THE AREA OF PYLONS FOUR, FIVE AND SIX AT KARNAK TEMPLE:

ASSESSING THE ARCHITECTURE, SEQUENCE OF CONSTRUCTION AND ENSUING HISTORICAL IMPLICATIONS



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I declare that this thesis is a product of my own work and has not been previously submitted for assessment at a tertiary institution.

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Abstract

This thesis presents a historiographic assessment of the architectural and archaeological study of the area of Pylons Four, Five and Six of the Ancient Egyptian temple of Amun-Re at Karnak. Built during the politically significant period of the reigns of Thutmose I, Thutmose II, Hatshepsut and Thutmose III, this area is characterised by the remains of numerous architectural elements such as pylons, obelisks, columns and colossi that are situated within a relatively small space. Today, the remains of the various building projects of the different pharaohs lie superimposed on top of one another making it difficult for scholars to attribute specific architectural elements to these individual pharaohs. The confusion relating to the historical period has further made it problematic for scholars to determine the sequence of construction of this area of the temple. This study identifies the complexities and trends within the work of scholars Borchardt (1905), Barguet (1962), Carlotti and Gabolde (2003) and Larché (2007) who have endeavoured to reconstruct the building history of this area. Furthermore, it reflects on the impact of contemporary discoveries relating to the archaeology and history of the site during these four phases of study on the area of Pylons Four, Five and Six of Karnak.

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To my parents and sisters, thank you.

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List of abbreviations

AAWB Abhandlungen der deutschen Akademie der Wissenschaften zu Berlin, phil.-

historische Klasse

ACF Annuaire du Collège de France. Résumé des cours et travaux

AIBL Académie des inscriptions et belles-lettres

ASAE Annales du Service des Antiquités de l'Égypte

BIFAO Bulletin de l'Institut français d'archéologie orientale

BMMA Bulletin of the Metropolitan Museum of Art

BSEG Bulletin de la Société d'égyptologie de Genève

BSFE Bulletin de la Société française d'égyptologie

CFEETK Centre Franco-Égyptien d'Étude des Temples de Karnak

CRAIBL Comptes rendus de l'Académie des inscriptions et belles-lettres

FIFAO Fouilles de l'Institut français d'archéologie orientale

GM Göttinger Miszellen - Beiträge zur ägyptologischen Diskussion

HÄB Hildesheimer ägyptologische Beiträge

JAEA Journal of Ancient Egyptian Architecture

Karnak Cahiers de Karnak

MAIBL Mémoires de l'Académie des inscriptions et belles-lettres

MIFAO Mémoires publiés par les membres de l'Institut français d'archéologie

orientale

SAOC Studies in Ancient Oriental Civilizations

UGAÄ Untersuchungen zur Geschichte und Altertumskunde Ägyptens

Urk. Sethe, K. (1906), Urkunden der 18. Dynastie, Abteilung IV, Heft 1-16.

Leipzig.

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Chapter 1

Introduction

1.1 Karnak and its complexity

Today, the monumental architecture of Ancient Egyptian temples stand as a reminder of the ingenuity of an ancient civilization. For the Ancient Egyptians these temples stood as symbols for the power of the gods and were constant reminders for the greater population of the wealth and prosperity of Egypt. In this way, while their religious significance cannot be overstated, neither can their function as administrative and economic centres. During the New Kingdom, in particular, massive building schemes focusing on the construction of new and the restoration of old temples functioned as signs of royal prestige and power as well as reflecting the changes in social and theological concerns and practices. As such, the diachronic study of Egyptian temples and their architecture is essential to understanding all aspects of Ancient Egyptian culture and society.

The Karnak temple complex, with its impressively long and historically diverse history has centered in much of this diachronic study. This temple complex, which was built over and remained active for about 2000 years, is a magnificent exemplar of stone architecture that today remains one of the largest temple complexes from Ancient Egypt and an impressive feat of technical skill and innovation (Fig. 1.1).² More so, as the site of significant building schemes throughout the New Kingdom Karnak offers modern scholars the unique opportunity to study the development and relationship between architecture and historical-political events.

Within the physical remains of Karnak we find evidence for the ideology that influenced their design and construction. From the archaeological record modern scholars cannot only learn how structures were made and used but can also learn of their greater significance to the people who interacted and witnessed them. In this way Karnak's architecture is a mode of cultural expression and communication.³

R. H. Wilkinson (2000), The Complete Temples of Ancient Egypt. London, 154.

J. Lauffray (1979), Karnak d'Égypte. Domaine du divin. Paris, 45.

This is a similar idea to the theory of tectonics in modern architecture. Tectonics is primarily concerned with the apparent self-consciousness of a building with respect to its construction and is related to the conscious attempt by the architect to communicate through the physical construction of a building, see R. Maulden,

Being progressively built over a lengthy period of time, Karnak acts not as an artifact for a particular time period but as a "temporal collage" for a significant portion of Ancient Egyptian culture. Today, the remains of the temple complex are an accumulation of overlapping traces from successive eras, with each trace constantly both modifying and being modified. While in the ancient times the pharaohs continuously constructed and dismantled the temple for 2000 years, Karnak's 'life' has continued. After the fall of pharoanic Egypt there is evidence that Karnak continued to operate in some capacity during the Roman period and later still Christian churches were established at the site. After the seventh century AD Karnak fell into disuse and ruin until the nineteenth century when archaeologists initiated the clearance and excavation of the site and worked towards the anastylosis of Karnak's buildings and history. In this way, the remains at Karnak are not static artifacts but rather, they tell the memoir of the temple and its continuous state of becoming and vanishing.

1.2 The Area of Pylons Four, Five and Six

The main temple at Karnak, known as *Ipet-Sout* in ancient times, is the Amun-Re complex and is comprised a large assemblage of pylons, columned halls, courtyards, obelisks and sanctuaries orientated towards the Nile in the west (Fig. 1.2). Housing the oldest remains of the Karnak complex, the central zone of the temple of Amun-Re is marked by Pylon Three on the west and bounded by an adjoining enclosure wall (Fig. 1.3). To the east of Pylon Three lies a quick succession of courtyards and pylons, numbered Four, Five and Six, that lead to the inner-most sanctuaries of the temple. Thought to have been built in a period of rapid expansion during the reigns of Thutmose I, Thutmose II, Hatshepsut and Thutmose III, the area of Pylons Four, Five and Six marked the entrance into the 'Holy of Holies'. Today, it is

(1986). *Tectonics in Architecture: From the Physical to the Meta-physical* (Unpublished Master's Thesis, Massachusetts Institute of Technology, Massachusetts) http://hdl.handle.net/1721.1/78804 (accessed June 17, 2016).

⁶ E. Blythe (2006), *Karnak: Evolution of a Temple*. London & New York,

⁴ The term "temporal collage" is borrowed from K. Lynch, (1972). What Time is This Place? Cambridge, 168-169 and refers to the visible accumulation of historical events, specifically the juxtaposition of two time periods present on a single monument or building.

I. Kopytoff, (1986). 'The cultural biography of things: commoditization as process', A. Appadurai (ed) *The Social Life of Things: Commodities in cultural perspective*, Cambridge & New York, 66-68; C. Holtorf, C. (2015). 'What Future for the Life-History Approach to Prehistoric Monuments in the Landscape?', J. Kolen, J. Renes & R. Hermans (eds) *Landscape Biographies: geographical, historical and archaeological perspectives on the production and transmission of landscapes*, Amsterdam, 167-181, 168 & 171.

characterized by the remains of numerous architectural elements such as obelisks, columns, colossi and doorways that are situated within a relatively small space.

1.3 The problems of its interpretation

In the study of Karnak, the principal obstacle for archaeologists and scholars is that the temple complex was progressively constructed and altered over the period of different pharaohs' reigns and as such details on its construction history tend to be shrouded in confusion. There was no single, coherent design for Karnak and as such the dismantling of structures, reuse of materials and imitation of artistic styles makes it difficult for scholars to identify what the temple looked like and how it functioned during the reigns of the individual pharaohs.

During the New Kingdom it was customary for pharaohs to undertake building schemes at Karnak. The area of Pylons Four, Five and Six is of particular interest as it is dated to a period of the New Kingdom that saw a rapid succession of kings. The result of this was the area underwent dramatic architectural changes during a relatively short period of time. Today, the remains of the various building projects of the different pharaohs lie superimposed on top of one another making it difficult for scholars to attribute specific architectural elements to these individual pharaohs. The confusion relating to the historical period, the quick succession of kings and the politically unique co-regency of Hatshepsut and Thutmose III, has further made it problematic for scholars to determine the history of this area of the temple.

1.4 Research question and methodology

Since the initiation of academic clearance and excavation at Karnak scholars and archaeologists have attempted to make sense of the remains in this area of the temple and put forth various sequences of construction for the area of Pylons Four, Five and Six. While all these chronologies are dated to the period between Thutmose I and Thutmose III, the attribution of architectural elements greatly varies, as does the interpretation of the motives behind the building schemes of these pharaohs. The current project essentially endeavours to understand the complexities and the problems regarding the physical remains of the area of

Pylons Four, Five and Six and the historical events and issues associated with the area as they are presented in modern scholarship.

The methodology of the project is fundamentally historiographic in nature. The project is foremost a historiographic assessment of past scholarship on the archaeology and architecture of Karnak and the Eighteenth Dynasty. It aims to compare and contrast the previous approaches and interpretations of evidence regarding the physical remains of this area of the temple in order to assess how the site of Pylons Four, Five and Six has been problematised in past literature.

It will do so through the identification of important works and critical debates relating to the archaeology and architecture of this area, as well as including a critique of how the study of the temple has been approached and the evidence interpreted. The aim in the revision of the scholarly study of the historical record is to reflect on the impact of contemporary discoveries and interpretation of evidence producing a renewed understanding of a period or site. This is a particularly important aspect of modern historiography given the evolving nature of archaeological research in recent decades.

It has been identified that there have been four significant phases of modern scholarship focusing on this area of the temple. Through their archaeological and epigraphic work at Karnak Ludwig Borchardt (1905), Paul Barguet (1962), Jean-François Carlotti and Luc Gabolde (2003)⁹ as well as François Larché (2007)¹⁰ have presented competing and corroborating building chronologies for the area of Pylons Four, Five and Six. This project will assess each of these chronologies and identify the complexities and trends in the work of these scholars and investigate how they have interacted with the developments in other research relating to the temple and the historical period.

As the project is primarily an assessment of the historiography of the site this thesis will approach the temple and scholarship chronologically. The illustrations and figures referred to in the thesis can be found at the end of the respective chapter in which they are first

L. Borchardt (1905), Zur Baugeschichte des Amonstempels von Karnak. UGAÄ 5. Leipzig.

P. Barguet (1962), Le Temple d'Amon-Rê à Karnak; essai d'exégèse. Cairo.

J.-F. Carlotti & L. Gabolde (2003), 'Nouvelles données sur la Oudjyt', Cahiers de Karnak 11: 255-338.

F. Larché (2007). 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', Karnak 12 (2), 407-592.

referenced. The reader will find the bibliographic details for these images in the list of figures found immediately following the table of contents.

At the end of this chapter, the reader will also find a general plan of Karnak (Fig. 1.1) and a number of detailed plans for the pylons and courtyards featured in this thesis (Fig. 1.2-1.6) taken from the recently (2016) published *Inventaire des monuments objets, scènces et inscriptions des temples de Karnak*. The labels provided for architectural details on these plans will be used as a point of reference throughout the thesis.

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S. Biston-Moulin (2016), *Inventaire des monuments objets, scènces et inscriptions des temples de Karnak.* Montpellier.

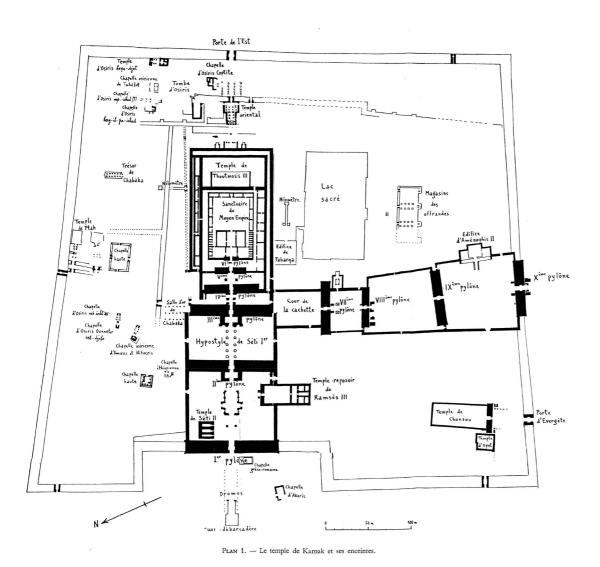


Fig. 1.1 Plan of the Karnak Temple complex. Barguet (1962), *Le Temple d'Amon-Rê*, Plan 1.

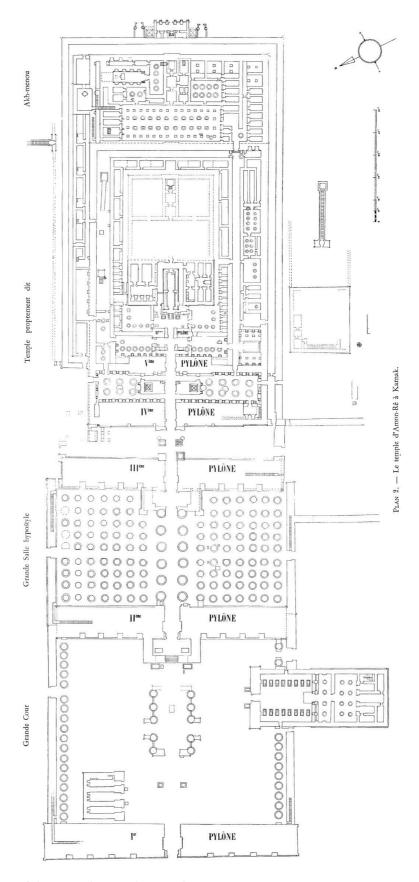


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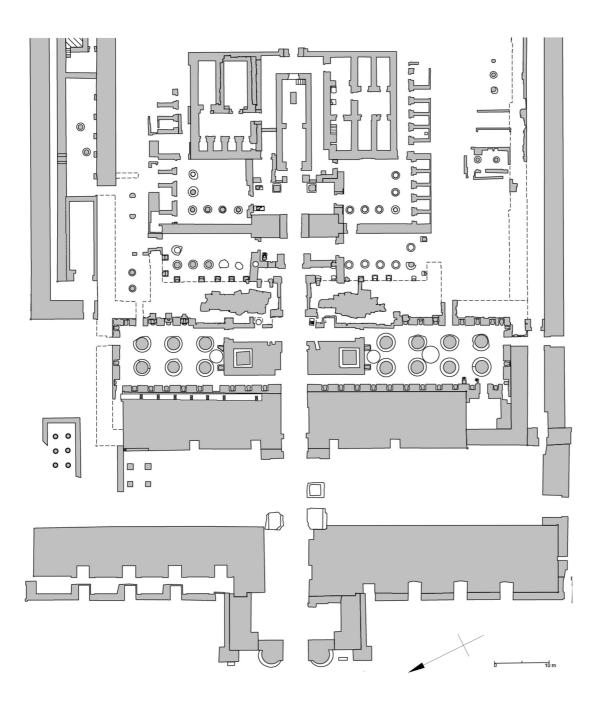


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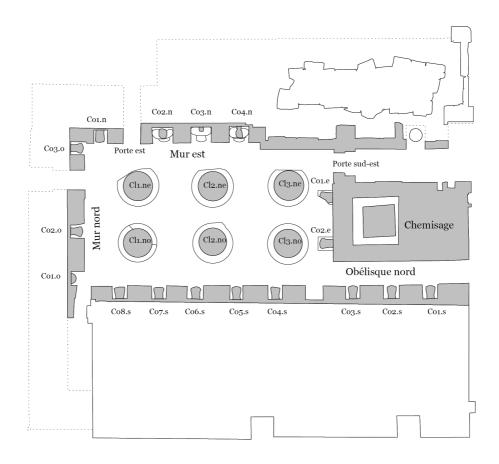


Fig. 1.4 Plan of the northern half of the courtyard between Pylons Four and Five Biston-Moulin (2016), *Inventaire des monuments objets, scènces et inscriptions des temples de Karnak*, 136.

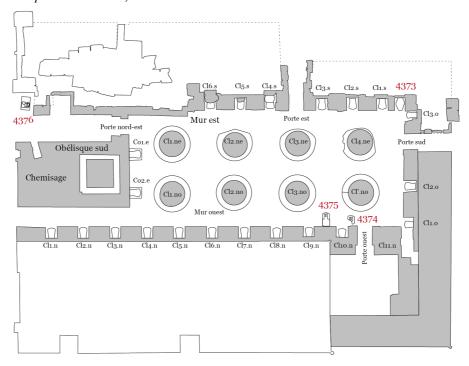


Fig. 1.5 Plan of the southern half of the courtyard between Pylons Four and Five Biston-Moulin (2016), *Inventaire des monuments objets, scènces et inscriptions des temples de Karnak*, 141.

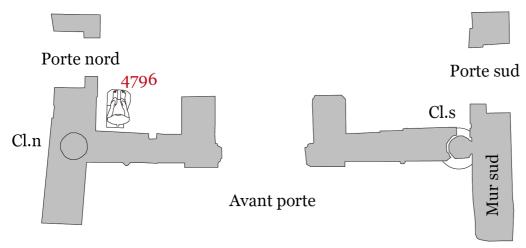


Fig. 1.6 Plan of the central axis between Pylon Five and Six.

Biston-Moulin (2016), *Inventaire des monuments objets, scènces et inscriptions des temples de Karnak*, 148.

Chapter 2

Early archaeology at Karnak and Ludwig Borchardt's *Baugeschichte des Amonstempels*

2.1 Early archaeology in Karnak: Mariette, Legrain and the early photographers

While writers and travellers of Egypt have always known the magnitude of Karnak, the attempt by archaeologists and Egyptologists to sort through the rubble and remains of over 2000 years of successive occupation at the site began in 1858 when Auguste Mariette was given directorship of the Egyptian Antiquities and began the first systematic archaeological excavation and clearance of Karnak. Early photographs by the likes of Maxime du Camp (Fig. 2.1), Felix Bonfils (Fig. 2.2) and Antonio Beato (Fig. 2.3) capture the appearance of the temple in the second half of the nineteenth century and provide perspective on the extensive developments that have taken place in the last century and a half.

Mariette's work at the site culminated in the two-volume work *Karnak. étude topographique et archéologique* published in 1875. The major contribution of this work was a detailed plan of the temple that guided future work at the site. In 1895 a Directorate of work of Karnak was created and the position entrusted to Georges Legrain. The priority for Legrain was to clear the layers of remains from the successive human occupation of the temple along the main axes of the temple. A major achievement of this period was the discovery of the Cachette Court of Pylon Seven in 1903 and the reconstruction and stabilization of the great Hypostyle Hall that had partially collapsed in 1899. Published posthumously in 1929, Legrain's book, *Les Temples des Karnak*, primarily provided detailed architectural and archaeological descriptions of the First Pylon and the Hypostyle Hall.

2.2 Borchardt's Baugeschichte des Amonstempels

In 1905, Ludwig Borchardt, a German Egyptologist and architect working with the Frenchled Egyptian Antiquities Service, published *Zur Baugeschichte des Amonstempels von Karnak*

¹² M. L. Bierbrier (2012), Who was who in Egyptology (4th ed). London, 355-6.

¹³ A. Mariette (1875), Karnak. étude topographique et archéologique. 2 vols. Leipzig.

N. Grimal (2007), 'La mission permanente de Karnak', *La revue pour l'histoire du CNRS*. http://histoire-cnrs.revues.org/3302 (accessed August 18 2015).

J. H. Breasted (1905/2010), Egypt through the Stereoscope: A Journey through the lands of the Pharaohs. Chicago, 112 & 115.

¹⁶ G. Legrain (1929), Les Temples de Karnak. Brussels.

that presented the construction history of the central area of the temple of Amun-Re during the Middle Kingdom and early Eighteenth Dynasty.¹⁷ While it is not clear the extent to which Borchardt conducted excavations at the site his work relied heavily upon the earlier excavations and clearances of Mariette and Legrain, Borchardt's major contribution to the study of Karnak was the identification of various building phases and the attribution of these to the reigns of individual pharaohs.

The temple prior to the reign of Thutmose I

Working in chronological order to reconstruct the temple's history, Borchardt begins with the temple of the Middle Kingdom, although he was unable to clarify little more than previous excavations. Prior to his work, Legrain's excavations in the area had, however, uncovered a third granite threshold along the central axis of the temple as well as a square sandstone platform that presumably supported a significantly sized structure (Fig. 2.4). These were evidence of a series of inner doorways leading to a shrine, of which a black granite block was also found, which would have housed an image of Amun-Re. In the early Eighteenth Dynasty, under the reign of Amenhotep I, the area outside the bounds of the temple of Amun-Re was embellished with the addition of another temple built of fine white limestone and decorated with reliefs. Borchardt located this temple to the southwest of the main enclosure wall nearby to the later Pylon Seven (Fig. 2.5). This temple existed until the time of Thutmose III when it must have been cleared, judging by the direction that the southern obelisk of Thutmose III, located to the west of Pylon Four, was erected (see section 2.4).

2.3 Borchardt and the temple under Thutmose I (Fig. 2.6)

Phase One of Thutmose I's building scheme: Pylon Five and its associated court

Borchardt was able to determine that the building scheme of Thutmose I at Karnak greatly extended the boundary of the temple towards the west and introduced many of the elements that would go on to characterize Karnak during later periods. Borchardt identified two distinct phases in the constructions of Thutmose, both of which worked to outwardly extend the

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Borchardt (1905), Baugeschichte des Amonstempels.

A Fourth granite threshold also aligned with the central processional way would later be found see: L. Gabolde (1998), Le "grand château d'Amon" de Sésostris Ier à Karnak: La décoration du temple d'Amon-Rê au Moyen Empire, AIBL 17. Paris, pl 1.

Borchardt (1905), Baugeschichte des Amonstempels, 3-4.

G. Legrain (1903), 'Second rapport sur les travaux exécutés à du 31 octobre 1901 au 15 mai 1902', ASAE 4, 1-40, 14-16; Borchardt (1905), Baugeschichte des Amonstempels, 7.

temple's area towards the west. The first phase consisted of the encasement of the Middle Kingdom temple and a substantial area in front of it with a sandstone enclosure wall marked by a pylon on its western side. The pylon, now referred to as the Pylon Five, was made of a sandstone core that was later encased with limestone and featured two flagstaffs at its entrance.²¹ The remains of the pylon at its base show that it measured 36.4m in length and 7.7m in depth and based on these figures has been estimated to have stood at a height of 19m.²² The pylon marked the entrance to a large open court in which the Middle Kingdom shrine stood toward the eastern end. Reaching around the interior of all four sides of the enclosure wall was a peristyle consisting of a wooden roof supported by sixteen-sided fluted sandstone columns inscribed in the name of Thutmose I. Borchardt's plan of the temple shows that twelve columns lined the eastern face of the pylon and were erected at even intervals around the court. Aligned with the columns and providing additional support for the peristyle were two granite pillars on either side of the central axis positioned at the entrance.²³ The remnants of two of these columns (Cl.n and Cl.s in Fig 1.6) and both granite pillars survive today within the walls of a chamber attributed to Thutmose III which will be further discussed in section 2.4. Beneath the peristyle and leaning against the walls were large Osiride statues of the king. Doors at the western end of the north and south boundary walls gave additional access into courtyard.

Phase Two of Thutmose I's building scheme: Pylon Four and its associated court

Borchardt identified that in the second phase of construction of Thutmose I a larger pylon, also built of sandstone and encased with limestone, was constructed to the west of Pylon Five. The new pylon measured 62.2m in length and 10.4m in depth and has been reconstructed to have stood at a height of 23.5m.²⁴ The pylon, recognised today as the Pylon Four, further extended the temple's boundary and created a new monumental entrance to the temple and remained until the reign of Amenhotep III, a century and a half later, as the primary entrance

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Borchardt (1905), *Baugeschichte des Amonstempels*, 11.

J.-F. Carlotti (1995). 'Contribution à l' étude métrologique de quelques monuments du temple d'Amon-Rê à Karnak', *Karnak* 10, 65-127, 84-5; Digital Karnak (2008). 5th Pylon and Court http://dlib.etc.ucla.edu/projects/Karnak/feature/PylonVAndCourt (accessed September 27, 2016).

Borchardt (1905), Baugeschichte des Amonstempels, 8.

It is presumed that the reconstruction of the height is based upon these figures and the angle of the incline of the pylon that is known from the partial remains of torus moulding at the northwestern corner of the northern wing of the pylon, see: Carlotti (1995), 'Contribution à l' étude métrologique de quelques monuments du temple d'Amon-Rê à Karnak', 84; Digital Karnak (2008). 4th Pylon and Enclosure http://dlib.etc.ucla.edu/projects/Karnak/feature/PylonIV (accessed September 27, 2016).

to the temple.²⁵ This pylon and its associated enclosure wall, that extended from the pylon and surrounded the previous enclosure wall, replaced an earlier brick wall of Amenhotep I. The courtyard created between Pylons Four and Five measures 75m wide and 14m deep.²⁶ While Borchardt's plan shows a double doorway in the pylon, no further reference or explanation is made to it. It does however feature in the work of Barguet discussed in the following chapter. Similarly, Borchardt's plan also shows two pillar-like structures within the centre of the hall, although no architectural description of them is given. These elements are not referred to in the work or depicted on the maps of later scholars. Presumably these provided structural support for the roof. Adorning the entrance to the temple were the two obelisks set up by Thutmose I. These would have been the first pair of great obelisks at Karnak, perhaps even in Thebes.²⁷

The addition of Pylon Four and its enclosure wall created a court between Pylon Four and Five as well as a corridor between the two enclosure walls on the north, east and south of the Middle Kingdom temple. This courtyard would later feature prominently in the building schemes of Hatshepsut and Thutmose III, but found its original architecture as a hall from Thutmose I. During the reign of Thutmose I the hall was covered with a wooden ceiling supported by five wooden columns standing upon calcite bases, Borchardt had previously identified two of these within the hall.²⁸ Due to their diameter Borchardt reconstructed that two of these columns stood in the northern half of the hall and three stood in the southern half and aligned along the north south axis of the courtyard. Near the north and south doorways in the boundary walls of the court, roughly aligned with the calcite column bases, stood pillars inscribed in the name of Thutmose I that supported the roof, these were later hidden by the interior encasing wall of the hall (Fig. 2.7a and 2.7b).²⁹

2.4 Borchardt, Hatshepsut and her obelisks

Hatshepsut's constructions as identified by Borchardt in the central area of Karnak dramatically altered the Middle Kingdom Temple and the area directly in front of it. Her constructions of the inner temple consisted of a sequence of chapels and rooms that considerably expanded the inner sanctuary of the temple (Fig. 2.8). Additionally, she erected

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²⁵ Blythe (2006), Karnak: Evolution of a Temple, 40.

Digital Karnak (2008). *Wadjet Hall* http://dlib.etc.ucla.edu/projects/Karnak/feature/WadjetHall (accessed September 27, 2016).

L. Habachi (1984), *The Obelisks of Egypt: Skyscrapers of the Past*. Cairo, 57.

²⁸ Borchardt (1905), Baugeschichte des Amonstempels, 12 & 28.

²⁹ Borchardt (1905), Baugeschichte des Amonstempels, 12 (fig. 10).

obelisks within the relatively narrow area between Pylons Four and Five, a major undertaking that significantly changed the architecture of this area.

Decoration of the Obelisks

Hatshepsut's decoration of the obelisks is unusual with a scene decorating the pyramidion and a central line of customary dedicatory inscription along the shaft.³⁰ This is complemented by eight scenes placed either side of the central text, these reach only about half way down the shafts (Fig. 2.9). On the bases are eight lines of horizontal text.³¹

Erecting the Obelisks

In reference to the erection of the obelisks, Borchardt proposes that the same technique had been used for all the Karnak obelisks. A number of the obelisk bases at Karnak appear to have a similar purposely cut channel, 20-30cm wide and 6-10cm deep, running along and beyond, by up to 30cm, the edges of the actual obelisk (Fig. 2.10 and 2.11).³² The grooves consistently appear on the northern side of the obelisk bases.³³ Based on these grooves Borchardt proposes that the obelisks were brought in lying horizontally to meet the bases already in position; the edge of the obelisk was fitted into the groove and kept in place by a crossbeam fitted onto the top of the base (Fig. 2.12). The obelisk was then thought to have been levered upright using a system of scaffolding before ropes finally pulled it into place.³⁴

An alternative theory was put forward by Engelbach in 1923 and supported by Chevrier in the 1950s, who proposed that the obelisks were pulled up ramps high above the obelisk bases and led to funnel like structures surrounding the bases and filled with sand (Fig. 2.13). By removing the sand through a channel at ground level the obelisk would slowly descend directly over the base whilst being guided into the groove along the base before pulled upright and into its final position by ropes.³⁵ In the 1997 Golvin and Goyon proposed that the ramps did not led high above the bases but rather sat closer to the bases. They proposed that using

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L. D. Bell (2002), 'Divine Kingship and the Theology of the Obelisk Cult in the Temples of Thebes', in H. Beinlich (ed) Ägyptologische Tempeltagung: Würzburg, 23-26. September 1999, Ägypten und Altes Testament. Wiesbaden, 17-46, 20.

³¹ Borchardt (1905), Baugeschichte des Amonstempels, 20.

³² Borchardt (1905), *Baugeschichte des Amonstempels*, 15.

Borchardt (1905), Baugeschichte des Amonstempels, 7.

³⁴ Borchardt (1905), Baugeschichte des Amonstempels, 15.

Engelbach (1923), *Problem of the Obelisks: from a study of the unfinished obelisk at Aswan*. London, 66-84; H. Chevrier (1952-54), 'Note sur l'érection des obélisques', *ASAE* 52, 309-313.

the same sand funnel system the obelisks would be pulled upright (Fig. 2.14).³⁶ Borchardt's theory has since been supported by Dieter Arnold in 1991 who noted that they angle of the grooves on the obelisks and the damage done to them during the erection of the obelisk suggest that they approached the base not at a steep angle but at an angle of no more than ten degrees.³⁷ Furthermore, temple reliefs depicting the erection of obelisks show the king pulling them upright through the use of ropes. Although symbolic these depictions may reflect a real practice.³⁸ Given that obelisks were brought in from the north, Borchardt proposes that Hatshepsut dismantled the northern half of the hall and boundary wall as well partially dismantled the southern half of the hall.³⁹

Replacing the wooden columns

By the time of Thutmose III's reign the wooden columns in the hall between Pylons Four and Five had been replaced by sandstone ones that supported the wooden roof in the north and south of the hall, leaving the area between the obelisks unroofed. While Borchardt favoured the theory that Hatshepsut erected the sandstone columns when she rebuilt the hall after the erection of her obelisks, he also notes that it is possible that Thutmose I have already replaced the wooden columns with ones of stone. This would account for the inscription on the columns in the northern hall which claim that Thutmose III did not remove any stone of Thutmose I as well as the difference in decoration of the northernmost columns in each hall (discussed in the following section of this chapter).⁴⁰

2.5 The temple under Thutmose III according to Borchardt (Fig. 2.15)

Phase one: Pylon Six

During the co-regency of Hatshepsut and Thutmose III no building activity can be ascribed to them jointly and Thutmose III seems to have conducted all his building activity during his sole reign after the sources become silent on Hatshepsut. Borchardt identifies two distinct building phases that he dates to shortly after the death of Hatshepsut and the other to the around the time after the Asiatic Campaigns. ⁴¹ During the first phase, Thutmose III constructed a small pylon, now referred to as Pylon Six to the east of Pylon Five. He records

³⁶ J.-C. Golvin & J.-C. Goyon (1987), Les bâtisseurs de Karnak. Paris, 131-7.

D. Arnold (1991), Building in Egypt: Pharaonic Stone Masonry. New York & Oxford, 70.

³⁸ Arnold, (1991), Building in Egypt: Pharaonic Stone Masonry, 70.

Borchardt (1905), Baugeschichte des Amonstempels, 20; J. Vandier, (1955). Manuel d'archéologie II vol 2. Paris. 880.

Borchardt (1905), Baugeschichte des Amonstempels, 12-13 & 28.

⁴¹ Borchardt (1905), Baugeschichte des Amonstempels, 21.

the erection of the Pylon in his *Text de la Jeunesse* saying he made 'an august pylon on the interior front of the holy of holies'. ⁴² Borchardt dates the erection of the pylon to year 24. ⁴³ The pylon measures 15.7m in width and 4.2m in depth and has been reconstructed at a height of 12.5m. ⁴⁴ In the newly formed courtyard between Pylons Five and Six, the peristyle of Thutmose I was retained. To the east of Pylon Six the peristyle and Osiride statues of Thutmose I were replaced with a new peristyle reaching to the chapels of Hatshepsut (Fig. 2.16). Behind the peristyle on the north and south walls a series of small rooms were installed. ⁴⁵ While the peristyle reached only as far as Hatshepsut's chapel series, the rooms continued to extend east and around behind the Middle Kingdom Temple.

The courtyard between Pylons Four and Five

Also undertaken during this first phase of construction were major renovations in the courtyard between Pylon Four and Five. The five sandstone columns stood in the court were moved and nine more added creating two rows of columns, with eight standing in the southern hall and the remaining six in the north. Borchardt proposes that the original sandstone columns were placed as the northern most columns in each half of the hall (Cl1.ne and Cl1.no in Fig 1.4 and Cl1.ne, Cl1.no and Cl2.no in Fig 1.5). This attribution is due to the fact that the northern most columns are uniform in their decoration and differentiates them from the other columns. The northernmost columns are decorated on their lower halves by sets of overlapping leaves above which were the inscriptions of Thutmose I. The newly erected columns featured the same overlapping leaves and additional lotus flowers directly below inscriptions (Fig. 2.17a, 2.17b, 2.18a, 2.17b).

The fragmented columns that stand in the hall today record in their inscriptions a history of the hall's construction. Karl Piehl first published these inscriptions in 1885 and Borchardt provides in his work a German translation of the columns in the southern half of the hall.⁴⁹

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⁴² J. H. Breasted (1906), Ancient Records of Egypt II. Chicago, 155.

⁴³ Borchardt (1905), *Baugeschichte des Amonstempels*, 22.

Carlotti (1995), 'Contribution à l' étude métrologique de quelques monuments du temple d'Amon-Rê à Karnak', 85; Digital Karnak (2008). 5th Pylon and Court

http://dlib.etc.ucla.edu/projects/Karnak/feature/PylonVIAndCourt (accessed September 27, 2016).

Borchardt (1905), Baugeschichte des Amonstempels, 22.

⁴⁶ Borchardt (1905), Baugeschichte des Amonstempels, 28.

⁴⁷ Borchardt (1905), *Baugeschichte des Amonstempels*, 11.

⁴⁸ Borchardt (1905), Baugeschichte des Amonstempels, 11 & fig. 8.

K. Piehl (1885), 'Sur l'origine des colonnes de la salle des caryatides du grand temple de Karnak', Actes du sixième congrès International des Orientalistes, tenu en 1883 à Leide IV. Leiden, 201-219; Borchardt (1905), Baugeschichte des Amonstempels, 34-35.

The columns in the northern hall feature inscriptions of Thutmose III and record the renovations that took place. A fragmented inscription of Thutmose III on one of the columns in the northern hall claims that he found the hall in such a damaged state that water had to bailed out. This may refer to the wooden roof installed by Hatshepsut that due to the presence of the obelisks could not have covered the hall entirely. The columns in the southern hall feature the later protocol of Amenhotep II. In his text Amenhotep claims to have made 'august columns of the southern hypostyle, wrought with electrum very plentifully, as an eternal work'. ⁵⁰ Borchardt interprets this to refer only to the decoration of the columns in the southern hall and not to their erection. ⁵¹

These columns provided support for a new sandstone roof that was further reinforced by a new wall built against the interior facades of the pylons unlike the reclined pylon walls these stood vertically. The Osiride statues of Thutmose I that had lined the court of Pylon Five appear to have been relocated to this court and placed in tall niches cut into the new wall as well as against the obelisk towers. The statues in the northern half of the hall wear the red crown of Lower Egypt and in the south the white crown of Upper Egypt (Fig. 2.19). ⁵²

The encasing of the obelisks of Hatshepsut

Borchardt also identifies that Thutmose III constructed a masonry tower around the obelisks of Hatshepsut that obscured them from view.⁵³ Borchardt notes that the figure and name of Hatshepsut is defaced on the top 3.5m of the obelisk and assumes that this corresponds to the area that was left uncovered.⁵⁴ Beneath the masonry, the figures and names of Hatshepsut were kept intact. The new structure appears to have been joined to western face of Pylon Five by walls that effectively created a small chamber between the obelisks and Pylon Five and divided the courtyard into separate northern and southern courts.⁵⁵

Phase Two: chamber of Pylon Six

In the second phase of construction of Thutmose III a narrow chamber between Pylons Five and Six was constructed.⁵⁶ Walls were built joining Pylon Five and Six and engulfed the

⁵⁰ Breasted (1906), *ARE* II, 805.

⁵¹ Borchardt (1905), *Baugeschichte des Amonstempels*, 33-34.

⁵² Borchardt (1905), Baugeschichte des Amonstempels, 10 & 28.

Borchardt (1905), Baugeschichte des Amonstempels, 26.

⁵⁴ Borchardt (1905), Baugeschichte des Amonstempels, 25.

⁵⁵ Borchardt (1905), Baugeschichte des Amonstempels, 24.

⁵⁶ Borchardt (1905), Baugeschichte des Amonstempels, 32.

central granite pillars and innermost columns of Thutmose I's peristyle (Cl.n and Cl.s in Fig 1.6 and Fig. 2.20). This separated the southern and northern sections of the court and another wall was built in line with the peristyle creating another doorway between the two Pylons. Borchardt suggests that this structure, while unusual, may have been built to provide structural support for Pylon Five that was beginning to lose its structural integrity.⁵⁷ These developments in the courts between Pylons Four, Five and Six transformed what was at Thutmose I's time a series of wide simple courts into a corridor with halls and courts either side and separated by walls.

2.6 Overview and Commentary

2.6.1 The construction of Pylons Four, Five and Six as understood by Borchardt (1905)

In the first phase of construction by Thutmose I Pylon Five and the associated court and enclosure wall was erected. The courtyard featured a peristyle and Osiride statues lining its interior. In the second phase a set of obelisks and Pylon Four were added to the west of Pylon Five. An enclosure wall connected to Pylon Four surrounded the temple complex. In the court between Pylons Four and Five stood five cedar wood columns supporting a wooden roof.

Borchardt identifies that Hatshepsut dismantled the northern courtyard between Pylons Four and Five and at least a portion of the southern courtyard. She erected two obelisks in the space and rebuilt the hall of Thutmose I. The wooden columns were replaced by sandstone column by either her or possibly Thutmose I.

Two building phases were identified during the reign of Thutmose III. Borchardt attributes the construction of Pylon Six and the peristyle on its eastern face to Thutmose III. During this construction phase the obelisk of Hatshepsut in the hall between Pylons Four and Five were encased by a masonry structure and joined to Pylon Five creating a small chamber. Nine more sandstone columns were added as well as an interior wall lining the courtyard providing support for the sandstone roof. The Osiride statues of Thutmose I that had lined the original courtyard of Pylon Five were moved into this hall and placed in tall niches around the court. In the second phase of construction Borchardt identifies that small chamber in the central processional way between Pylons Five and Six was built. Its walls engulfed the granite pillars and innermost columns of the peristyle of Thutmose I.

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⁵⁷ Borchardt (1905), Baugeschichte des Amonstempels, 33.

2.6.2 The "Hatshepsut Problem"

Borchardt's chronology highlights two problems related to the central area of Karnak. The first is the "Hatshepsut Problem" and the second is the "Obelisk Problem". The first has been well attested in scholarship as the Hatshepsut Problem since the publication of Kurt Sethe's *Das Hatschepsut-Problem noch einmal untersucht* in 1932 and is related to the historical events surrounding the politically unique reign of Hatshepsut and the later erasure of her name and image. As one of the few times in Egyptian history that a woman ruled as pharaoh, her reign is unusual in its fundamental nature and is made all the more problematic by the proscription of her name and image during the reign of her successor despite the general success of her reign; by all accounts Hatshepsut's reign appears to have been a prosperous period for Egypt. Furthermore, the reputation and portrayal of Hatshepsut in modern scholarship reflects developments in the interpretation of historical evidence during the twentieth century.

The "Hatshepsut Problem" originated with the identification of images and the cartouche of a pharaoh with female gender endings at the temple at Deir el-Bahri by Jean-François Champollion in 1828/9. This cartouche was read at the time as Amenenthe but would later be known as Hatshepsut. In dating the reign of this king Champollion posited that Thutmose II, preceded by Thutmose I, was succeeded by his sister Amessis the wife of Amenenthe, who would rule as regent but would also include his wife's name along with his own cartouches, followed by the reign of Thutmose III. ⁶⁰ This chronology accounted for the presence of feminine gender endings and aligned with the Third Century BC king list of Manetho that placed Amessis, the sister of Thutmose II, as ruler of Egypt for the twenty-one years after the reign of Thutmose II. However, it did not account for the fact in many cases the cartouche of Amenenthe had been chiseled out and replaced by the names of Thutmose I and Thutmose II who had ruled before her as well as that of Thutmose III. Later Sethe would propose that these usurped cartouches were evidence of a complicated chronology born out of dynastic feuds between the early Eighteenth Dynasty rulers. Based on the assumptions that recut

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⁵⁸ K. Sethe (1932). Das Hatschepsut-Problem noch einmal untersucht. AAWB 4. Berlin.

J. Wilson (1951), *The Burden of Egypt: an interpretation of Egyptian culture*. Chicago, 174; D. Redford (1967), *History and Chronology of the Eighteenth Dynasty of Egypt*. Toronto, 63.

S. Ratié (1979), *La Reine Hatshepsout Sources et Problèms*. Orientalia Monspeliensia I. Leiden, 14; C. A. Keller (2005), 'Hatshepsut's Reputation in History', in C. H. Roehrig (ed) *Hatshepsut: From Queen to Pharaoh*. New York, 294-297, 294.

cartouches were evidence of usurpation by the king whose name replaced the original name, Sethe reconstructed the chronology for the Thutmoside succession as follows:

- 1) Thutmose I
- 2) Thutmose II
- 3) Thutmose III and Hatshepsut jointly
- 4) Thutmose III
- 5) Thutmose II and Thutmose I jointly until Thutmose I died
- 6) Hatshepsut and Thutmose III jointly until Hatshepsut died
- 7) Thutmose III⁶¹

Despite the fact that this chronology was not clearly reflected in the tomb biography of the Theban official Ineni, discovered in 1892, which recounts his career under the reigns of Amenhotep I, Thutmose I, Thutmose II and Thutmose III in that order and the fact that this chronology proposed the repeated rule of Pharaohs, a phenomena unheard of in Egyptian history, the complicated chronology of Sethe was widely, though not unanimously, accepted by scholars. In 1933, Sethe's chronology was firmly rejected by William F. Edgerton who, echoing the thoughts of Eduard Meyer and Herbert E. Winlock, published the chronology that is accepted today: the reign of Thutmose I was followed by that of Thutmose II. On his death the crown was passed to Thutmose III, however given that he was too young to reign independently Thutmose II's wife Hatshepsut reigned as co-regent and eventually assumed full pharaonic titles. After almost twenty years of co-regency, Thutmose III reigned for a further twenty years as the sole ruler until his death.

While Borchardt's work at Karnak was primarily concerned with architectural descriptions and attributing monuments to pharaohs and not with discerning the order of their succession, the identification of building phases must have nonetheless been useful in interpreting historical events. Of note in Borchardt's chronology of the temple is that Hatshepsut is attributed with a separate building scheme prior to Thutmose III's own constructions. It is

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K. Sethe (1896), Die Thronwirren unter den Nachfolgern Königs Thutmosis' I., ihr Verlauf und ihre bedeutung, Die Prinzenliste von Medinet Habu und die reihenfolge der ersten Könige der zwanzigsten Dynastie. UGAÄ 1. Leipzig, 1-55.

For a summary of the scholars that accepted and rejected Sethe's chronology and their arguments see: W. F. Edgerton (1933), *The Thutmosid Succession*. SAOC 8. Chicago, 2-3.

E. Meyer (1928), Geschichte des Altertums II (I). Stuttgart & Berlin, 110-20; H. E. Winlock (1928), 'The Egyptian Expedition 1925-1927: The Museum's Excavations at Thebes', BMMA 23 (2.2), 3-58, 47-48; Edgerton (1933), The Thutmosid Succession.

also important to observe that Thutmose II is not attributed with any building activity, or at least never principally responsible for constructions, within the central zone of Karnak.⁶⁴

2.6.3 The "Obelisk Problem"

The erecting of the obelisks of Hatshepsut

This issue, which is not directly dealt with in the work of Borchardt, is preoccupied with the positioning of the obelisks of Hatshepsut within the hall between Pylons Four and Five that is problematic for a number of technical and historical reasons. Firstly, the erecting of obelisks *after* the construction of Pylons Four and Five would have been a technical feat even if Borchardt's method of construction is accepted. Borchardt proposes that in order to erect the obelisks in the narrow hall the northern half of the hall and boundary wall would have had to be dismantled and the obelisks brought in from this direction lying horizontally. They would have been erected using a system of scaffolding and ropes and kept in position through the use of a groove in the base and wooden cross beams. Borchardt's proposal that the northern hall and boundary wall was dismantled before the erection of the obelisks is now commonly accepted by scholars, such as Barguet and Gabolde, (see chapters 3 and 4), who believe the obelisks were erected after the pylons and is essentially the only plausible explanation for how the obelisks could have been erected after the pylons.

While this system of erecting the obelisks is reasonable it is by no means without its problems. Even with the dismantling of the peristyle and Osiride statues it seems unlikely that there would there have plausibly been enough space between the two Pylons to accommodate sufficient scaffolding. Further, in order to stabilize the obelisks ropes must have been used and pulled from a considerable distance in the east and west as well as the south. Given that the pylons, the Middle Kingdom courtyard and the obelisks of Thutmose I were also in the surrounding area it would have been a technical feat to have successfully anchored ropes at the right angles in the required directions.

While the technical issues surrounding the method of erection should be acknowledged they are not of particular consequence to the current study other than noting that despite the

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⁶⁴ Borchardt (1905), Baugeschichte des Amonstempels, 33.

⁶⁵ Arnold (1991), Building in Egypt: Pharaonic Stone Masonry, 70.

technical difficulty, Borchardt assigned them a date them as later than construction of Pylons Four and Five.

The roofed hall between Pylons Four and Five

Furthermore the positioning of the obelisks in between two Pylons, an area that had been designed as a roofed hall, is unusual as are the closely confined roofing immediately beside the obelisk. 66 Previously, obelisks were placed as cult objects at the center of sun temples or at the entrance to temples before a main Pylon gate within an open air and spacious courtyard. 67 It has been suggested that given Thutmose I had already erected his in the east of Pylon Four Hatshepsut had to place hers somewhere else. However, later, Thutmose II and III would erect two more sets in the same area west of Pylon Four. Perhaps she saw the fifth Pylon as the true entrance into the inner temple and chose to place the obelisks here as suggested by Elizabeth Blythe. 68

The encasing of the obelisks by Thutmose III

The final problem associated with the obelisks of Hatshepsut in the hall is the treatment of them by Thutmose III. The masonry towers of Thutmose III essentially obscured the obelisks from view when inside the hall and decreased the available space within the hall and created two small closed halls either side of the processional way. Borchardt dates the masonry towers that surrounded the obelisks to the first phase of Thutmose III's sole reign shortly after the disappearance of Hatshepsut from the record. Furthermore, that the inscriptions of Hatshepsut's that were not covered by the masonry were erased has been used as evidence linking the masonry towers with the proscription of Hatshepsut.⁶⁹ However, if the masonry towers were built in order to purposely obscure the obelisks and inscriptions of Hatshepsut why did the masonry only reach a certain height? Surely it would have been possible to continue the masonry to completely enclose the obelisks. Moreover, if the goal was to erase the reign of Hatshepsut through the dismantling of her structures would the proscription of her name and the complete enclosure of the obelisks not have been a more effective method. Considering the height of the obelisks, their tips would still have been visible outside the temple boundary walls. Or more effective still: why not dismantle the obelisks? While

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⁶⁶ E. Baldwin Smith (1938), Egyptian architecture as cultural expression. New York & London, 161.

Baldwin Smith (1938), Egyptian architecture as cultural expression, 163; D. Arnold (trans. S. H. Gardiner & H. Strudwick) (2003), The Encyclopedia of Ancient Egyptian Architecture. Princeton, 165.

⁶⁸ Blythe (2006), Karnak: Evolution of a Temple, 55.

⁶⁹ M. A. Murray (1931), *Egyptian Temples*. London, 69-70.

lowering the monoliths in a controlled manner is a different type of engineering task, it is just a challenging as erecting them.

The problems outlined here have continued as a main focus in later excavations in this area at Karnak. Borchardt's work at central Karnak successfully identified various phases of building activity and attributed these to the individual reigns of the pharaohs. While later excavations have yielded further architectural details that have greatly impacted Borchardt's chronology and necessitated a re-assessment of the site. The patterns of construction identified in his work have been echoed by almost every study of the area since. Here are the most important phases in summary: under Thutmose I the temple was expanded westward and the characteristic elements of Karnak, monumental pylons marked by obelisks and leading to courtyards along a processional axis, Hatshepsut embellished her father's constructions and Thutmose III altered the central processional axis with a series of chambers and additional doorways.

It may also be of worth to note the parallel in the interpretation of Thutmose I's reign and the layout of his constructions at Karnak. Following the chronology of Borchardt, it was under Thutmose I that the general plan of Karnak, that was also the standard design for New Kingdom temples, which would be further elaborated on throughout its history, was conceived. Through the expansion of the temple westward and the introduction of pylons, a hypostyle hall, obelisks and a processional axis, Thutmose I introduced the main architectural elements that characterized Karnak for the remainder of its history. Karl Martin and Lanny Bell note that the introduction of obelisks at Karnak by Thutmose I marks a significant point in the usage of obelisks and their association with Amun-Re. That Thutmose I was the one to set a precedent of building activity at Karnak is reminiscent of the way in which his reign has be seen as the archetype for Eighteenth Dynasty pharaohs. It was under Thutmose I that Egypt's period of military strength, territorial expansion and material prosperity was truly

⁷⁰ Baldwin Smith (1938), Egyptian architecture as cultural expression, 152.

W. C. Hayes (1959/1990), *The Scepter of Egypt* II (4th ed). New York, 76; A. Badawy (1965), *Ancient Egyptian Architectural Design: a study of the harmonic system*. Berkeley, 14; E. Sullivan (2008), 'Architectural Features', *Digital Karnak*, http://dlib. etc.ucla.edu/projects/Karnak (accessed September 20 2016). 1.

K. Martin (1977), *Ein Garantsymbol des Lebens*, HÄB 3. Hildesheim, 134-5; Bell (2002), 'Divine Kingship and the Theology of the Obelisk Cult in the Temples of Thebes', 18.

W. C. Hayes (1973), 'Egypt: Internal affairs from Tuthmosis I to Amenophis III', in I. E. S. Edwards et al. (eds) *The Cambridge Ancient History*. Vol II (1). Cambridge, 313-416, 314; Blythe (2006), *Karnak: Evolution of a Temple*, 39.

initiated, as such it only seems fitting that Thutmose I would also initiate a building scheme that would set a precedent for later pharaohs.⁷⁴

⁷⁴ Hayes (1959/1990), *The Scepter of Egypt* II, 74.



Fig. 2.1 Karnak 1850, Maxime du Camp

Taken from inside the Middle Kingdom court, looking west. In the center, the remaining obelisk of Hatshepsut between Pylons Four and Five towers over the rubble. To the right, stacked high are the remains of Pylon Four.

MMA: 1981.1229.6.5.



Fig. 2.2 Obelisks of Hatshepsut c.1870, Felix Bonfils

The standing (northern) obelisk of Hatshepsut and the upper half of its fallen pair between Pylons Four and Five, which can be seen on the left and right respectively. The remains of sandstone columns and Osiride statues can be seen on the left hand side.

GEH: 73.074.37



Fig. 2.3 Pylon Four and the obelisks of Thutmose I and Hatshepsut c.1870-1900, Antonio Beato The remains of Pylon Four surround the standing obelisk of Thutmose I. Behind (to the right), stands the northern obelisk of Hatshepsut between Pylons Four and Five.

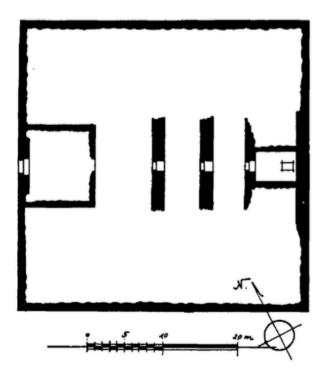


Fig. 2.4 Plan of the Middle Kingdom temple at Karnak Borchardt (1905), *Baugeschichte des Amonstempels*, 3 (fig. 1).

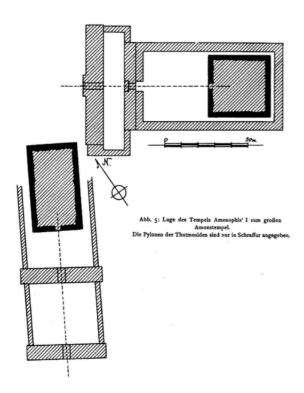


Fig. 2.5 Plan of Karnak at the end of the reign of Amenhotep I. Hatching indicates the later constructions of the Eighteenth Dynasty. Borchardt (1905), *Baugeschichte des Amonstempels*, 6 (fig. 5).

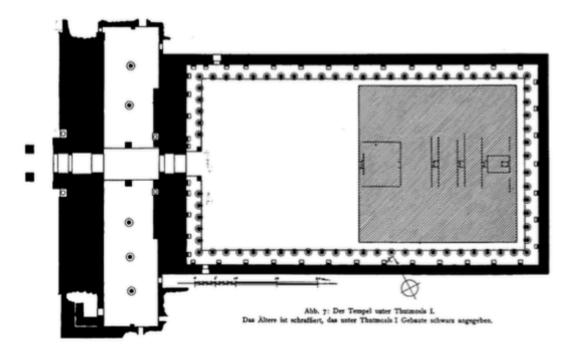


Fig. 2.6 Plan of the temple of Amun-Re at the end of Thutmose I's reign Borchardt (1905), *Baugeschichte des Amonstempels*, 9 (fig. 7).

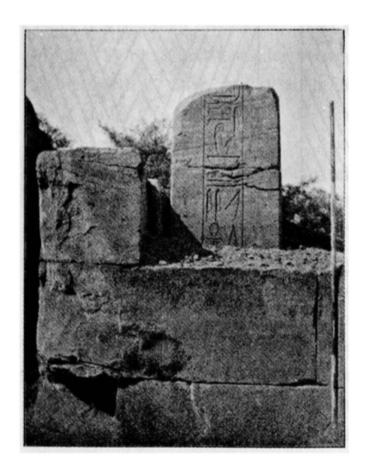


Fig. 2.7a A pillar at the northern end of the courtyard between Pylons Four and Five inscribed in the name Thutmose I. Later masonry obscures it from view.

Borchardt (1905), *Baugeschichte des Amonstempels*, 12 (fig. 10).



Fig 2.7b The same pillar seen in Fig. 2.7a as it stood in the courtyard in 2015. The doorway in the northern boundary wall can be seen to the right of the pillar. Photo: G. Smith.

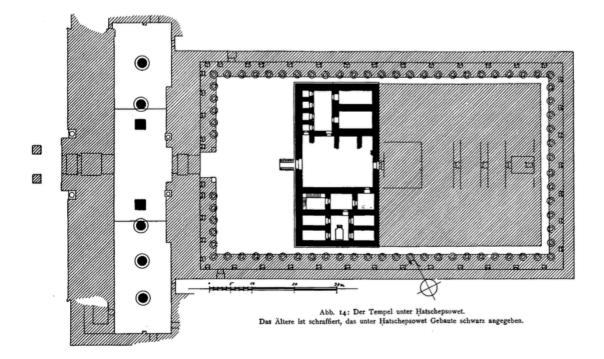


Fig. 2.8 Plan at the temple at the end of the reign of Hatshepsut. The monuments of Hatshepsut are indicated in bold.

Borchardt (1905), Baugeschichte des Amonstempels, 19 (fig. 14).



Fig. 2.9 The decoration on the upper half of the northern obelisk of Hatshepsut between Pylons Four and Five. Schwaller de Lubicz (1999), *Les temples de Karnak*, pl. 108.



Fig 2.10 The base of the southern obelisk in the courtyard between Pylons Four and Five. The groove is visible on the northern side of the top face, as are the remains of the base inscriptions.

Photo: Georges Legrain

Golvin & Goyon (1987), Les bâtisseurs de Karnak, 135.



Fig 2.11 The base of the southern obelisk in the courtyard between Pylons Four and Five. The groove used to erect the obelisk is visible of the northern edge.

Photo: G. Smith.

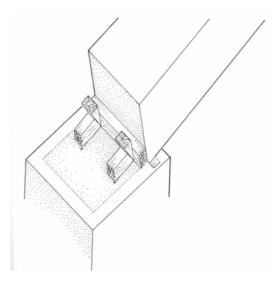


Fig 2.12 Illustration of Borchardt's proposed method of erection for the obelisks at Karnak Arnold (1991), *Building in Egypt: Pharaonic Stone Masonry*, 69.

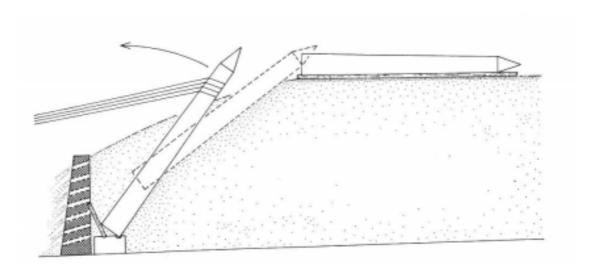


Fig. 2.13 Illustration of the method of erection for obelisks as proposed by Englebach and Chevrier. Arnold (1991), *Building in Egypt: Pharaonic Stone Masonry*, 68.

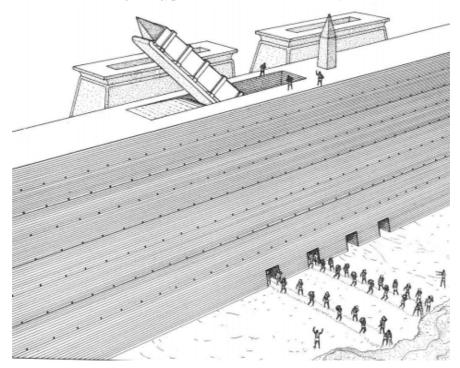


Fig. 2.14 Illustration of Golvin and Goyon's proposed method of construction for obelisks Golvin & Goyon (1987), *Les bâtisseurs de Karnak*, 133.

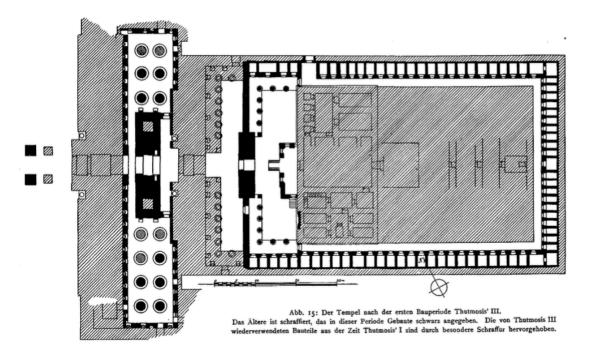


Fig. 2.15 Plan of the temple at the end of the reign of Thutmose III. His constructions are indicated in bold.

Borchardt (1905), Baugeschichte des Amonstempels, 23 (fig. 15).



Fig 2.16 The columns belonging to the southern peristyle of Thutmose III to the east of Pylon Six. Photo: G. Smith

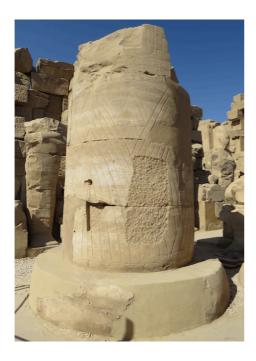


Fig. 2.17a The decoration of the sandstone columns that were erected prior to the reign of Thutmose III in the hall between Pylons Four and Five. Photo: G. Smith



columns that were erected by Thutmose III in the hall between Pylons Four and Five Photo: G. Smith.

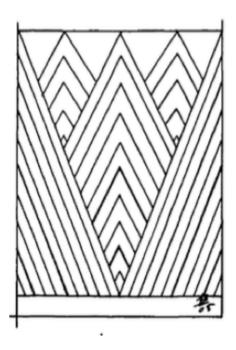


Fig. 2.17b Line drawing of the decoration of the sandstone columns that were erected prior to the reign of Thutmose III in the hall between Pylons Four and Five.

Borchardt (1905), Baugeschichte des Amonstemples, 11 (fig. 8).

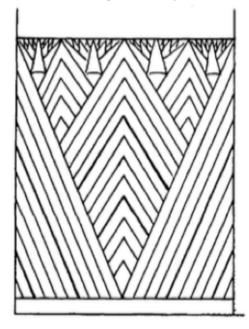


Fig. 2.18a The decoration of the sandstone Fig. 2.178 Line drawing of the sandstone columns that were erected by Thutmose III in the hall between Pylons Four and Five Borchardt (1905), Baugeschichte des Amonstemples, 11 (fig. 8).

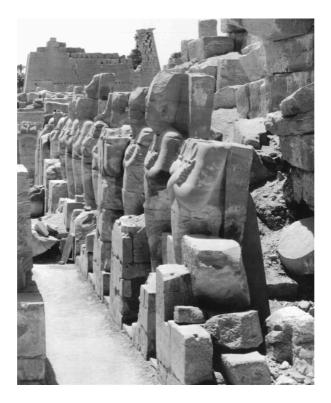


Fig 2.19 The Osiride statues on the east face of the southern wing of Pylon Four. Schwaller de Lubicz, (1999). *Les temples de Karnak*, pl. 117.



Fig 2.20 A column from the peristyle of Thutmose I in the courtyard of Pylon Five encased by the walls of the chamber of Thutmose III between Pylons Five and Six. Photo: G. Smith.

Chapter 3

Barguet's exégèse of the temple of Amun-Re

3.1 From Borchardt to Barguet

Following Legrain in 1921, Maurice Pillet oversaw the continued clearance of Karnak, focusing particularly the courts and pylons along the north south axis, the sacred lake and Mut temple, and the hypostyle hall. His work was published in 1928 in the book *Thèbes, Karnak et Louxor*. After the short-lived directorate of Pillet, in 1924 Henri Chevrier oversaw almost thirty years of work at Karnak. His work was regularly published in *Annales du service des antiquities de l'Egypt* and included the clearance of the sacred lake, the reconstruction and stabilization of the hypostyle hall, excavations of temple of Akhenaten.

In 1962 Paul Barguet published *Le Temple d'Amon-Rê à Karnak. Essai d'exégèse*, the culmination of almost twenty years of work at Karnak the work was the first comprehensive description of the monuments of the enclosure of Amun-Re at Karnak together with an interpretation of some of them. Due to its comprehensive nature it has remained a fundamental tool for research on the Amun-Re complex.

The temple prior to the reign of Thutmose I

Barguet's primary focus is the temple's history from the New Kingdom onwards and little more had been discovered about the temple during the Middle Kingdom since the chronology presented by Borchardt. A reused block from Pylon Three was used to date a relatively minor monument to the Eleventh Dynasty and it was supposed that during the Twelfth Dynasty the temple was expanded and given the shape it would retain until the Eighteenth Dynasty.⁷⁵ It was suspected that Sesostris I had built a pillared structure although its layout had not yet been recovered and like Borchardt, Barguet attributed the series of granite thresholds to the inner rooms of the Middle Kingdom Temple.⁷⁶

H. Chevrier (1947), 'Rapports sur les travaux de Karnak', ASAE 46, 147-161, 149; Vandier (1955). Manuel d'archéologie Égyptienne II vol. 2, 866; Barguet (1962), Le Temple d'Amon-Rê à Karnak, 152.

⁷⁶ Barguet (1962), *Le Temple d'Amon-Rê*, 155.

3.2 Barguet's temple of Amun-Re under Thutmose I

Barguet marks Pylon Four as the entrance to the temple proper at the time of Thutmose I. No evidence of Thutmose I's name appears on the pylon and interestingly, Barguet's attribution of the pylon significantly relies on the tomb biography of the architect Ineni who describes the building activity that he oversaw during the reign of Thutmose I at Karnak.⁷⁷ He describes the erection of great pylons of limestone adorned with cedar flagstaffs, their tips coated in electrum.⁷⁸ He also describes a door that was erected of Asiatic copper and had the image of the Amun inlaid with gold.⁷⁹

In reality, like Borchardt, Barguet notes that the core of the pylon was made of sandstone and encased with limestone, some blocks of which remain at the base.⁸⁰ At the western entrance of the pylon stood the granite obelisks of Thutmose I were erected to celebrate the Sed Festival of the king. Like Borchardt, Barguet notes groove on the northern side of the obelisk base and agrees that this is indicates that the obelisks were erected from the north.⁸¹ On the western façade of the pylon the remains of the granite bases of four flagstaffs, two more than Borchardt had noted, have been preserved, as has some of the torus moulding on the northwestern corner of the pylon (Fig. 3.1)⁸².

The pylon door

A significant contribution of Barguet's was the identification of the names of the pylon doors. The name of doors, doorways and gateways given by Barguet provided an important corpus of inscriptions that assist with the interpretation and understanding of the areas of the temple. In Pylon Four two successive doors gave entrance through the pylon: the first was thought to be a double leaf door and the second a single leaf made from copper and gold was named "Amun-Re, Mighty of Prestige". 83 This double leaf doorway was reminiscent of a gateway of

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Urk. IV, 55-56; Barguet (1962), Le Temple d'Amon-Rê à Karnak, 88; E. Dziobek (1992), Das Grab des Ineni: Theben Nr. 81. Mainz.

⁷⁸ Breasted (1906), ARE II, 103

⁷⁹ Breasted (1906), *ARE* II, 104.

⁸⁰ Urk. IV, 56.2; Barguet (1962), Le Temple d'Amon-Rê à Karnak, 87; C. F. Nims (1965), Thebes of the Pharaohs. London, 99.

⁸¹ Urk. IV, 93-94; Barguet (1962), Le Temple d'Amon-Rê, 87.

For a possible reconstruction of the flagstaffs and their bases see: M. Azim & C. Traunecker (1982), 'Un mât du IXe pylône au nom d'Horemheb', *Karnak* 7, 75-92, 79-81.

Barguet (1962), Le Temple d'Amon-Rê à Karnak, 88; R. A. Schwaller de Lubicz (1999), Les temples de Karnak, London, 89 & 601.

Amenhotep I's that had stood in the mud brick enclosure wall surrounding the temple. The gate of Amenhotep I is known from two sources: the biography of Ineni and an inscription on the remains of a doorway found by Legrain in the Cachette Court. He Legrain was of the opinion that the inscription was to be read to understand that the gate had been erected outside the temple and dismantled before or during the reign Thutmose III in its original place near the Pylon Seven. Barguet however suggests that the door acted as the entrance of the temple and that Thutmose I removed the door and relocated it within Pylon Four. Alternatively, Gun Björkman has suggested that based on the biography of Ineni, who mentions erecting a monumental doorway for both Amenhotep I and Thutmose I, that two were built: Amenhotep's in the southern face of the temple enclosure wall and Thutmose I's in the main axis of the temple in Pylon Four. He

Pylon Five and courtyard

Barguet's attribution and reconstruction of Pylon Five during the reign of Thutmose I follows closely that of Borchardt. The name of the door, "Amun, Great of Prestige", is given on the west side of the northern obelisk of Hatshepsut.⁸⁷ The use of the word prestige, *šfyt*, in the names of both Pylons Four and Five, might be explained by the fact the word *šfyt* was a homonym for "ram's head" with the ram being a sacred animal for Amun.⁸⁸

The pylon was built of sandstone and encased with limestone and was embellished on its western face by two flagstaffs, the granite bases of which can still be seen (Fig. 3.2). Barguet further attributes a gateway that collapsed in 1865 but which is preserved in early photographs of Karnak and the work of Mariette as being a reconstruction, possibly by Seti I, of the original Pylon Five gateway of Thutmose I (Fig. 3.3a and 3.3b). The gateway, devoid of decoration with the exception of remnants of a cornice, was recessed from the façade of the

Breasted (1906), ARE II, 44-5; Legrain (1903), 'Second rapport sur les travaux exécutés à Karnak du 31 octobre 1901 au 15 mai 1902', 14-16; G. Legrain (1904), 'Rapport sur les travaux exécutés à Karnak du 31 octobre 1902 au 15 mai 1903', ASAE 5, 1-43, 24 & 33.

⁸⁵ Barguet (1962), Le Temple d'Amon-Rê à Karnak, 88.

Urk. IV 53.14 & 56.8; G. Björkman, (1971), Kings at Karnak: a study of the treatment of the monuments of royal predecessors in the early New Kingdom. Uppsala, 63; Schwaller de Lebicz has notes that the doorways were transformed by the Thutmose IV and given that the reliefs on the embrasure for the double doorway are attributed to Thutmose IV this doorway may have been it addition, see: Schwaller de Lubicz (1999), Les temples de Karnak, 601.

Barguet (1962), Le Temple d'Amon-Rê à Karnak, 89.

Nims (1965), Thebes of the Pharaohs, 99; Blythe (2006), Karnak: Evolution of a Temple, 42.

⁸⁹ Barguet (1962), Le Temple d'Amon-Rê à Karnak, 106.

⁹⁰ Mariette (1875), Karnak. étude topographique et archéologique I, 8.

pylon creating small spaces on either side of the pylon where, presumably, statues of the king would have been placed. Later replaced by those of Thutmose III and IV.⁹¹

Like Borchardt, Barguet identities that the courtyard to the east of Pylon Five was designed as a peristyle during the reign of Thutmose I. The courtyard was lined with sixteen-sided sandstone columns and Osiride statues stood beneath the peristyle lining the court. Unlike Borchardt however, Barguet not identify granite pillars as part of this peristyle. The reuse of the columns of Thutmose I and the granite pillars will be discussed further in section 3.4 of this chapter.

Courtyard between Pylons Four and Five

Boundary walls joined Pylons Four and Five, creating a fully enclosed courtyard between. It was continued around the Middle Kingdom Temple to enclose the temple complex. Like Borchardt, Barguet ascribes the calcite column bases on either side of the obelisks to the reign of Thutmose I, along with a further two that were found after Borchardt during archaeological excavations below the current surface level of the courtyard (Fig. 3.4a, 3.4b and 3.4c). These wooden columns, along with two pillars of Thutmose I at the north and south ends of the court Barguet agrees supported a wooden roof over the entire courtyard. Furthermore, Barguet from his study of inscriptions at Karnak identifies that at this time the courtyard was designated a *iwnyt špst m w3dw*, an august pillared hall with papyriform columns.

Barguet dates the Osiride statues that lined the courtyard between Pylons Four and Five to the reign of Thutmose I, although he does not make a firm statement as to whether this was their original placement or if they had been moved here from a previous position. Barguet refers to Borchardt's discussion of the dating but agrees that they were placed into this courtyard subsequent to the outer casing of the pylons.⁹⁵

Pylon chambers

Barguet identified two small chambers in the southern courtyard adjacent to the southern

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⁹¹ Barguet (1962), Le Temple d'Amon-Rê à Karnak, 107.

⁹² Barguet (1962), Le Temple d'Amon-Rê à Karnak, 96-97, plan 2.

⁹³ Barguet (1962), Le Temple d'Amon-Rê à Karnak, 97-8.

⁹⁴ Urk. IV, 55.17; Barguet (1962), Le Temple d'Amon-Rê à Karnak, 97; Björkman, (1971). Kings at Karnak: a study of the treatment of the monuments of royal predecessors in the early New Kingdom, 61.

Barguet (1962), Le Temple d'Amon-Rê à Karnak, 96 & 98.

wing of Pylon Four. The southernmost doorway led to a stairway into the Pylon Four, the other opened into a small room. In the western wall of the room two niches were cut. ⁹⁶ At the opposite end of the hall in the northwest corner of the northern wing of Pylon Four a smaller room was also identified. According to Barguet these rooms may have in later Ptolemaic times been used as a library and sacristy. There is however one curious fact: the inscription on a fragment of the lintel for the southern room in the name of Thutmose I confirms they were part of the original construction. ⁹⁷

3.3 Hatshepsut's obelisks

Again, the building scheme attributed to Hatshepsut in area of Pylons Four to Six follows closely that of Borchardt's. Barguet also understood the same sequence of constructions. During the reign of Hatshepsut the wooden roof of the courtyard between Pylons Four and Five was dismantled and obelisks of pink granite were erected. The surfaces of these obelisks were plated with electrum. The inscription on the base of the northern obelisk, still standing, provides the date that they were erected after seven months of work in "year 16, in the fourth summer month" and raised to commemorate Hatshepsut's Sed festival. ⁹⁸ Given this, it is likely that the courtyard was intended for use during the royal festivals. ⁹⁹ After the obelisks were erected she likely rebuilt the hall of Thutmose I, however due the roof, which could no longer cover the entire hall, was only rebuilt in the northern and southern halves leaving the axial way uncovered.

3.4 Barguet's building scheme of Thutmose III at central Karnak

Encasing the obelisks

Thutmose III dramatically changed the appearance of the courtyard between Pylons Four and Five; his addition of masonry surrounding the obelisks, a stone roof and columns transformed the space into densely embellished hall. Like Borchardt, Barguet ascribes the encasing of the obelisk to Thutmose III but provides further details on the chamber doorways between the obelisks and Pylon Five. Around the obelisks of Hatshepsut he built a sandstone casing up to

⁹⁶ Barguet (1962), Le Temple d'Amon-Rê à Karnak, 97 (n.1).

⁹⁷ Barguet (1962), Le Temple d'Amon-Rê à Karnak, 97 (n.1).

⁹⁸ Urk. IV, 365; Barguet (1962), Le Temple d'Amon-Rê à Karnak, 99-100.

Barguet (1962), Le Temple d'Amon-Rê à Karnak, 97 & 314; Björkman, (1971). Kings at Karnak: a study of the treatment of the monuments of royal predecessors in the early New Kingdom, 66.

the height of the new roof (Fig. 3.5). This structure encasing the obelisks was joined by walls to Pylon Five and provided a passage between the two obelisks creating a small chamber in the space between the obelisks and the pylon. The new room also had doorways leading to the north and south areas of the hall. The north doorway, "the great doorway (called) 'Menkheperre-is-great-of-offerings" (Porte sud-est in Fig. 1.4), has been well preserved whereas the south gateway, "the great doorway (called) Menkheperre-is-pure-of-offerings" (Porte nord-est in Fig. 1.5) is fragmented (Fig. 3.6). 102

The transformation of the hall between Pylons Four and Five

In the north and south areas of the hall, Thutmose III increased the number of columns to fourteen, creating two rows of sandstone columns with six in the northern half and eight in the southern half, which supported a new stone roof. Barguet, like Borchardt, attributes that at some point previous to Thutmose III the wooden columns of Thutmose I had been replaced by sandstone ones and were retained during Thutmose III's renovations. During this period, Barguet notes it is also possible, that if the Osiride colossal statues of Thutmose I were not already standing in this courtyard, they were moved into this hall and placed around the interior walls during Thutmose III's reign. Between these statues, large pillars were built against the pylon walls to support the weight of the stone roof and against the west façade of Pylon Five a revetment wall was built (Fig. 3.7).

Pylon Six

The major transformation of the court of Pylon Five was due to the construction of Pylon Six by Thutmose III that divided the large open court into a two smaller courts. Both Barguet and Borchardt date the erection of Pylon Six to the twenty-fourth year of Thutmose III's reign based on the inscriptions of the *Text de la Jeunesse* of Thutmose III at Karnak that recounts the erection of Thutmose III's monuments at Karnak in dedication to Amun. The pylon was built of sandstone and its doorway of pink granite and plated with electrum was called

Vandier (1955), Manuel d'archéologie Égyptienne II vol. 2, 881; Barguet (1962), Le Temple d'Amon-Rê à Karnak, 100.

¹⁰¹ Barguet (1962), Le Temple d'Amon-Rê à Karnak, 101.

Barguet (1962), Le Temple d'Amon-Rê à Karnak, 101-2; Blythe (2006), Karnak: Evolution of a Temple, 78.

¹⁰³ Barguet (1962), Le Temple d'Amon-Rê à Karnak, 102-3.

Vandier (1955), Manuel d'archéologie II vol 2. 879; Barguet (1962), Le Temple d'Amon-Rê à Karnak, 103.

¹⁰⁵ Barguet (1962), Le Temple d'Amon-Rê à Karnak, 115-16.

¹⁰⁶ Urk. IV, 167; Borchardt (1905), Baugeschichte des Amonstemples, 22; Barguet (1962), Le Temple d'Amon-Rê à Karnak, 116 & n.1.

"Amun-Re, Senior of Prestige". To the east of Pylon Six a peristyle court was built which was later divided into a north and south courtyard by walls. 108

Courtyard between Pylons Five and Six

In the courtyard between Pylons Five and Six, Thutmose III also renovated the court replacing the peristyle of Thutmose I with one of his own, whereby some columns of Thutmose I were reused, the inscriptions of Thutmose I are still visible on the centermost columns of the hall thus allowing their attribution. A chamber in the central part of the court was also built. This was created by the building of two walls other side of the axial way which enveloped the central two columns of the peristyle (Cl.n and Cl.s in Fig. 1.6). Aligned with the columns a granite doorway was constructed of reused materials from a sanctuary built by Hatshepsut. ¹⁰⁹ An inscription on the eastern face of the doorway characterises it as a supplementary doorway of Pylon Five and claims that Thutmose III did not want to impose the doorway on the structure of Thutmose I, 'My majesty has not done this...in order to hide the moment of my father the king of Upper and Lower Egypt Aakheperkare...Aakheperkare in the house of Amun eternally together with the monument of my Majesty in the house of Amun, my father'. ¹¹⁰ The rooms therefore likely had no specific function and were a result from the transformation of the central processional way into a closed corridor. ¹¹¹

In the north and south walls of this room doorways gave access to the courtyards between Pylons Five and Six (Porte nord and Porte sud in Fig. 1.6). Based on the presence of columns and Osiride statues of Thutmose I in, Barguet identifies that the courtyards to the north and south of the chamber kept their design from under Thutmose I. However, new thirty-two sided columns replaced the previous columns of Thutmose I (Fig. 3.8). 112

A change in the processional way

The preserved scenes on the new granite door in this courtyard are oriented southwards and not centered on the main east-west axis as is normally seen. 113 Barguet suggests that this

¹⁰⁷ Urk. IV, 849; Barguet (1962), Le Temple d'Amon-Rê à Karnak, 116.

¹⁰⁸ Barguet (1962), Le Temple d'Amon-Rê à Karnak, 119-20.

Barguet (1962), Le Temple d'Amon-Rê à Karnak, 109.

Barguet (1962), Le Temple d'Amon-Rê à Karnak, 111; G. Björkman (1971), Kings at Karnak: a study of the treatment of the monuments of royal predecessors in the early New Kingdom. Uppsala, 76.

¹¹¹ Barguet (1962), Le Temple d'Amon-Rê à Karnak, 110.

¹¹² Barguet (1962), Le Temple d'Amon-Rê à Karnak, 113.

¹¹³ H. Chevrier (1955), 'Rapport sur les travaux Karnak 1952-1953', ASEA 53, 7-19, 13-14.

indicates a change in the processional way towards a structure just beyond the southern courtyard of Pylon Five (Fig. 3.9). The remains of the structure suggest that it was comprised of a sandstone dais surrounded by square pillars and Osiride statues. For Barguet the room was a coronation seat of Amun where Thutmose would be consecrated before entering the inner sanctuaries. Previously, Chevrier had identified the room as a purification chapel (Fig. 3.10). 115

At the conclusion of Thutmose III's building activities the central processional way was transformed into a corridor leading from the entrance of Pylon Four through to the barque sanctuary in the Middle Kingdom court. The new processional way was decorated with extensive relief work and often gilded. Fixing points for gilding can be seen on the doorway to the antechamber of Pylon Six and the pylon gateway itself as well as the columns of the peristyle in the courtyard of Pylon Six and the columns in the hall between Pylons Four and Five (Fig. 3.11). The processional way was decorated with extensive relief work and often gilded. Fixing points for gilding can be seen on the doorway to the antechamber of Pylon Six and the columns in the hall between Pylons Four and Five (Fig. 3.11).

3.5 Overview and commentary

3.5.1 The construction of Pylons Four, Five and Six as understood by Barguet (1962)

Barguet identified that Thutmose I was responsible for the construction of Pylon Four, featuring a double doorway and side chambers, and Pylon Five and two enclosure walls around the temple complex. The doorway that collapsed in the late 1800s was attributed by Barguet as the door of Pylon Five and led into a peristyle hall with Osiride columns to the east of Pylon. In the area between Pylons Four and Five Thutmose constructed five columns supporting a wooden roof. Barguet notes that the Osiride statues that are present in the courtyard today are dated to Thutmose I, however it was unknown whether they were placed here during the reign of Thutmose I or later in the reign of Thutmose III.

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¹¹⁴ Barguet (1962), Le Temple d'Amon-Rê à Karnak, 148; Blythe, (2006). Karnak: Evolution of a Temple, 79.

¹¹⁵ Chevrier, (1955). 'Rapport sur les travaux Karnak 1952-1953', 13-14.

Vandier (1955), Manuel d'archéologie Égyptienne II vol. 2, 88; Barguet (1962), Le Temple d'Amon-Rê à Karnak, 110; G. Björkman, (1971). Kings at Karnak: a study of the treatment of the monuments of royal predecessors in the early New Kingdom. Uppsala, 75.

P. Lacau (1955), 'L'or dans l'architecture égyptienne', ASAE 53, 221-250; Blythe (2006), Karnak: Evolution of a Temple, 78 & 80 (fig. 6.2).

Like Borchardt, Barguet attributes the obelisks within the courtyard of Pylons Four and Five to the reign of Hatshepsut. The erection of these obelisks would have required the temporary dismantling of the northern half of the courtyard.

During the reign of Thutmose III Barguet identifies that the obelisks of Hatshepsut in the courtyard of Pylon Four and Five were encased with masonry and the number of columns in this courtyard also increased and a new stone roof constructed. Barguet notes that if the Osiride statues of Thutmose I were not already in the hall, Thutmose III would have been responsible for their relocation around the hall. Between the statues pillars were installed and against the west façade of Pylon Five a revetment wall was erected. Thutmose III was also thought to have been responsible for the chamber between the obelisks and Pylon Five, and the chamber between Pylons Five and Six that consisted of columns from the Thutmose I's peristyle and granite elements of Hatshepsut's that were reused.

Barguet's contribution

Barguet's extensive work at the site corroborates with the earlier assertions of Borchardt on the chronology of central area of the Amun-Re complex. The major attributions of monuments, the pylons and obelisks, are the same although details on additional architectural elements are given. This is predominantly due to Barguet's extensive epigraphic work at Karnak.

Noticeably missing from Barguet's exégèse is any attribution of monuments to Thutmose II despite the presence of his cartouche at the site. While Barguet notes that a limestone block likely belonging to a gateway of Thutmose II was reused by Amenhotep III in Pylon Three no further explanation of Thutmose II's building activity is made. That this apparent absence of building activity by Thutmose II was not found to be noteworthy by Barguet may be explained by the shortness in length of Thutmose II's reign. Generally thought to have been around thirteen years, some research shows that Thutmose II's reign may have been as short as three years. The absence of Thutmose II in Barguet's work is made all the more noteworthy by the results of later excavations at the site that have determined that Thutmose II was responsible for the erection of a pylon, court and obelisks to the west of Pylon Four. 119

Blythe (2006), Karnak: Evolution of a Temple, 46.

L. Gabolde (1993), 'La "cour de fêtes" de Thoutmosis II à Karnak', *Karnak* 9, 1-100.

3.5.2 Karnak, Amun-Re and the pharaohs of the Eighteenth Dynasty

Amun-Re in the Eighteenth Dynasty

The expansion of the temple of Amun-Re during the Eighteenth Dynasty was likely a result of the increase in the power of Amun-Re and the priesthood during this period. The rise of the Amun at Thebes began during the Second Intermediate period when the god became closely associated with Egyptian power following the Hyksos wars and expansion of the Egypt into Nubia and Asia. As Amun's national significance rose, so strengthened the relationship between Amun and R and by the reign of Hatshepsut Karnak was considered the southern counterpart of Heliopolis, the cult center of Re and the Amun priesthood was claiming jurisdiction of all the temples in Egypt.

This period of the Eighteenth Dynasty, particularly the reign of Hatshepsut, is marked by new expressions of religious and royal power and marked a distinctive reconceptualization of cultural identity. It should also be noted, however, that while in contrast to the early Eighteenth Dynasty and Middle Kingdom, when religious evidence is scarce, the material of the Eighteenth Dynasty in its multitude invites an interpretation of the period as innovative, this may simply be attributed to the level of material that exists and such innovations may also be present in earlier times. It is a such innovation of the period as innovative, this may simply be attributed to the level of material that exists and such innovations may also be present in earlier times.

Karnak and Kingship

The rise of Amun-Re and the temple also became intertwined the kingship and the ideology of the king during the Eighteenth Dynasty and is evidenced by the presence of building activity attributable to almost every pharaoh from the Eighteenth Dynasty onwards, even those like Thutmose II who reigned for only short periods of time. The building schemes at Karnak functioned not only as expressions of piety towards Amun-Re but also functioned as

¹²⁰ Hayes (1973), 'Egypt: Internal affairs from Tuthmosis I to Amenophis III', 323.

Hayes (1973). 'Egypt: Internal affairs from Tuthmosis I to Amenophis III', 324; Gabolde (1998), 'Le "grand château d'Amon" de Sésostris Ier à Karnak', 14; N. Grimal & F. Larché (2003), 'Karnak 1994-1997', Karnak 11, 7-64, 16; D. Warburton (2012), Architecture, Power, and Religion: Hatshepsut, Amun and Karnak in Context. Vienna & Münster, 211.

P. F. Dorman (2014), 'Innovation at the Dawn of the New Kingdom', in J. M. Galán, B. M Bryan and P. F. Dorman (eds) *Creativity and Innovation in the Reign of Hatshepsut*. SAOC 69. Chicago, 1-6, 1.

L. Troy (2006), 'Religion and Cult at the time of Thutmose III', in E. H. Cline & B. D. O'Connor (eds) Thutmose III: A New Biography. Michigan, 123-182, 123.

signs of royal power and prestige.¹²⁴ In this way the building schemes of pharaohs at Karnak can be used as indication of the nature of their kingship and ideology during their reign.

3.5.3 Hatshepsut at Karnak

In the same way as it can be seen in Borchardt's chronology, Barguet attributes Thutmose I with the rapid expansion and aggrandizement of the temple that introduced many of the characteristic elements of the Amun-Re complex. Hatshepsut's building scheme at the temple however focused not on expansion but the development of its religious aspect. Her building activity primarily took place within the inner courts and sanctuaries of the temple and though she likely dismantled some of the inner sanctuaries of the Middle Kingdom her building program exhibited considerable respect towards Thutmose I and Thutmose II with the inclusion of them in many of her building inscriptions. 125 As the daughter of Thutmose I and wife of Thutmose II, she was placed on the throne as co-regent for the young heir Thutmose III, the son of Thutmose II by a lesser wife. The account of her appointment to the throne by Thutmose I indicates a reliance on her father as the source for her claim to the throne. 126 Furthermore, her title of God's Wife of Amun was used to foster her transition to the kingship. 127 Her building program at Karnak concentrated primarily on the inner and most sacred areas of the temple and suggests a particular interest in religious development of the temple. Furthermore, the erection of obelisks within the temple walls indicates an interest in the solar aspect of Amun-Re. 128

3.5.4 Thutmose III at Karnak

Thutmose III's reign was heavily characterized by successful military campaigns that generated substantial wealth for the empire and resulted in significant expressions of

¹²⁴ Lauffray (1979), Karnak d'Égypte. Domaine du divin, 45

E. Sullivan (2010). 'Karnak: Development of the Temple of Amun-Ra', in W. Wendrich (ed) *UCLA Encyclopedia of Egyptology*. http://digital2.library.ucla.edu/viewItem.do?ark=21198/zz002564qn (accessed August 19 2016).

Blythe (2006), Karnak: Evolution of a Temple, 52.

Troy (2006), 'Religion and Cult at the time of Thutmose III', 132.

L. D. Bell (2002), 'Divine Kingship and the Theology of the Obelisk Cult in the Temples of Thebes', in H. Beinlich (ed) Ägyptologische Tempeltagung: Würzburg, 23-26. September 1999, Ägypten und Altes Testament. Wiesbaden, 17-46, 18.

religiosity through the restoration and embellishment of temples. His building activities and inscriptions suggest that as Pharaoh Thutmose III aimed to create a strong link between his kingship and Amun. The lengthy inscriptions of his *Annals* and *Text de la Jeunesse* and the construction of his Ahk-Menu in the east of Karnak indicate a strong display of kingly power at the temple. The transformation of the processional way and the hall between Pylons Four and Five can also be interpreted as an attempt by Thutmose III to individualise the temple to his own reign.

Thutmose III's accession to the throne is recorded in his *Text de la Jeunesse* at Karnak temple and describes the events that led to Thutmose's kingship. 130 The focus of this account is on Amun's recognition of Thutmose in the northern part of the hall between Pylons Four and Five. 131 Appearing in the hall, most likely in the form of a cult statue on the shoulders of priests, the god stops before the child, indicating his recognition: 'There was no one (standing) in front who knew what he was doing, as his majesty searched everywhere. Then, knowing me, he stopped'. 132 The transformation of this into what must have been a crowed colonnade is interesting in light of this event. Thutmose III's constructions in the hall created small confined spaces that must have been reminiscent of the inner sanctuaries of temples. In this way the constructions rendered the hall usable for large festivals and the space likely lost much of functionality and became a more sacred zone of the temple. The extension of the sacred areas of the temple can also be seen in the addition of chambers and doors along the processional way. These chambers were likely associated with ritual functions that were performed along the processional way and were juxtaposed against the open courts of Pylon Five and Six on either side. The ritualisation of the outer areas of the temple are an interesting feature of Thutmose III building program at Karnak and like Hatshepsut indicates a concentration on the expansion of the religious aspects of the temple.

¹²⁹ C. A. Keller (2005) 'The Joint Reign of Hatshepsut and Thutmose III', in C. H. Roehrig (ed) Hatshepsut: From Queen to Pharaoh, New York, 96-106, 96.

¹³⁰ Urk. IV, 156-75.

¹³¹ Barguet (1962), *Le Temple d'Amon-Rê à Karnak*, 103 (n. 1).

Urk. IV, 158, 9-12; Troy (2006), 'Religion and Cult at the time of Thutmose III', 132.

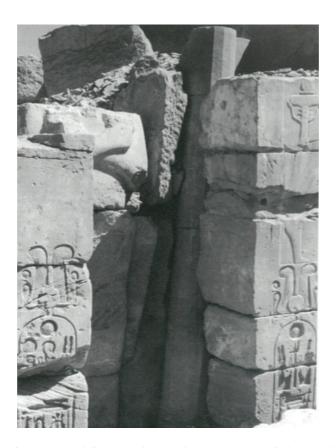


Fig. 3.1 Remains of torus moulding on the northwest corner of the northern wing of Pylon Four.

Schwaller de Lubicz, (1999). *Les temples de Karnak*, London, 601 (fig. 57).



Fig. 3.2 A remaining granite base of the flagstaff on the west face of the south wing of Pylon Five.

Photo: G. Smith.



Fig. 3.3a Looking west. Remains of a gateway attributed by Barguet as part of Pylon Five. Photo: Henry Cammas, c. 1858-1961.

Azim (2001), 'Un monument de Karnak oublié: la porte centrale de la Ouadjyt', pl.III.



Fig. 3.3b Looking east. Remains of a gateway attributed by Barguet as part of Pylon Five. Photo: Louis De Clercq 1860.

Azim (2001), 'Un monument de Karnak oublié: la porte centrale de la Ouadjyt', pl.IV.



Fig. 3.4a The southern most calcite column base in the southern courtyard between Pylons Four and Five. Today it sits below floor level. Photo: G. Smith.



Fig. 3.4b The calcite column base alongside the southern obelisk of Hatshepsut. Photo: G. Smith.



Fig. 3.4c The calcite column base alongside the northern obelisk of Hatshepsut. Photo: G. Smith.



Fig. 3.5 Looking North. The remains of the encasing structure around the northern obelisk of Hatshepsut. To the left the Osiride statues that line the courtyard can be seen. Photo: G. Smith.



Fig. 3.6 Looking North. The northern doorway of the chamber between the obelisks of Hatshepsut and Pylon Five. Photo: G. Smith.



Fig. 3.7 The Osirides and pillars along the east face of the northern wing of Pylon Four. Photo: G. Smith.



Fig. 3.8 The northern courtyard between Pylons Five and Six. The remains of the Osiride statues and columns can be seen. Behind these is Pylon Five. The boundary wall that extended north from the pylon has since disappeared. Photo: G. Smith.

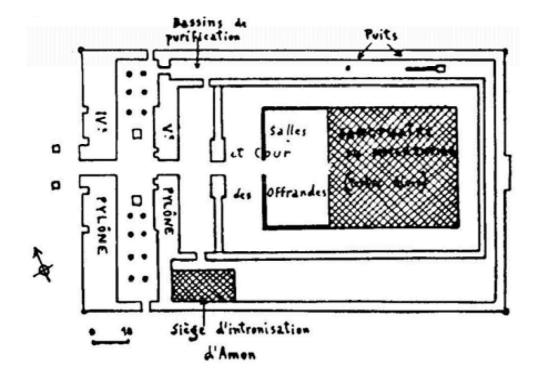


Fig. 3.9 Plan of the central area of the temple of Amun-Re during the reign of Thutmose III. The hatching at the bottom of the image shows the area identified by Barguet as a coronation seat of Amun.

Barguet (1962), *Le Temple d'Amon-Rê à Karnak*, 340.

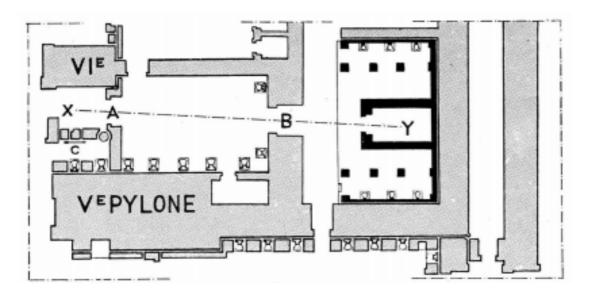


Fig. 3.10 Plan of the southern courtyard between Pylons Five and Six. In bold is the room identified by Barguet as a coronation seat of Amun. Chevrier (1955), 'Rapport sur les travaux Karnak 1952-1953', 14 (fig. 2).

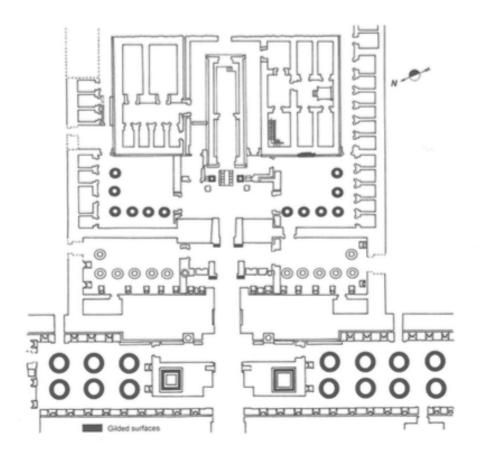


Fig. 3.11 Plan of the central area of Karnak. The bolded elements are those that have been identified as having been gilded. Blythe (2006), *Karnak: Evolution of a Temple*, 80 (fig. 6.2) (after Lacau (1955), 'L'or dans l'architecture égyptienne', pl. I.).

Chapter 4

Re-excavation and new evidence: Carlotti and Gabolde

Centre Franco-Égyptien d'Étude des Temples de Karnak 4.1

In 1967 commission of the Karnak was transferred to the Centre Franco-Égyptien d'Étude des Temples de Karnak (CFEETK), which undertook the study of epigraphy and architecture at the site as well as the conservation and anastylosis of monuments within the Karnak temple complex. 133 Their work was at first published in the journal Kemi before being relocated to the regularly published journal Cahiers de Karnak.

While excavations at the site had been undertaken since Mariette in 1858, the CFEETK's work at the site marks an important moment in Karnak's modern history. The developments in scientific archaeology that emerged in the second half of the twentieth century encouraged the re-examination of evidence previously recorded shedding new, and different, light on Ancient Egypt. Using new technologies Karnak's architecture, artifacts and landscape have been re-evaluated and re-recorded for evidence that was not previously accessible.

Since the late 1990s, as part of the CFEETK, architect Jean-François Carlotti and Egyptologist Luc Gabolde have made a significant contribution to the study of Karnak and have concentrated on the re-excavation and reconstruction the central area of Karnak focusing on reconstructing the earliest periods of the Amun-Re Temple and the various phases of construction during the Eighteenth Dynasty.

4.2 **Origins of Karnak**

Regarding the early period of Karnak, evidence from Gabolde's excavations suggest that a temple of Amun-Re may have stood at the site from as early as the reign of Intef II during the First Intermediate Period. 134 Evidence for a small mud-brick temple with a stone columned portico comes from one sandstone column (Luxor J.841), later reused in the Hall of Youth of Thutmose III, with an inscription dedicated to that king and the remains of a sandstone

¹³³ CFEETK (2014), *Les services*. http://www.cfeetk.cnrs.fr/ (accessed May 11 2016). ¹³⁴ Urk. IV, 608-610; Lauffray (1979), *Karnak d'Égypte. Domaine du divin*, 45.

platform in the west of the Middle Kingdom Court below the granite thresholds dated to the Middle Kingdom Temple. This is supplemented by a stela (Manchester Museum no. 5052) from the Intef cemetery on the west bank that suggests a temple of Amun was present in Thebes from at least the reign of Mentuhotep II. While this was known earlier, Barguet dated the stela to some time before Intef II. 136 It should be noted however that due to the presence of a number of Old Kingdom cartouches, dating back to the Fourth Dynasty, in a list of kings within Thutmose III's Ahkmenu, it has been suggested that Karnak may have been the site for a temple of Amun, rather than Amun-Re, as early as the late Third Dynasty.

The first monumental structure at Karnak has been reconstructed by Gabolde and has been dated to the reign of Sesostris I in the Twelfth Dynasty. At the site of the sandstone platform, Gabolde has reconstructed a limestone temple, embellished at the entrance by a portico of square columns between which stood Osiride statues of the king. Within the temple, a peristyle court led to a series of chambers, marked by granite thresholds along the central axis. The inner sanctuary of the temple however lay to the north of the central axis. Limestone lintels and door jambs were also excavated in the Middle Kingdom court. These were thought to belong to two mud-brick concentric enclosure walls around the temple of Sesostris. The western side of this wall probably lay somewhere in the vicinity of Pylon Three and the southern edge near Pylon Eight. Charles Van Siclen argues that the Nile's eastern bank would have been located nearby and could have thus limited the westward expansion of the temple at the time. Furthermore, Van Siclen's excavations have also suggested that Sesostris erected a limestone shrine near the court of Pylon Nine, such structure being the earliest sign of a north-south processional route at Karnak.

F. Le Saout, A. H. Maarouf & T. Zimmer (1987), 'Le Moyen Empire à Karnak: varia 1', *Karnak* 8, 294-297; L. Gabolde, J.-F Carlotti & E. Czerny (1999), 'Aux origines de Karnak: les recherches récentes dans la "cour du Moyen Empire", *BSEG* 23, 31-49, 39.

W. M. F. Petrie (1909), Qurneh, British School of Archaeology in Egypt and Egyptian Research Account 16. London, 17, pl X; Barguet (1962), Le Temple d'Amon-Rê à Karnak, 2; M. Ullmann (2007), 'Thebes: Origins of a Ritual Landscape', P. Dorman & B. Bryan (eds) Sacred Space and Sacred Function in Ancient Thebes, SAOC 61. Chicago, 3-25, 3-4.

Gabolde (1998), Le "grand château d'Amon" de Sésostris Ier à Karnak: La décoration du temple d'Amon-Rê au Moyen Empire. 18-21.

Gabolde (1998), Le "grand château d'Amon" de Sésostris Ier à Karnak: La décoration du temple d'Amon-Rê au Moyen Empire, 114-5; G. Charloux (2007), 'Karnak au Moyen Empire: L'enceinte et les fondations des magasins du temple d'Amon-Rê', Karnak 12, 191-225 & 809-813, pl. IV.

¹³⁹ C. Van Siclen (2005), 'La cour du IXe pylône à Karnak', *BSFE* 163, 27-46, 29 & 32.

Van Siclen (2005), 'La cour du IXe pylône à Karnak', 29 & 32. Given that evidence dating to the Middle Kingdom at the site of the Luxor and Mut temples is unknown, the destination of this north-south processional route is unknown. Furthermore, domestic remains found in excavations to the south of Pylon Ten dating to the Second Intermediate Period suggest that at this time the area was still part of secular

Early Eighteenth Dynasty

Work by Catherine Graindorge has reconstructed the building activity of Amenhotep I during the early Eighteenth Dynasty based on her study of the limestone blocks and fragments excavated in various parts of the temple throughout the twentieth century. She suggests that Amenhotep I added stone chapels and storage rooms in the north and south sides of the Middle Kingdom's forecourt, the inner wall of the Middle Kingdom mud-brick enclosure wall, whose western side probably lay in the vicinity of the later Pylon Six. A high wall fronted by a two columned porticoes subsequently replaced it. In the outer enclosure wall, which she places to be closer to Pylon Four rather than Pylon Three, a new gate was erected.¹⁴¹

4.3 New data on the constructions of Thutmose I

The re-excavation of the courtyard between Pylons Four and Five by Carlotti and Gabolde published in 2003, confirmed much of the traditional chronology of the courtyard and surrounding area but also brought to light new insights and architectural details. In reconstructing the building chronology of Thutmose I Carlotti and Gabolde were able identify two separate phases in the time of Thutmose I. They probably immediately followed each other. The building program of Thutmose I in this area would have necessitated the removal of Amenhotep I's structures during phase one.

Phase One- the pylons (Fig 4.1)

The excavations conducted in the northern half of the courtyard between Pylons Four and Five, looked at the foundations of the courtyard, the northern boundary wall, Pylons Four and Five and the inner encasing wall of the area. The surveys showed that the foundations for both pylons and the northern boundary wall lay at the same level, 11cm deeper than that of the interior encasing wall, suggesting that the two pylons and the boundary wall were contemporary with one another. Carlotti and Gabolde attribute these constructions to the

Thebes, see: L. Bell (1997), 'The New Kingdom "divine temple": The example of Luxor', B. Shafer (ed) *Temples of ancient Egypt*, New York, 127-84, 147-8; M. Azim (1980), 'La fouille de la cour du Xe pylône: Rapport préliminaire', *Karnak* 6, 153-65, 161; Ullmann (2007), 'Thebes: Origins of a Ritual Landscape', 11.

¹⁴¹ C. Graindorge (2002), 'Der Tempel des Amun-Re von Karnak zu Beginn der 18. Dynastie', in H. Beinlich (ed) Ägyptologische Tempeltagung: Würzburg, 23. - 26. September 1999, Ägypten und Altes Testament. Wiesbaden, 83-90.

¹⁴² Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 257.

reign of Thutmose I. In the same construction phase as these pylons, the sandstone enclosure walls, which replaced the earlier temple enclosure walls, and the obelisks to the west of Pylon Four, sixteen niches, eight in each pylon wing, were cut into the eastern face of Pylon Four (Fig. 4.2). In these niches seated Osiride statues of the king were placed (Fig. 4.3). From the remains of these, found in both situ and in the surrounding area, it has been reconstructed that those in the southern pylon wing wore the white crown and those in the northern wing wore the double crown. 143 Based on the fragmentary inscriptions within the niches and their entrance they can be attributed to Thutmose I. 144

Phase Two- the peristyle of Pylon Five

The second phase of construction under Thutmose I consisted primarily of the adornment of the courtyards (Fig. 4.4). To the east of Pylon Five a peristyle of sixteen sided sandstone columns supported a roof that protected the Osiride statues of the king. Unlike Borchardt and Barguet who thought the peristyle continued around the entirety of the enclosure walls, Carlotti and Gabolde place the peristyle only in the area immediately to the east of the pylon.

Side chambers of Pylon Four

In the courtyard between Pylons Four and Five the empty space between the southern wing of Pylon Four and the southern boundary wall was closed off into a small room by the addition of a wall that aligned with the eastern face of the pylon. Doorways in the new wall gave access to two small rooms. In the southernmost room a set of stairs led up to the top of the pylon. To the north of this doorway lay another room (Porte oust in Fig. 1.5) that had niches installed in its western wall. The doorway partially survives and records a relief allowing an attribution to Thutmose I. 145

The Osiride statues

Additionally, Carlotti and Gabolde also examined the large Osiride statues, 3.15m high and 0.61m wide, of the king that were placed next to the niches on the eastern wall of the court and at even intervals around the remaining three sides of the court. 46 While previously Borchardt and Barguet had suggested that these colossi were moved from a previous position

144 Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 258-261.
145 Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 258 & pl XIIIa.
146 Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 260.

¹⁴³ Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 266.

in the courtyard of Pylon Five, Carlotti and Gabolde propose that bases on the supporting structures connecting the statues and the walls their original position was where they currently stand lining the walls of the court of Pylon Four. Towards the eastern end of the north and south boundary walls doorways provide access into the court. The colossus that stands to the east of the northern doorway (C03.o in Fig. 1.4) overhangs into the doorway slightly at the torso (Fig. 4.5a and 4.5b). The positioning of this colossi to frame the doorway, Carlotti and Gabolde argue, suggests that the statue was created specifically with this position in mind. 148

The peristyle of Pylon Four

Around the courtyard, a peristyle was erected providing protection for the Osiride colossi. This peristyle was built in the same style as the one to the east of Pylon Five, sitting close to the walls. The thirty-two sided columns, of which fragments remain, have been reconstructed to the enormous height of just over 6m and they are thought to have supported a wooden roof that left the axial way uncovered (Fig. 4.6). From the remains of the sandstone architraves, the distance between each column has been reconstructed to 2.85m.¹⁴⁹

4.4 The building scheme of Thutmose II

Carlotti and Gabolde have reconstructed that at the site of Pylon Three Thutmose II erected a new entrance for the temple that was later dismantled. While only limestone blocks remain, Gabolde has constructed that the new entrance likely took the form of a pylon. Theoretically, based on the increasing size of Pylons Six, Five and Four, this pylon would have measured 55m in length and 10m in depth and the court created between this pylon and Pylon Four would have measured 73m in length and 38m in depth. This courtyard is now referred to as the Festival Court of Thutmose II and enclosed the obelisks of Thutmose I and a set erected by Thutmose II. Excavations undertaken by Gabolde have shown that the foundations for this court sit at a higher level those of Pylon Four and therefore confirm that

¹⁴⁷ Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 285.

¹⁴⁸ Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 285 & pl XIc.

¹⁴⁹ Carlotti & Gabolde, (2003), 'Nouvelles données sur la Oudjyt', 286-7.

¹⁵⁰ Gabolde (1993), 'La "coûr de fêtes" de Thoutmosis II a Karnak IX'.

Digital Karnak (2008), *Pylon and Festival Court of Thutmose II* http://dlib.etc.ucla.edu/projects/Karnak/feature/PylonAndFestivalCourtOfThutmoseII (accessed September 27, 2016).

September 27, 2016).

Gabolde & Zimmer (1987), 'Sondage effectue 5 l'angle sud-est du parvis du IVe pylône', 161-2; Gabolde (1993), 'La "coûr de fêtes" de Thoutmosis II a Karnak IX', 18-9 & 2; Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 256.

Pylon Four must have been built prior to this courtyard. At the southern boundary of this courtyard, Gabolde has also reconstructed a small pylon, on a north-south axis from blocks found in Pylon Three.

4.5 Hatshepsut's Wadjyt hall

In light of the extensive archaeological work of the CFEETK it is now understood that the building scheme at Karnak undertaken by Hatshepsut dramatically transformed and enhanced the temple complex. She raised three sets of obelisks at different locations, renovated the courtyard of Thutmose I between Pylons Four and Five, constructed a large pylon, Pylon Eight, along the north-south axis of the temple and erected a series of chapels in the Middle Kingdom court. ¹⁵³

Regarding the renovations in the courtyard of Pylon Four, Carlotti and Gabolde's reconstruction differs from those previously given and proposes that Hatshepsut erected a set of electrum-plated granite obelisks in the center of the courtyard as well as Five gilded-wood papyriform columns, positioned in a single line along the centre north-south axis of the court, that supported a wooden roof at the north and south ends of the courtyard and the central area surrounding the obelisks remained unroofed (Fig. 4.7 and 4.8). An excavation in 2001 concluded that the calcite column base cited by Borchardt showed traces of having supported a column that featured a three-section shaft, or a *wadj*-column.

As such, it was under Hatshepsut that the courtyard was transformed into a *Wadjyt* hall and is, for Carlotti and Gabolde, confirmed by the inscription of the base of the remaining standing obelisk in the hall.

...my heart led me to make for him (Amun) two obelisks of electrum, whose point[s] mingled with heaven, in the august colonnade (*Iunyt*) between the two great Pylons of the king the Mighty Bull, the King of Upper and Lower Egypt, Akheperkare (Thutmose I), the deceased Horus.¹⁵⁶

¹⁵³ Blythe (2006), Karnak: Evolution of a Temple, 54-62.

¹⁵⁴ Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 291-292; J.-F. Carlotti & L. Gabolde (2005), 'Deux notes prises sur la Ouadjyt de Karnak', *Memnonia* 16, 175-187, 182.

¹⁵⁵ Carlotti & Gabolde (2005), 'Deux notes prises sur la Ouadjyt de Karnak', 177.

¹⁵⁶ Urk. IV, 365.1-5; Breasted (1906), ARE II, 317.

The inscription mentions Hatshepsut's plans to erect obelisks in the *lunyt* between two pylons of Thutmose I. Given that Carlotti and Gabolde have established that Thutmose I was responsible for the erection of Pylons Four and Five and that no other obelisks within a hall of Thutmose I are known, it follows that before the erection of Hatshepsut's obelisks the courtyard was designed as an *Iunyt* and must have been transformed into a *Wadjyt* hall after the obelisks were erected. 157 This challenges Barguet's chronology that Thutmose I had positioned columns along the north-south axis of the room. This is further supplemented by the text of a block (bloc 302) from the Chapelle Rouge that describes the construction of two obelisks within a Wadjyt hall by Hatshepsut. 158

This sequence would have necessitated a complicated scenario for the erection of the obelisks. In order to erect the obelisks in the closed off courtyard, Hatshepsut dismantled the northern boundary wall, and the peristyle of Thutmose I, leaving only the Osiride statues that lined the walls.159

Four of the calcite bases belonging to the columns of Hatshepsut's Wadjyt are still present within the hall. It has been reconstructed that the columns were made of gilded-wood and supported a wooden roof. Given the dimensions of the bases it can be reconstructed that two columns would be built in the northern hall and three is the southern. 160 This would have resulted in an asymmetrical layout of the hall and would have highlighted that asymmetry of the temple during this time. Due to a chapel series of Thutmose I on the western side of the Middle Kingdom court the temple was wider on the western side of the main axis.

4.6 Thutmose III's constructions (Fig. 4.9)

Encasement of the obelisks

Through the re-examination of the temple remains Carlotti and Gabolde concluded that Thutmose III also built extensively in the central zone of Karnak, his constructions once again

¹⁵⁷ Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 286; L. Gabolde (2013), 'Remarques sur le chemisage des obélisques de la Ouadiyt et sa datation', Karnak 14, 283-399, 386.

P. Lacau, H. Chevrier, M.-A. Bonhême, et al. (1977), Une chapelle d'Hatshepsout à Karnak I. Cairo, 231-234; Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudivt', 291; CFEETK (n.d.), Dresser les obélisques Scene 02.0 (bloc 302)- (KUI 1300). http://www.cfeetk.crns.fr/karnak/?u=1300 (accessed August 19, 2016).

 ¹⁵⁹ Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 289-291.
 160 Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 289-292.

altering many of the earlier structures. In the newly erected *Wadjyt* hall between Pylon Four and Five, Carlotti and Gabolde attribute the structure surrounding the obelisks to Thutmose III. This sandstone structure, which necessitated the dismantling of Thutmose I's peristyle, resembled a small four-sided pylon and encased both obelisks leaving only the top halves of their shafts uncovered (4.10).¹⁶¹

The doorway between the obelisks

Access along the central processional axis was kept clear by the installation of a monumental sandstone gate in center of the structure. This doorway is known from the work of Mariette and photographs from the Nineteenth Century that preserved the later reconstruction, possibly Nectanebo I, of the doorway before its collapse sometime around 1862. Previously, Barguet had wrongly attributed this doorway as belonging to Pylon Five (Fig. 3.3a and 3.3b) and had also attributed it as a reconstruction by Seti I. During the nineteenth century the doorway stood isolated from the pylons with two narrow pillars and supported a triple lintel with the remains of a horizontal cornice towards the south. It appears to have been plastered over and does not have any inscriptions or relief decoration. 164

The chamber between the obelisks and Pylon Five

Two walls joining the structure at its far ends to Pylon Five created a small chamber between Pylon Five and the encased obelisks. In both walls doorways gave access to the north and south halls. ¹⁶⁵ The erection of this chamber predates the supporting wall built against the west face of Pylon Five, which covers over the inscriptions of the doorjambs (Fig. 4.11). ¹⁶⁶ Thutmose III erected the Osiride statues along the obelisk encasement. ¹⁶⁷ The inscriptions on the doorways and the obelisk encasement are ascribed to Thutmose III, with no mention of Hatshepsut and they do not show any evidence of being re-used and re-carved at a later time

¹⁶¹ Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 317 (fig. 11b); Gabolde (2013), 'Remarques sur le chemisage des obélisques de la Ouadjyt et sa datation', 388.

Both Mariette and Legrain claimed that the door had collapsed in 1865, however Azim holds that earlier documents relating to the doorway suggest that it likely collapsed just prior to this date see: Mariette (1875), *Karnak, étude topographique et archéologique* I, 8; G. Legrain, G. Maspero, C. Nicour et al. (1900), 'Rapports sur l'écroulement de onze colonnes dans la salle hypostyle du grand temple d'Amon à Karnak, le 3 octobre 1899', *ASAE* 1, 121-140, 127; Legrain (1929), *Les temples de Karnak*, 14; M. Azim (2001), 'Un monument de Karnak oublié: la porte centrale de la Ouadjyt', *RdE* 52, 7-27.

Barguet (1962), Le Temple d'Amon-Rê à Karnak, 107; Schwaller de Lubicz (1999), Les temples de Karnak, fig. 65.

¹⁶⁴ Azim (2001), 'Un monument de Karnak oublié: la porte centrale de la Ouadjyt', 8.

Azim (2001), 'Un monument de Karnak oublié: la porte centrale de la Ouadjyt', 8.

¹⁶⁶ Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 292.

¹⁶⁷ Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 296.

allowing the attribution of this structure to Thutmose III.

The Wadjyt hall: from wood to stone

Additionally, in the hall inscriptions on the remains of the sandstone columns in the northern half of the hall record Thutmose III's further renovations. 168 Using this text, Gabolde reconstructs that Thutmose III dismantled the wooden columns and the roof of Hatshepsut and in the northern hall replaced these with six sandstone wadj-columns in two rows. These columns supported a sandstone roof more than 16m high that was further supported by the installation of a new interior wall surrounding the court that obscured the niches of Thutmose I on the eastern wall of Pylon Four. Amenhotep II was later to complete the southern half of the hall with the erection of eight more columns and their roof. This is recorded in the inscription on the columns in the southern half of the hall (Fig. 4.12).¹⁶⁹

It may be worth noting that the design of the columns and roof of this hall is reminiscent of the later Hypostyle Hall of Sety I (Fig. 4.13 and 4.14). Both halls are designed as entrances to the temple with cosmological reference to the Egyptian marshes. ¹⁷⁰ In this way, the hall designed between Pylons Four and Five can be seen as the prototype for the Hypostyle Hall.

Pylon Six and Courtyard

East of Pylon Five, Carlotti and Gabolde also conclude that Thutmose III constructed Pylon Six and a small structure before its entrance. Gabolde has proposed that between Pylons Five and Six Thutmose III constructed a small one-tower sandstone pylon. Its doorway though made of sandstone was surrounded by granite elements enclosing the central column of Thutmose I's peristyle and joined to both Pylons Five and Six by additional walls. 171 This structure will be discussed further in the following chapter.

Thutmose I's constructions significantly altered the processional axis of the temple with the addition of the Sixth Pylon, the encasing of the obelisks and the small one-tower pylon between Pylons Five and Six the processional axis was converted into a series of monumental

Piehl (1885), 'Sur l'origine des colonnes de la salle des caryatides du grand temple de Karnak', 203-19, 205-8; Breasted (1906), ARE II, 601.

Breasted (1906), ARE II, 805; Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudivt', 293-295; L. Gabolde, (2013). 'Remarques sur le chemisage des obélisques de la Ouadjyt et sa datation', Karnak 14, 283-399. 398-9.

Wilkinson (2000), *The Complete Temples of Ancient Egypt*, 65-66.
 L. Gabolde (2009), 'De la soi-disant "arche" en granit de Thoutmosis III à Karnak', *GM* 223: 43-52.

gateways which alternated between a larger pylon joined by boundary walls with courts or halls either side and smaller single tower pylons that led to small chambers.

4.7 Overview and Commentary

4.7.1 The construction of Pylons Four, Five and Six as understood by Carlotti and Gabolde (2005)

During Thutmose I's initial building phase Carlotti and Gabodle determined Thutmose I constructed Pylons Four and Five and the their enclosure walls. The east face of Pylon Four featured sixteen niches in which Osiride statues of the king were placed. In the second phase of construction in the area immediately east to Pylon Five a peristyle and Osiride statues of the king were erected. In the courtyard east of Pylon Four side chambers were erected beside the pylons and around the sides of the courtyard Osiride statues of the king were placed and a peristyle of thirty-two sided columns was built.

During Hatshepsut's reign the courtyard of Thutmose I to the east of Pylon Four was dismantled and two obelisks and five gilded-wood papyriform columns were erected along the north-south axis of the room. These columns supported a wooden roof on the north and south ends of the courtyard while the central area surrounding the obelisks remained uncovered.

The re-excavations of Carlotti and Gabolde also concluded that Thutmose III erected a structure resembling a small pylon around the obelisks of Hatshepsut. The monumental gateway that collapsed in the late 1800s was part of this structure though its wall connected to Pylon Five. Later a supporting wall was built around the courtyard covering the niches in Pylon Four. In the northern half of the area six sandstone columns supporting a stone roof were constructed. Later, the same was done in the southern half of the courtyard later by Amenhotep II. Thutmose III also erected Pylon Six and a small one-tower pylon between Pylons Five and Six.

4.7.2 A new building chronology

Through CFEETK's concentrated studies on the foundations of the courtyards insightful details have been yielded that have challenged previous assumptions on the building phases of

the temple. The excavations of Carlotti and Gabolde have supported the attribution of Pylons Four and Five made previously by Borchardt and Barguet, however they suggest an alternative reconstruction of the building phases of the hall between Pylons Four and Five. Their chronology suggests that Hatshepsut, not Thutmose I, transformed this area into a *Wadjyt*. The change in attribution means that Thutmose I was not responsible for the introduction of the characteristic hypostyle hall. His building program however was still influential in introducing the characteristic pylons and central axis to Karnak. Furthermore, in this new chronology Thutmose I also replaced the earlier mud-brick wall with a sandstone one which marks a development in the scale of stone used at the sight that likely corresponds with the increase of importance and power of the temple and its priesthood.¹⁷²

4.7.3 The "Obelisk Problem"

Through the more complete architectural picture that Carlotti and Gabolde have uncovered the building program of Thutmose III showed a consistent goal in the transformation of the central axis of the temple. Despite the fact that this transformation may have in some respect explained the encasing of Hatshepsut's obelisks, in that Thutmose III's transformation worked to create a quick succession of doorways through pylons and chambers between them, Gabolde continues to agree with previous scholars in interpreting the obelisk towers as an act of ill will towards Hatshepsut. He states that the lining of the obelisk meets neither architectural or theological need nor any historical imperative but rather the lining of the obelisk fits with theory that during the sole reign of Thutmose III he felt the need to erase the propaganda texts of Hatshepsut. 173

4.7.4 A new understanding of the reigns of Hatshepsut and Thutmose III

Interestingly, the conclusions of Gabolde on the reasoning for the encasement of the obelisks do not reflect the changes in the opinions of scholars in the interpretation of historical events of the period. The 1960s and 70s marked a significant development in scholars understanding of the reign of Hatshepsut and Thutmose III. The systematic and thorough study of inscriptions and monuments dating to Hatshepsut yielded a number of interesting conclusions

Warburton (2012), Architecture, Power, and Religion: Hatshepsut, Amun and Karnak in Context, 218.

¹⁷³ Gabolde (2013), 'Remarques sur le chemisage des obélisques de la Ouadjyt et sa datation', 398.

that led to a decline in the opinion of a negative relationship between Hatshepsut and Thutmose III.

A significant development in the study of Karnak in the 1970s was the study of Gun Björkman, *Kings at Karnak*, which studied the dismantling and reuse of monuments at Karnak during the Eighteenth Dynasty. Until this time the dismantling of structures had been seen as a sign of disregard for the monuments of previous pharaohs and in some cases a sign of personal antagonism between rulers. Baldwin Smith had previously noted that at Karnak each successive pharaoh had curiously little regard for the divine needs of the predecessors and they were inclined to appropriate the temples of the their fathers.¹⁷⁴ This understanding echoed the interpretation of the usurpation of cartouches that were generally seen as a sign of political or religious rivalry.¹⁷⁵ Björkman's study showed however that during the Eighteenth Dynasty at Karnak there was systematic dismantling and reuse of monuments by almost all pharaohs and this suggests that it did not signify contempt for predecessors but rather was a product of necessity and perhaps also an ideology based on the regeneration of monuments and kingship.¹⁷⁶

Given that building schemes at Karnak by Eighteenth Dynasty pharaohs played an important role in the assertion of power, both religiously and politically, and in terms of physical space they were to some extent confined by the temple boundary, the dismantling of structures so as to acquire room for new building programs must have been necessary. The sheer quantity of previous buildings being used in the foundation levels of structures suggests that the systematic reuse must have been more than convenience or necessity for stone. As well as for practical reasons the reuse of architectural elements or stone in the foundations or monuments was a way of preserving the past structures and a sign of regard for the previous structures and their pharaohs.¹⁷⁷

¹⁷⁴ Baldwin Smith (1938), Egyptian architecture as cultural expression, 152.

Sethe (1896), Die Thronwirren unter den Nachfolgern Königs Thutmosis' I., ihr verlauf und ihre bedeutung, Die prinzenliste von Medinet Habu und die reihenfolge der ersten könige der zwanzigsten dynastie,1-55.

Björkman (1971), Kings at Karnak: a study of the treatment of the monuments of royal predecessors in the early New Kingdom, 121-2.

Björkman (1971), Kings at Karnak: a study of the treatment of the monuments of royal predecessors in the early New Kingdom.

This echoed an earlier theory put forward by Alexandre Varille that suggested that the burying on monuments was not indicative of impiety towards previous Pharaohs.¹⁷⁸ The example of the foundations of Amenhotep's Third Pylon are almost 6m deep, considerably deeper than technically necessary, and include stone from almost every pharaoh who had previously built at Karnak indicating an ideological reasoning.¹⁷⁹

The encasement of the Obelisks

While Thutmose III dismantled the obelisks of Hatshepsut, his obscuring them from view may have operated in a similar way. By only obscuring them from view Thutmose III was able to preserve their essence but also continue with his own transformation of the processional way. The theory that the masonry surrounding the obelisks was not out of spite for Hatshepsut is also supported by the changing opinions of scholars regarding the erasure of Hatshepsut's reign.

The erasure of Hatshepsut

The discovery that the erasure of Hatshepsut by Thutmose III was not started almost immediately after her death but twenty years later greatly impacted the opinions of scholars on the relationship between the two pharaohs and theories behind the erasure of her name and image. Charles Nims' work on the dismantled blocks of the Hatshepsut's Chapelle Rouge suggested that the destruction of Hatshepsut's name and image given its random distribution could not have occurred until after the chapelle was dismantled which did not occur until year 42 of Thutmose III's reign. ¹⁸⁰ No longer did the theory that Thutmose III had systematically destroyed her name and image due to a personal vendetta hold given that twenty years passed between her disappearance and the beginning of the erasures.

Furthermore, the campaign to erase her reign was neither particularly long lasting nor systematic. Peter Dorman highlights that while the innermost sanctuaries of Hatshepsut's temple at Deir el-Bahri were altered the reliefs on the outer terraces celebrating her divine birth, the expedition to Punt and transportation of the Karnak obelisks were virtually left intact and the proscription of her reign seems to have come abruptly to an end during the

¹⁷⁸ A. Varille (1943), *Karnak I*, FIFAO 19. Cairo, 16.

Björkman (1971), Kings at Karnak: a study of the treatment of the monuments of royal predecessors in the early New Kingdom, 110.

¹⁸⁰ C. Nims (1966), The Date of the Dishonoring of Hatshepsut. Berlin; P. Dorman, (1988). The Monuments of Senenmut: Problems in Historical Methodology. London and New York, 46-65.

reign of Amenhotep II. 181 Moreover the consistency with which her names were erased suggests that it was not a personal attack. While her cartouches and feminine gender endings were consistently removed, her nomen, Hatshepsut, Beloved of Amun, was removed more thoroughly than her prenomen Maatkare and her Horus and minor names were often left untouched. 182 Furthermore, images and inscriptions referring to Hatshepsut as queen were left intact suggesting that it was the proscription was not personal but instigated by her role as pharaoh. As such it seems unlikely that her erasure is linked to either a personal vendetta or a significant ideological or political difference both of which would have required the quick and systematic destruction of her memory.

Alternatively, it is possible that proscription of Hatshepsut was related to the concerns of royal succession. Given that the erasure occurred late in the reign of Thutmose III and ceased during the reign of Amenhotep II it may have been linked to concerns over heir of Thutmose III. If there were two possible heirs to the throne, Amenhotep II the descendent of the Thutmoside bloodline and another descending from the Ahmoside bloodline to which Hatshepsut had descended, the destruction of the memory of Hatshepsut's reign may have been necessary to secure the throne for Amenhotep II. The destruction of her monuments and erasure of her name and image may have been a way to discredit the legitimacy of her bloodline and secure the throne for Amenhotep II. However, evidence for such theory is lacking, the records show no evidence of a second potential heir nor is there evidence that such finely distinguished lines in heritage would have been of consequence.

Another possible theory for Hatshepsut's proscription is related to the fact that her reign was a different model of kingship: the female pharaoh. Unusual about Hatshepsut's reign was not the fact that a woman was ruling as co-regent, but rather that she ruled not as a regent but as a pharaoh. Before Hatshepsut, a number of women had ruled Egypt with most of them adopting the title *mwt nswt*, "King's Mother". ¹⁸⁴ Interesting is the fact that there is no separate Egyptian title that can be translated as regent, but rather the title King's Mother gave

P. Dorman (2005), 'The Proscription of Hatshepsut', in C. H. Roehrig (ed) *Hatshepsut: From Queen to Pharaoh*. New York, 277-81, 277.

¹⁸² A. M. Roth (2005), 'Erasing a Reign', in C. H. Roehrig (ed) *Hatshepsut: From Queen to Pharaoh*. New York, 277-281, 277.

Dorman (2005), 'The Proscription of Hatshepsut', in C. H. Roehrig (ed) *Hatshepsut: From Queen to Pharaoh*, 269.

¹⁸⁴ A. M. Roth (2005), 'Models of Authority: Hatshepsut's Predecessors in Power', in C. H. Roehrig (ed) *Hatshepsut: From Queen to Pharaoh*. New York, 9-14, 10.

individuals the power to act as regents for their young sons.¹⁸⁵ This order of succession was presumably put in place to combat any attempts of other adults seizing power other adults serving as regents may have made.¹⁸⁶

However, Hatshepsut ruled as regent for Thutmose III under unusual circumstances; she was not his mother but rather the chief wife of his father and more so her full adoption of pharaonic titles and regalia promoted her to beyond that of a King's Mother. Previous to Hatshepsut three other regent queens appear to have ruled in a similar fashion and all suffered erasure after their rule. The wife of Djedkare-Izezi in the Fifth Dynasty, Queen Neith-Iqerti in the Sixth Dynasty and Queen Nefrusobek in the Twelfth Dynasty all had their names, images and monuments erased or destroyed following their death. Making Hatshepsut's reign unique was also the principal title that Hatshepsut held during her rule was God's Wife of Amun, a title that gave her religious and political prestige. Her rule then was highly unusual and set a precedence that challenged the traditional lines of succession and models of kingship. The eradication of the memory of her rule may have been an attempt to eliminate the possibility of another occurrence of an unconventional rule by future regents. This would also explain why the title God's Wife of Amun was no longer used after the reign of Thutmose III. 188

The developments in scholarship on the co-regency of Hatshepsut and Thutmose III present a radically different interpretation than previously. This new interpretation of Hatshsepsut has directed recent research towards a renewed interest in the study and interpretation of her reign and ideology. Such study is producing research that highlights the innovation in the art and architecture produced under her rule and highlighting the lasting influence her reign had on the Eighteenth Dynasty.¹⁸⁹

¹⁸⁵ Roth (2005), 'Models of Authority: Hatshepsut's Predecessors in Power', 10-11 (n.14).

¹⁸⁶ Roth (2005), 'Models of Authority: Hatshepsut's Predecessors in Power', 10-11.

¹⁸⁷ Roth (2005), 'Models of Authority: Hatshepsut's Predecessors in Power', 12.

G. Robins (1993), Women in Ancient Egypt. Cambridge, 152; B. Bryan (1996), 'In Women Good and Bad Fortune is on Earth: Status and roles of women in Egyptian culture', in A. K. Capel & G. E. Markoe (eds) Mistress of the House, Mistress of Heaven: Women in Ancient Egypt. New York, 25-46, 34; P. Dorman (2005), 'The Proscription of Hatshepsut', in C. H. Roehrig (ed) Hatshepsut: From Queen to Pharaoh. New York, 267-9, 269.

¹⁸⁹ Keller (2005), 'Hatshepsut's Reputation in History', 295.

4.8 Figures chapter 4

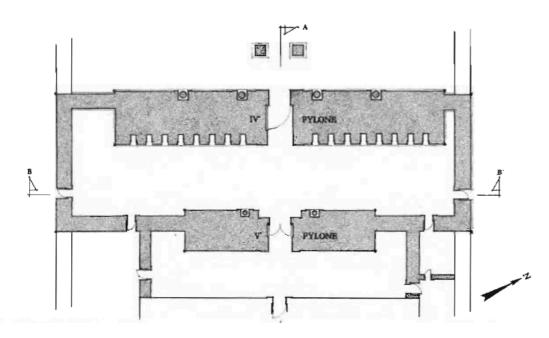


Fig. 4.1 Plan of Thutmose I's first phase of construction. Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 310 (fig. 8a).

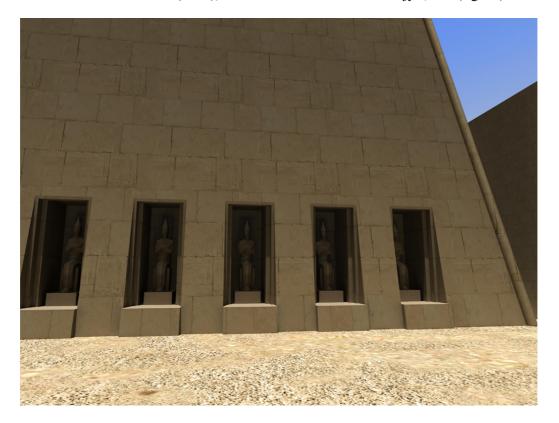


Fig. 4.2 Reconstruction of the niches on the east face of Pylon Four.

Digital Karnak (2008),

http://dlib.etc.ucla.edu/projects/Karnak/resource/WadjetHall/2245 (accessed September 15 2016).



Fig. 4.3 The remains of the Osiride statues within the niches on the east face of the north wing of Pylon Four.
Photo: G. Smith.

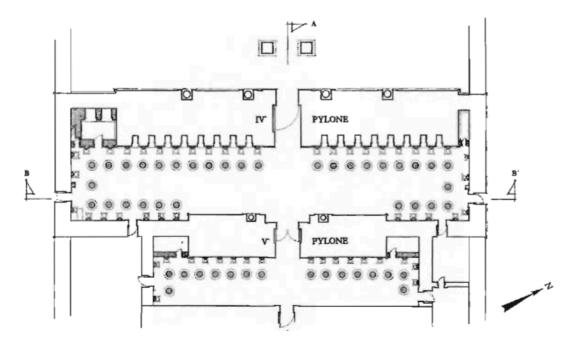


Fig. 4.4 Plan of Pylons Four and Five at the end of Thutmose I's reign. Carlotti & Gabolde (2003) 'Nouvelles données sur la Oudjyt', 312 (fig. 9a).



Fig. 4.5a Colossus (C03.0) overhanging the doorway in the northern boundary wall of the courtyard between Pylons Four and Five.

Carlotti & Gabolde (2003). 'Nouvelles données sur la Oudjyt', pl. XIc.



Fig. 4.5b Colossus (C03.0) overhanging the doorway in the northern boundary wall of the courtyard between Pylons Four and Five. Photo: G. Smith.

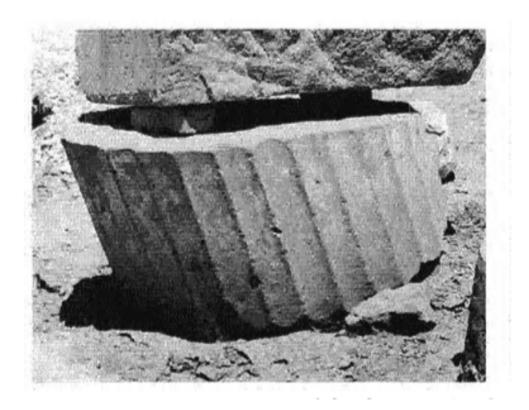


Fig. 4.6 Fragments of the columns attributed to the peristyle of Thutmose I in the courtyard between Pylons Four and Five.
Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', pl. XIVc.

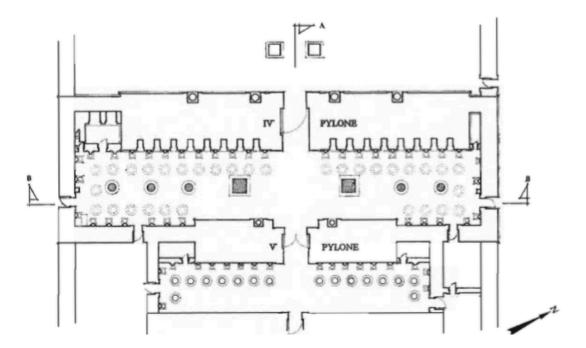


Fig. 4.7 Plan of Pylons Four and Five at the end of Hatshepsut's reign. Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 314 (fig. 10a).

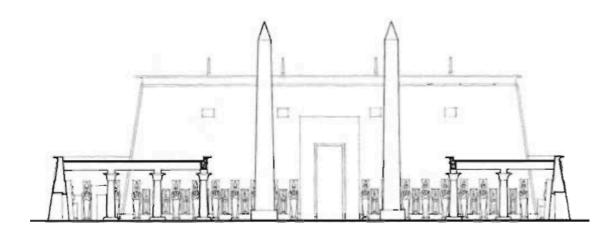


Fig. 4.8 Reconstruction of the courtyard of Pylon Four, looking west, at the end of Hatshepsut's reign.Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 315 (fig. 10b).

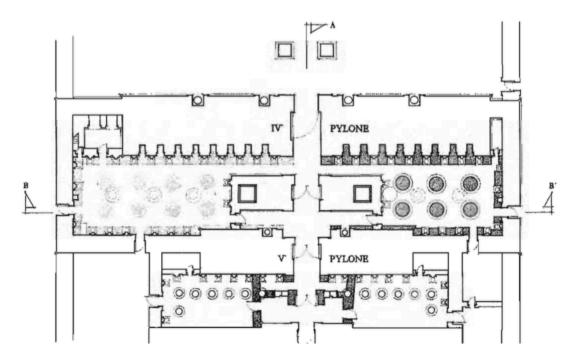


Fig. 4.9 Plan of Pylons Four and Five at the end of Thutmose III's reign. Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 318 (fig. 12a).

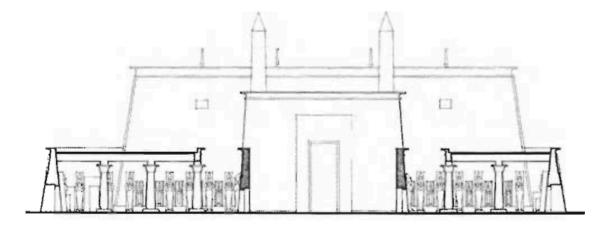


Fig. 4.10 Reconstruction of the courtyard of Pylon Four, looking west, at the end of Hatshepsut's reign.

Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 315 (fig. 11b).



Fig. 4.11 The northern doorway of the chamber between the obelisks and Pylon Five. The masonry encasing the obelisk and the casing wall against Pylon Five cover the door jambs.

Photo: G. Smith.

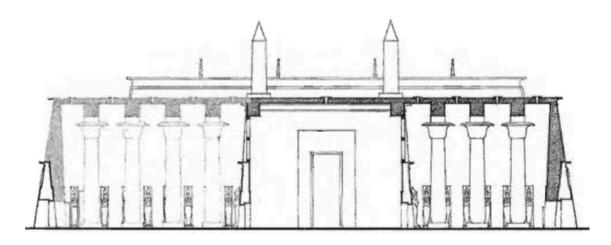


Fig. 4.12 Reconstruction of the courtyard of Pylon Four, looking west, at the end of Amenhotep II's reign. The bolded elements are those attributed to Thutmose III. Carlotti & Gabolde (2003), 'Nouvelles données sur la Oudjyt', 319 (fig. 12b).



Fig. 4.13 Reconstruction of temple of Amun-Re west of the Middle Kingdom court. The obelisks of Hatshepsut between Pylons Four and Five can be seen protruding through the roof of the *Wadjyt* hall.

Digital Karnak (2008),

http://dlib.etc.ucla.edu/projects/Karnak/resource/WadjetHall/2219 (accessed September 15 2016).



Fig. 4.14 Reconstruction of the Hypostyle Hall of the temple of Amun-Re built by Seti I. The columns, roof and clerestory windows show similarities to those of the *Wadjyt* hall. Digital Karnak (2008),

http://dlib.etc.ucla.edu/projects/Karnak/resource/HypostyleHall/2086 (accessed September 15 2016).

Chapter 5

Larché's new observations

5.1 Larché's reinterpretation of evidence

In 2007 François Larché, an architect with the CFEETK, published a radical new chronology of the central area of the Amun-Re complex. His own work at the site and the excavations undertaken by members of the CFEETK in the preceding decades informed his alternative reconstructions which have challenged many of the fundamental attributions of monuments in the central part of Karnak to the Middle Kingdom and Eighteenth Dynasty.

Regarding the Middle Kingdom Temple, based on the re-figuring of archaeological remains and the orientation of decorative features, Larché proposes that the temple of Sesostris I and its double portico were oriented eastward towards a secondary branch of the Nile that lay to the east of Karnak, rather than westward as traditionally assumed. This would have meant that Karnak was originally situated on an island, which theologically is a plausible suggestion. Due to the disappearance of this branch and the degradation of the stone, Amenhotep I is now thought to have partially dismantled the structure and replaced it with his own that was oriented west towards the main Nile channel (Fig. 5.1). Later, Thutmose I and Hatshepsut are likewise understood to have dismantled most of the temple of Amenhotep I before embarking on their own building schemes. According to Larché's theory many of the structures traditionally assigned to Thutmose were actually constructed by Hatshepsut.

A geological analysis published in 2008 supports Larché's assertion and has suggested that the suggestion of Ernst Egli in 1959 that Karnak was initially situated on an island with channels of the Nile running to both its east and west is correct. The results of the survey have suggested that in the early stages of the Middle Kingdom the temple be approached in both the east and west by channels of the Nile before a northwestern shift of the Nile resulted in the silting up of the eastern channel and shifted the main channel further west, see: J. M. Bunbury, A. Graham & M. A. Hunter. (2008), 'Stratigraphic Landscape Analysis: Charting the Holocene Movements of the Nile at Karnak through Ancient Egyptian Time', *Geoarchaeology: An International Journal* 23:3, 351–373; E. Egli (1959), *Geschichte des Städtebaues. Erster Band. Die alte Welt.* Erlenbach-Zürich and Stuttgart, 40-43; F. Larché (2007). 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', *Karnak* 12 (2), 407-592, 409-421; F. Larché (2009), 'A Reconstruction of Senwosret I's Portico and Some Structures of Amenhotep I at Karnak', P. J. Brand, L. Cooper & W. J. Murnane (eds), *Causing his name to live: Studies in Egyptian epigraphy and history in memory of William J. Murnane*. Leiden, 137-174.

5.2 The building scheme of Thutmose I (Fig. 5.2)

Pylon Five

Larché attributes the dismantling of two concentric enclosure walls, the inner wall being 2 cubits thick and the outer wall 3 cubits, of Amenhotep I's and the chapels that lined the inner wall on the north and south sides to the reign of Thutmose I. Thutmose II and Hatshepsut probably continued the dismantling of Amenhotep's structures during their reigns. Thutmose I replaced these enclosure walls with two sandstone walls of his own. In the outer wall a pylon, Pylon Five was erected on the western side. To the east of the pylon a peristyle courtyard was constructed which Larché observed imitated the style of the colonnade of Sesostris I that had previously stood in this area. Larché notes that the sandstone used for the core of the pylon appears slightly greenish in colour and along with the paving used in the associated courtyard it is the only example of this type of sandstone known from Egyptian temples. Larché notes that the sandstone known from Egyptian temples.

Thutmose I also added an enclosure wall that extended from the pylon slightly to the north and south and encompassed the temple complex east of it. ¹⁹⁴ Between the two enclosure walls a corridor was created and along the south side of a series of rooms were built replacing those of Amenhotep I's. Larché suggests that these rooms may have been used for cultic, administration of the temple or storage purposes. ¹⁹⁵ This addition of rooms only on the south side of the temple marked a shift in the balance of structures towards the south. ¹⁹⁶ However, it is of some note that already in the time of Amenhotep I, Larché has observed that the outer temple boundary wall extended further to the south than it had to the north.

F. Larché (2009), 'A Reconstruction of Senwosret I's Portico and Some Structures of Amenhotep I at Karnak', 162-163 & 168.

¹⁹² Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 489.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 441; J. A. Harell (2016), 'Varieties and sources of sandstone used in Ancient Egyptian temples', *JAEA* 1, 11-37, 19.

Larché (2007), "Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 442.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 442.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 489.

Courtyard of Pylon Five

The eastern face of the Pylon Five was adorned with five niches built into each wing of the pylon, in which small Osiride statues of the king were placed and a peristyle reaching around the east, north and south sides of the courtyard was erected.¹⁹⁷ Column drums and architraves from the colonnade of Sesostris I were reused in the foundations of this courtyard, along with two undated deposits of seventy-five objects placed either side of the central axis (Fig. 5.3).¹⁹⁸ Although the objects discovered in these deposits are similar to those recovered in foundation deposits dated to Thutmose I in North Karnak, Larché is hesitant to ascribe them to Thutmose I without the presence of a name or cartouche, given that foundation deposits are often of similar composition. Jean-François Jet, however, has nonetheless argued that the attribution of the deposits to Thutmose I.¹⁹⁹

The two colossi placed closest to the side rooms of the pylon in the far north and south on the eastern face of the pylon show that they were built at the same time as the wall, whereas the other statues in the courtyard show that they were placed here secondary to the walls and pylon. Only the feet and bases remain of the two statues adjacent to the side rooms, while the wall that they backed on to has completely disappeared with the exception of the foundation. The remaining part of the statues do not appear to have any form of protuberance on their backs although the bases of these colossi sit 15cm out from the foundations of the wall. Consequently, the support that connects wall and the colossi must have been built as part of the wall with the statue *leaning* against it. In the case of the other sixteen colossi this connection is reversed. This suggests that for the sixteen colossi were placed in the court *after* the pylon and walls were built, whereas the two others were placed in the courtyard at the same time as that portion of the wall was built.²⁰⁰

¹⁹⁷ Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 446.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 446 & 489; Larché (2009), 'A Reconstruction of Senwosret I's Portico and Some Structures of Amenhotep I at Karnak', 17; J.-F. Jet, (2010). 'Sondages dans la cour nord du Ve Pylône. Résultats et Étude d'un depot de foundation de la XVIIIe Dynastie', *Karnak* 13, 257-95, 261.

J. Jacquet (1983), *Karnak-Nord V. Le Trésor de Thoutmosis Ier. Étude architecturale*. Cairo, 125-136; Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 446 (n.86); Jet (2010), 'Sondages dans la cour nord du Ve Pylône. Résultats et Étude d'un depot de foundation de la XVIIIe Dynastie', 270.

²⁰⁰ Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 448.

Excavations by Jet in 2003 in the northern area of this court have shown that while the foundations of the colossi statutes were secondary to that of the columns, it is unlikely that the statues were erected after the peristyle was completed and therefore they can be dated to the same construction phase.²⁰¹ The construction of the Pylon Five, the side rooms and boundary wall have all been dated to Thutmose I as the foundations of all three are embedded together and lie atop the foundations of the previous structure that can conclusively be associated with Amenhotep I given the presence of his name on the remains.

5.3 A new building chronology for Hatshepsut (Fig. 5.4 and 5.5)

Pylon Four

Larché's most prominent deviation from previous chronologies is the attribution of Pylon Four, the court and boundary walls to later than the reign of Thutmose I. His chronology proposes that Thutmose I may have planned and initiated a much larger project than could be completed during his reign. Thutmose II then pursued this building scheme and completed under Hatshepsut.²⁰² Larché confirmed that Pylon Four was built of a sandstone core sitting on an almost completely preserved sandstone foundation and would have been encased by limestone that has since disappeared. A boundary wall extended slightly to the north and south of the pylon before travelling east to join onto the boundary walls of Pylon Five. The join and foundations of the boundary walls can be seen, suggesting that the walls were built independently.²⁰³

Side chambers

In the boundary wall that extended from the pylon to the north and south, two small rooms were built, one to the north of northern pylon wing and the other to the south of the southern Pylon wing.²⁰⁴ Doors in the courtyard between Pylon Four and Five gave access to these rooms. The room in the south is larger and its doorway sits between the two southern most

Jet (2010), 'Sondages dans la cour nord du Ve Pylône. Résultats et Étude d'un depot de foundation de la XVIIIe Dynastie', 264.

²⁰² Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 450.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 451; E. Laroze & D. Valbelle (2010), 'Travaux du CFEETK entre 2005 et 2007', *Rapport préliminaire CFEETK*. Luxor, 3.

Carlotti & L. Gabolde (2003), 'Nouvelles données sur la Oudjyt', 258-261; Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 453.

colossi on the western wall and is lined by fragmentary door jambs (Porte ouest in Fig. 1.5).²⁰⁵ Two limestone niches with sandstone plinths take up the western wall of this room. In these niches diorite statues of Sekhmet may have stood.²⁰⁶ These rooms are thought to have been built in the same time as, or at least immediately after the pylons themselves.

The Osiride Statues

The colossi (Cl10.n and Cl11.n in Fig. 1.5)) either side of the southern doorway are built in a slightly different style from the other eighteen in the courtyard (Fig. 5.6). The forearms and hands of these statues are thinner and appear to grip the ankh-sign lower down. They do, however, appear to be built at the same time as the wall that they join.²⁰⁷ This suggests that the side chambers of Pylon Four were built in a different phase of construction than the Osiride statues associated with Pylon Four.

The niches of Pylon Four (Fig. 5.7 and 5.8)

Larché has also further reconstructed the appearance of the niches built into the east face of Pylon Four that were identified by Carlotti and Gabolde. Within the niches of Pylon Four seated Osiride statues of Thutmose I were placed.²⁰⁸ A single column of text on the jambs either side of the niche contain the cartouche of Thutmose I and allow the attribution of the statues to his reign. However, it should be noted that a later engraved dedication to Hatshepsut has also been observed on the statues themselves. The lintel of the niche is decorated with a winged sun-disk, above which the fragments of a foot and the fork of a scepter, presumably belonging to Amun, can be identified. One may assume that above the niche there would have been a scene of the king before Amun. A similar scene to this decorated the pillars that would later be built by Thutmose III in front of the niches. The niche interiors were decorated with reliefs showing Thutmose I facing east. Unfortunately, the remainder of the scene is too fragmentary to be identified.²⁰⁹ Larché suggests that both the

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 492.

Barguet (1962). *Le Temple d'Amon-Rê à Karnak*, 106; J.F Carlotti & L. Gabolde (2003), 'Nouvelles données sur la Oudjyt', *Cahiers de Karnak* 11: 255-338, 258-261; Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 453.

²⁰⁷ Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 453-4.

Carlotti & Gabolde, (2003). 'Nouvelles données sur la Oudjyt', 258-261; Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 451

²⁰⁹ Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 451-2.

technical and artistic composition of the niches and Osiride colossi suggest that they were part of the same building phase of the courtyard. The design of the niches, particularly the overhang of their bases, suggests that they were cut to allow for the Osiride supports to be placed in these positions. Furthermore, the height of the reliefs above the niches align with the top of the crown of the colossi. A similar composition can be seen on the third terrace of the temple of Hatshepsut at Deir el-Bahri, where a smaller niche containing a seated statue of the queen alternated with a tall niche containing a standing Osiride statue.²¹⁰

Side pillars

On the inner western side of the doors of the north and south boundary walls are the remains of pillars, approximately 1.5 x 1 cubit, that were had already been identified by Borchardt (Fig. 2.7a and 2.7b). The pillars appear to be slightly inclined towards the wall which along with their small size suggests that they did not appear to reach up the entirely of the enclosure wall. On the side facing into the courtyard a column of text in which Thutmose I's name is included is the only remaining decoration. Larché suggests that given the nature of the engraving and height of the pillar a matching one may have stood on the eastern side, and perhaps had the name of Hatshepsut, of the door and a lintel may have sat above them creating a framed doorway (Porte sud in Fig 1.5). The dating of the doorway is certainly prior to Thutmose III as the inner masonry around the court supporting the stone slab roof enclosed the pillars and the eastern pillar would have had to be removed to make way for the colossi that were later to stand in the same position. Hatshepsut was probably the one to erect the doorway during the restructure of the courtyard.

The Portico of Hatshepsut

Significantly, Larché reconstructs that Hatshepsut also erected at the northern end of the courtyards a portico consisting of two sandstone papyriform columns at the doorways of the northern boundary wall (Fig. 5.5). The columns, which would later be reused by Thutmose III, supported a wooden roof.²¹³ The function of this portico is not commented on by Larché.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 454.

Borchardt (1905), *Baugeschichte des Amonstempels*, 12, & fig. 10; Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 455-456.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 455-456.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 493.

Hatshepsut's Obelisks

The date given in the inscription on the obelisks in the courtyard to Pylons Four and Five, year 16, provides an unchallenged attribution of the erection of the obelisks to the reign of Hatshepsut. However, Larché proposes that the obelisks had been planned as part of Thutmose I's building scheme and they had been extracted from an Aswan quarry during the reign of Thutmose I.²¹⁴ To make room for the obelisks on either side of the central axial way and the portico in the north Hatshepsut would have had to remove four columns that stood in this area belonging to a previous structure.

Larché notes they may be those mentioned on a stela from the time of Sobekhotep IV (JE 51911) that describes a portico of papyrus columns that stood before the Temple of Amun-Re.²¹⁵ Two of the calcite bases that supported these columns were kept in their place and concealed by the new pavement in the court while the other two were placed symmetrically on either side of the obelisks, this placement may be reminiscent of their were original position (Fig. 5.4). It is unlikely, however, that during Hatshepsut's renovations any columns were erected on these bases given that there is no evidence of another aligning base or structure that could have supported a lintel or architrave.²¹⁶ Larché claims that, based on the foundations for the obelisks and these column bases, the obelisk and column bases were placed in the courtyard during the same phase of construction, after which surrounding pavement was placed.²¹⁷

The obelisks were positioned atop a deep foundation pit consisting of three layers of sandstone resting upon a thick layer of sand.²¹⁸ Larché suggests that these foundations were the first project carried out during this era in the area in front of Pylon Five. In the foundations for the obelisks and in the courtyard between Pylon Five and the northern obelisk deposits in the name of Hatshepsut were found surrounded by construction elements of earlier

²¹⁴ Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 492-3.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 493; C. Wallet-Lebrun (2009), *Le grand livre de pierre*. MAIBL 41. Paris, 41-43

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 465-7 & 493.

²¹⁷ Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 457.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 457.

structures. Under the southern obelisk the deposit was comprised of a lintel of Sesostris I and limestone and sandstone Osiride statues belonging to Amenhotep I. Under the northern obelisk the deposit comprised of a niche containing a dyad of Neferhotep I and architraves, column fragments and a sandstone base of Sesostris I, attributed to Sesostris due to their size, decoration and the nature of the sandstone. ²¹⁹ Furthermore, the reuse of these in the foundations in both the east and west of Pylon Five for the peristyle in the Pylon Five courtyard suggests that the colonnade of Sesostris was removed by the builder of Pylon Five, Thutmose I.²²⁰

Encasement of the obelisks

Soon after the erection of the columns, the lower halves of the obelisks were enclosed in a pylon-like structure that acted as another doorway along the central processional way.²²¹ While the structure stood separately to Pylon Four, two short walls joined the enclosure to Pylon Five at the southernmost and northernmost points.²²² Doorways in the walls lead into the northern and southern halves of the courtyard (Porte sud-est in Fig. 1.4 and Porte nord-est in Fig. 1.5). On the north and southern ends of the masonry, four Osiride statues were erected (Co1.e and Co2.e in Fig. 1.4 and Co1.e and Co2.e in Fig. 1.5). Their foundations reveal that they were erected in the same construction phase as the obelisk lining.²²³

Given that Larché does not attribute the encasing of the obelisks to Thutmose III but rather to Hatshepsut, the theory supported by Borchardt, Barguet and Carlotti and Gabolde that the encasing was an attempt to obscure the obelisks from view does not hold. Two alternative hypotheses have been proposed to explain the encasement of the obelisks. The first is technical reasons and the second religious reasons.

The technical reason, supported by Larché, suggests an interesting engineering issue with the erection of the obelisk. This theory advocates that the southern obelisk had begun to lean and

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 449, 458 & 493; Larché (2009), 'A Reconstruction of Senwosret I's Portico and Some Structures of Amenhotep I at Karnak', 17-8.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 449.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 493.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 459.

²²³ Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 448.

the masonry structure was built to prevent any further tilting. The weak foundations for the southern obelisk, now fallen, strengthen the plausibility of this theory.²²⁴ The space between the sandstone blocks of the casing and the obelisks was filled with plaster and fragments of sandstone that would have prevented the obelisk from any further movement.²²⁵

Gabolde (2013) has challenged this theory that Hatshepsut encased the obelisk herself for technical reasons.²²⁶ He highlights that the masonry was would not have provided sufficient structural support to prevent the collapse of the obelisk. This is particularly so, given that the bulk of the masonry for the southern obelisk was positioned towards its north face and not the south which was the direction that the obelisk was likely to fall. Instead, on the southern side of the obelisk, there stood only a thin wall that would not have provided additional structural support.²²⁷

Larché puts forward another argument that the obelisks were encased by Hatshepsut, claiming that the building of this masonry also provides an explanation for the unusual decoration of the obelisks. Larché suggests that the height of the masonry is marked by eight registers either side of the central inscription that reach only from the top of the obelisk down to about half point. At this point the masonry would have covered the remainder of the obelisk. Of note in this argument is that Larché attributes at least the decoration of the eight registers to after the erection of the obelisk. Regarding when, before or after their erection, the rest of the decoration of the obelisks took place Larché does not make any comment.

The second hypothesis proposed by Christaine Wallet-Lebrun (1982, 1984 and 2009) and supported by Nicolas Grimal (2006), suggests that Hatshepsut built the encasing masonry of the obelisks in an attempt to build a structure that resembled the Benbens of the solar temples from the Fifth Dynasty.²²⁹ Benbens, truncated pyramid like structures, were the forerunners to

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 462.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 458.

²²⁶ Gabolde (2013), 'Remarques sur le chemisage des obélisques de la Ouadjyt et sa datation'.

Gabolde (2013), 'Remarques sur le chemisage des obélisques de la Ouadjyt et sa datation', 392.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 459.

C. Wallet-Lebrun (1982), 'Notes sur le temple d'Amon-Rê à Karnak. 1. L'emplacement insolite des obélisques d'Hatshepsout', *BIFAO* 82: 355-362; C. Wallet-Lebrun (1984), 'Notes sur le temple d'Amon-Rê à Karnak. 2. Les w3dyt thoutmosides entre les IVe et Ve pylônes', *BIFAO* 84: 317-333; N. Grimal, (2006), 'L'œuvre architecturale de Thoutmosis III dans le temple de Karnak', *CRAIBL* 150, 965-983, 976; N. Grimal

obelisks and were commonly found at Heliopolis, the replication of these at Karnak would not have been strange.²³⁰

Wallet-Lebrun's building chronology

Wallet-Lebrun bases this reconstruction on a study of the inscriptions on the obelisks and Chapelle Rouge. This interpretation of the inscriptions, which is not accepted generally, posits, like Larché, that Thutmose III constructed Pylon Four. Unlike Larché though this theory suggests that Thutmose I had constructed an open colonnade to the east of Pylon Five. The design of an open portico at the entrance of temple, while not common, is plausible given the example of such a design evidenced in the tomb of Merire. Thutmose I's colonnade was designed as a double portico and some of the columns in the northern hall today were used in this structure. That these columns were part of Thutmose I's design is known through the column inscriptions of Thutmose III claiming that during his renovation of the courtyard he removed no stone. The other columns of Thutmose I's being originally made from cedar wood were replaced by Thutmose III by the stone ones found in the hall today. 232

Under Thutmose II the court was most likely extended to the west and perhaps constructed another pylon or enclosure wall, at the position of Pylon Three. Such a pylon or wall would have marked the boundary of the temple complex but not the entrance to the temple proper. Hatshepsut would then have constructed her obelisks in this large courtyard to the west of Pylon Five, which at the time would have been the entrance to the temple itself.²³³

5.4 Thutmose III's transformation of the temple according to Larché (Fig. 5.9)

Wadjyt Hall

Sometime during the reign of Thutmose III, a storm is said to have destroyed the wooden roof of the portico in the northern courtyard of Pylon Four that led to major renovations in the courtyard. Larché proposes that Thutmose III added an additional four sandstone columns in

^{(2006), &#}x27;Civilisation pharaonique : archéologie, philologie, histoire', *ACF* 106, 581-602, 588; Wallet-Lebrun (2009), *Le grand livre de pierre*., 70-7.

Arnold (trans. S. H. Gardiner & H. Strudwick) (2003), *The Encyclopedia of Ancient Egyptian Architecture*,

Wallet-Lebrun (1982), 'Notes sur le temple d'Amon-Rê à Karnak. 1. L'emplacement insolite des obélisques d'Hatshepsout', 362.

²³² Breasted (1906), ARE II, 238.

Wallet-Lebrun (1984), 'Notes sur le temple d'Amon-Rê à Karnak. 2. Les w3dyt thoutmosides entre les IVe et Ve pylônes', 332.

the northern courtyard creating a double colonnade that supported a sandstone roof.²³⁴ Amenhotep II would later erect the columns and roof in the southern half of the courtyard and giving the area its final appearance as a *Wadjyt* hall (Fig. 5.10). The use of sandstone and not wood was probably in reaction to the need to rebuild using stronger materials but may also be indicative of the custom of increasing the grandeur of the temple. The two northernmost columns differ in design from the others added in the north courtyard by Thutmose III and are likely those that are referred to in the inscription on the columns themselves (Cl1.ne and Cl1.no in Fig. 1.4 and Fig. 2.7a, 2.7b, 2.8a and 2.8 b).²³⁵

Providing further support for the roof, buttresses between the Osiride statues were built, covering over the niches, and lintels sat above ultimately creating a new wall covering in which the statues stood in recesses.²³⁶ A new wall, supporting the roof was also built along the west face of Pylon Five. The new wall partially obscured the doorways connecting Pylon Five and the masonry around the obelisks (Fig. 4.11). This scenario therefore confirms that the wall was built later than the obelisk masonry.²³⁷

The new roof over the northern courtyard was higher than the masonry of the obelisks, of which now only the top five registers were left uncovered.²³⁸ In these top five registers the figure and name of Amun were first chiselled out under Akhenaten and later still re-engraved, some of the cartouches of Hatshepsut and Thutmose III were re-engraved by Seti I. This subsequent restoration, requiring the polishing of the granite, explains the noticeable change in color from pink on the lower half of the obelisk to yellowish at the top.²³⁹ The space between the roof and obelisk encasing, a height of three registers, was filled by supporting slabs.²⁴⁰

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²³⁴ Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 495.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 465.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 495.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 462.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 495.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 458.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 463.

Phase One: Pylon Six

Larché proposes that Thutmose III's renovations in the courtyard of Pylon Five took place in two phases. The first phase took place early in his sole reign, between his 23rd and 30th regnal years perhaps for his jubilee, and consisted of the construction of Pylon Six and a granite arch that enveloped the center two columns of the peristyle of Thutmose I in the courtyard of Pylon Five. The second phase is necessarily subsequent to the inscriptions on the west façade of Pylon Six, probably after his second jubilee, and consisted of the construction of the walls linking the Pylons. The joining of the walls to Pylon Six, however, has not been excavated in any real detail and this chronology therefore has not been confirmed.²⁴¹

The granite structure between Pylons Five and Six

In 2007 Emmanuelle Arnaudiès-Montélimard reconstructed that between Pylons Five and Six Thutmose III built a monumental granite archway that marked the central axis (Fig. 5.11 and 5.12).²⁴² Such a structure would have been an innovative and unique design for this period.

As it stands today the structure consists of two walls parallel with the axial way linking Pylon Five and Six, another wall running east west creates two small chambers along the central axis. In the eastern room doors open north and south into the respective courtyards (Porte nord and Porte sud in Fig. 1.6). Engulfed in the walls and still visible are two columns inscribed to Thutmose I (Fig. 1.5, 2.20 and 5.11). Also within the structure are two pillar-like granite structures that appear to have molding along a vertical edge, in Arnaudiès-Montélimard these granite elements are referred to as "monoliths".

Borchardt first identified these elements and attributed them as the central pillars and columns of the peristyle of Pylon Five.²⁴³ Barguet later proposed that the pillar structures were part of a small sanctuary built by Hatshepsut, and the columns part of the peristyle on Thutmose I.²⁴⁴ Arnaudiès-Montélimard rules out the possibility that the monoliths had been central pillars for a peristyle due to the presence of moulding and the width of the structure. Approximately 10m (north-south) is too large to have acted as the entrance to a sanctuary in this space. In comparison the Chapelle Rouge and granite sanctuary of Philip Arrhidaeus are only around

E. Arnaudiès-Montélimard (2007), 'L'arche en granit de Thoutmosis III et l'avant-porte du VIe pylône', Karnak 12: 107-190, 110.

Arnaudiès-Montélimard (2007), 'L'arche en granit de Thoutmosis III et l'avant-porte du VIe pylône', 107.

²⁴³ Borchardt (1905), Baugeschichte des Amonstempels, 8 & 32.

²⁴⁴ Barguet (1962), *Le Temple d'Amon-Rê à Karnak*, 109-112.

6m wide. Additionally, the structure could not have acted as a doorway as the swing of such a door would have been too large being at least 3m and there is no evidence of an attached door.²⁴⁵

Remaining from the granite arch of Thutmose III are two monoliths situated to the north and south of the axial way in line with the columns of the peristyle. Each structure consists of two adjoining elements. The outer monolith has a vertical flange up the northwest corner on the northern structure and the southwest on the southern structure (Fig. 5.13 and 5.14). The inner monolith resembles a pillar. These monoliths are slightly trapezoidal in shape and have a slight inclination present on the western face.²⁴⁶ A lintel forming an arch almost equally wide as high would have surmounted these two structures. This reconstruction of the lintel of the arch is based on three granite fragments found near the site.²⁴⁷

Phase Two: chamber between Pylons Five and Six

The second phase of work on the area by Thutmose III included the erection of walls either side of central axial way joining Pylons Five and Six and a north-south dividing wall.²⁴⁸ The first element of the structure was erection of a double-leaf door beneath the granite arch. Reducing the width of the passage to 3.15m, sandstone blocks were added next to the granite monoliths on the inside of the axial way. Continuing on the outer sides of the granite arch, sandstone walls were built connecting the granite monoliths to the first column of the peristyle. In line with this first column, sandstone walls were also built connecting Pylon Five and Pylon Six and obscuring the column from view. These walls are not parallel but narrow slightly as they lead towards Pylon Six.²⁴⁹ Two small, slightly trapezoidal, rooms were therefore created along the central axial way between the pylons and the courtyard sectioned off into a north and south court. In the walls of the room, immediately before Pylon Six, doorways gave access to the courtyards. It is suggested that the central rooms were roofed over by stone slabs, and the central sandstone blocks placed on the inside of the granite monoliths were probably built to support and reduce the length of the slabs.²⁵⁰ In the first

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²⁴⁵ Arnaudiès-Montélimard (2007), 'L'arche en granit de Thoutmosis III et l'avant-porte du VIe pylône', 108.

²⁴⁶ Arnaudiès-Montélimard (2007), 'L'arche en granit de Thoutmosis III et l'avant-porte du VIe pylône', 111.

Arnaudiès-Montélimard (2007), L'arche en granit de Thoutmosis III et l'avant-porte du VIe pylône', 117.

Arnaudiès-Montélimard (2007), 'L'arche en granit de Thoutmosis III et l'avant-porte du VIe pylône', 117.

Arnaudiès-Montélimard (2007), 'L'arche en granit de Thoutmosis III et l'avant-porte du VIe pylône', 113-115; Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 446.

Arnaudiès-Montélimard (2007), 'L'arche en granit de Thoutmosis III et l'avant-porte du VIe pylône', 116.
 Arnaudiès-Montélimard (2007), 'L'arche en granit de Thoutmosis III et l'avant-porte du VIe pylône', 113.

central room against the east face of Pylon Five immediately either side of the central passage two sandstone pillar-like structures were erected. They align with both the colossi on the eastern face of the pylon and the inner faces of the pylon wings. Their existence is explained in texts on and around the monument referring to the area as falling into ruin and so a new sandstone doorway was built.²⁵¹ This, however, echoes the texts inscribed on the columns in the courtyard between Pylons Four and Five, and Larché has put forward the suggestion the work may have been completed at the same time as the renovations in this court.

In reaction to these new ideas Gabolde disagrees with the reconstruction of this structure as an archway and highlights that on the uppermost fragment on the western face of the southern granite monolith, there is an area without relief and the hieroglyphs surrounding it start at an angle indicative that another architectural element joined here such as the sandstone cornice of a doorway (Fig. 5.15).²⁵² The fact that the engraving was clearly secondary to the cornice suggests that the sandstone and granite elements were contemporary with one another and part of a single structure, namely a one-tower pylon (Fig. 5.16). A comparison for such a structure can be that depicted in the tomb of Amenmose (TT19), a high priest under Amenhotep I.²⁵³ While the design of one-tower pylon aligns more closely to traditional architectural forms from this period than Arnaudiès-Montélimard's arch, the design of the pylon remains unusual. Traditionally, a doorway would be made of granite and surrounded by sandstone. Gabolde attributes the unusual scenario here to the desire to reuse available materials. Perhaps these granite elements belonged to the portico of the sanctuary of Hatshepsut that stood near the area an idea already suggested by Barguet.²⁵⁴

5.5 Overview and commentary

5.5.1 The constructions of Pylons Four, Five and Six as understood by Larché (2007)

Larché's new chronology proposed that Thutmose I was responsible for the erection of Pylon Five, the associated court to its east and two new enclosure walls. On the east face of the pylon a peristyle was erected and Osiride statues were placed within niches cut into the pylon.

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²⁵¹ Arnaudiès-Montélimard (2007), 'L'arche en granit de Thoutmosis III et l'avant-porte du VIe pylône', 116.

L. Gabolde (2009), 'De la soi-disant "arche" en granit de Thoutmosis III à Karnak', GM 223: 43-52, 44.

G. Foucard (1935), Tombes thébaines. Nécropole de Dirâ' Abû'n-Naga: Le tombeau d'Amonmos, MIFAO 57 (4). Cairo, pl. XI.

Barguet (1962), *Le Temple d'Amon-Rê à Karnak*, 109-112; L. Gabolde (2009), 'De la soi-disant "arche" en granit de Thoutmosis III à Karnak', *GM* 223: 43-52, 47.

For the reign of Hatshepsut Larché's chronology significantly differs from those previously given by Borchardt, Barguet and Carlotti and Gabolde. This new chronology proposes that Hatshepsut erected two obelisks to the west of Pylon Five and later encased them herself with a masonry structure to prevent the leaning of the southern obelisk. After this, Hatshepsut is thought to have constructed Pylon Four and created a courtyard between Pylons Four and Five. In the east face of Pylon Four Osiride statues dedicated to her father Thutmose I were placed around the court. In the east face of Pylon Four between the statues niches were cut and smaller seated statues of Thutmose I were placed inside. In the north of the hall a portico consisting of two sandstone columns and a wooden roof were erected. Many of these structures were inscribed with the name of Thutmose I and may have been planned by Thutmose I and initiated by Thutmose II but were predominantly completed during the reign of Hatshepsut.

For the reign of Thutmose III, Larché identifies that in the northern courtyard of Pylon Four Thutmose III erected four more sandstone columns and a sandstone roof that was further supported by pilasters and lintels on the east face of Pylon Four, obscuring the niches from view. Also, providing support for the new stone roof an additional wall was built against the west face of Pylon Five. Doorways joining the obelisk towers to Pylon Five created a chamber east of its entrance. According to Larché, Thutmose III was also responsible for the erection of Pylon Six and the granite archway halfway between Pylon Five and Six. Later walls joining this archway to Pylons Five and Six created two small chambers with doorways that opened into peristyle courtyards to the north and south.

5.5.2 A new understanding of the obelisks of Hatshepsut

Larché investigations at Karnak offer a dramatically different construction history for the central area of Karnak than those previously discussed. Notably, this new chronology, supported by Wallet-Lebrun, proposes a solution for the problems identified in the earlier works of Borchardt, Barguet and Carlotti and Gabolde regarding the erection of Hatshepsut's obelisks within a narrow hall. Through the identification of the Pylon Four as a later construction than the obelisks of Hatshepsut the technical difficulty involved with their erection is significantly reduced. While the process of erecting any obelisk in during ancient times remains an impressive engineering feat, the positioning of them within an open space, as Larché's chronology proposes, seems considerably more achievable.

Furthermore, this new chronology also attributes the masonry surrounding the obelisks to the reign of Hatshepsut. The attribution of the masonry, which is now thought to have been erected for technical or religious reasons, also takes into account the current thinking within scholarship that the erasure of Hatshepsut after her death was not necessarily a reflection of a negative relationship between the two pharaohs and took place late in Thutmose III's reign (see section 4.7.4).

The reconstruction of the portico in the north of the courtyard between Pylons Four and Five is also of importance. Of particular note about the portico is its brief mention by Larché. Larché. Very few architectural details about it are given and no suggestion of its function is provided. It should be mentioned that the columns used in this portico are the two northern most ones that stand in the hall today. These columns were reused in the *Wadjyt* hall by Thutmose III to support a sandstone roof and have been reconstructed to a height of 16m. The portico then would have been of a quite considerable height yet have only covered a small area and made for an odd architectural feature. Its presence however may be accounted for as having ritual or functional use. Its positioning at the doorway of the northern boundary hall is of note considering that there is no known evidence of a similar structure at the southern end of the court and it has been reconstructed that Thutmose III would later only roof over the northern part of this courtyard. Perhaps the presence of a portico in only the northern half of the hall can be equated with Thutmose III's account of being recognized by Amun within the northern courtyard (see section 3.5.4).

3.5.3 Larché's concept of the building scheme as a process

The innovation of Larché's reconstruction of the temple and its building history is the introduction of the concept of a continuous building scheme under the reign of Thutmose I, Thutmose II and Hatshepsut. Larché attributes that a number of the constructions undertaken by Hatshepsut were a continuation of planned and initiated constructions of Thutmose I. Traditionally, it is thought that the name originally inscribed upon the monument is the pharaoh who commissioned, initiated and completed the monument. While it is not unusual for monuments to be completed by a successor, an inscription stating so is generally found on

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²⁵⁵ Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', 495.

the monument. In Larché's theory, however, the three distinct phases (commissioning, initiation and completion of a monument) were, in the case of Thutmose I, Thutmose II and Hatshepsut, completed by different pharaohs. For Hatshepsut the continuation of Thutmose I and Thutmose II's building programs at Karnak may be have been way of legitimising her claim to the throne through an act of piety towards their reigns.

It is interesting also that Thutmose II is not ascribed with a building scheme of his own and Larché does not identify that any constructions were completed independently by Thutmose II. Even the construction of a pylon at the site of Pylon Three and the courtyard to the west of Pylon Four identified by Gabolde is attributed as being a joint effort by Thutmose II and Hatshepsut (Fig. 4.4). The lack of structures completed by Thutmose II can most likely be attributed to the shortness in length of his reign that would not have allowed time to complete major construction, particularly if the constructions commissioned and initiated under Thutmose I were still underway at the site.

Larché's concept of the building scheme as a process that could be completed over the reigns of different pharaohs introduces a new, and plausible, possibility to be considered in the attribution of monuments at Karnak.

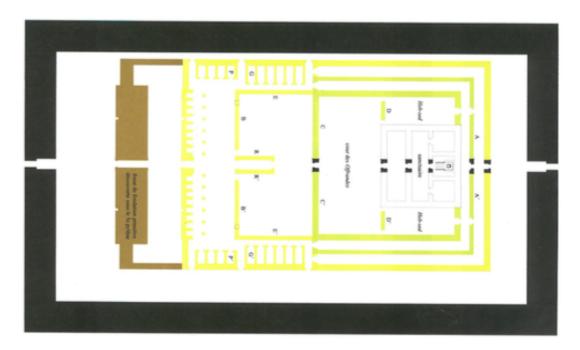


Fig. 5.1 Plan of the temple of Amun-Re at the end of the reign of Amenhotep I. The brown structure indicates the position of the later Pylon Five and the area in the remains of a mud brick structure, possibly a pylon-like structure, have been found. Bugos, Larché, et al. (2006), *La chapelle Rouge. Le sanctuaire de barque d'Hatshepsout* II, 332.

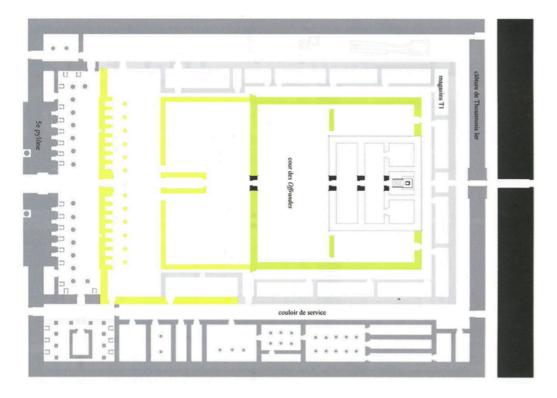


Fig. 5.2 Plan of the temple of Amun-Re at the end of the reign of Thutmose I. Bugos, Larché, et al. (2006), *La chapelle Rouge. Le sanctuaire de barque d'Hatshepsout* II, 333.



Fig. 5.3 Fragment of an architrave of Sesostris I used in the foundations for the cl3.0 in the courtyard of Pylon Five.
Jet (2010), 'Sondages dans la cour nord du Ve Pylône. Résultats et Étude d'un depot de foundation de la XVIII^E Dynastie', pl 15.

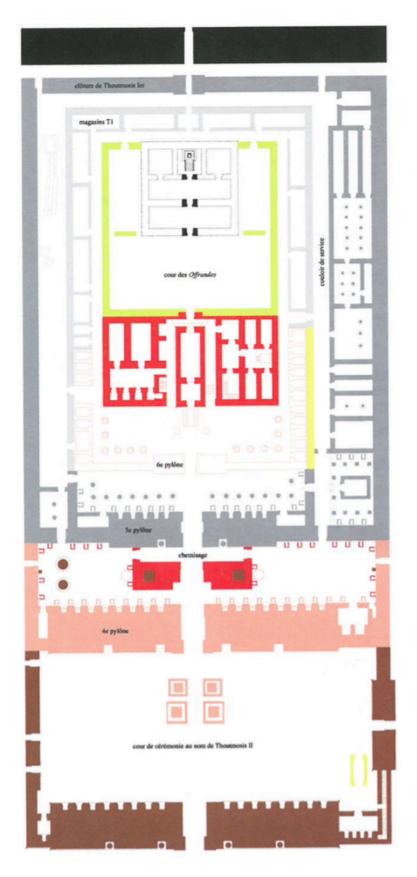


Fig. 5.4 Plan of the temple of Amun-Re at the end of the reign of Hatshepsut. Bugos, Larché, et al. (2006), *La chapelle Rouge. Le sanctuaire de barque d'Hatshepsout* II, 337.

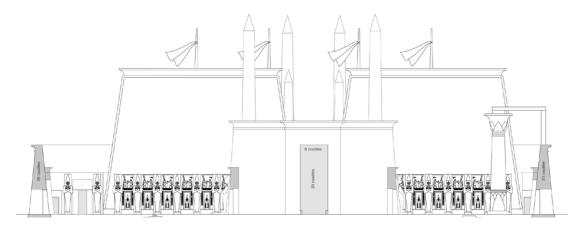


Fig. 5.5 Reconstruction of the courtyard of Pylon Four, looking west, at the end of the reign of Hatshepsut.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', pl. LXXX.



Fig. 5.6 Colossi Cl11, Cl10.n and Cl9.n (left to right) adorning the door of the southern side chamber of Pylon Four.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', pl. LVI.

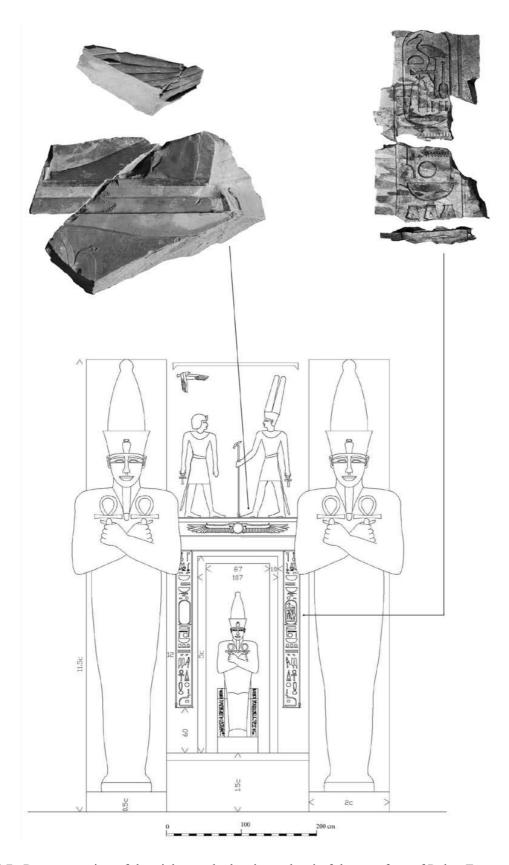


Fig. 5.7 Reconstruction of the niches and adorning colossi of the east face of Pylon Four. Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', pl. XLVIII.

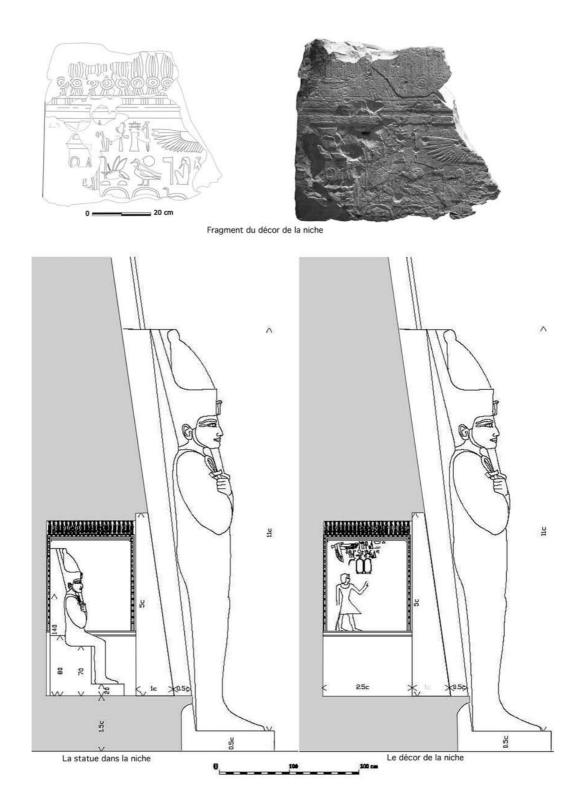


Fig. 5.8 View of the interior of the reconstruction of the niches and adorning colossi of the east face of Pylon Four.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', pl. XLIX.

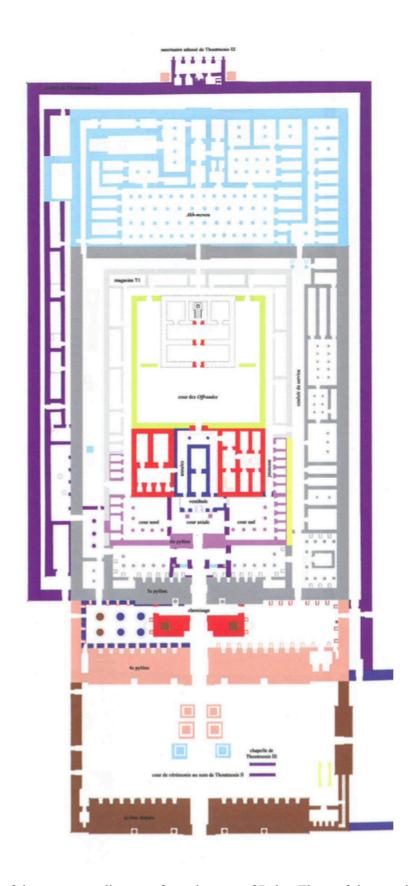


Fig. 5.9 Plan of the area extending east from the area of Pylon Three of the temple of Amun-Re at the end of the reign of Thutmose III. Bugos, Larché, et al. (2006), *La chapelle Rouge. Le sanctuaire de barque d'Hatshepsout* II, 341.

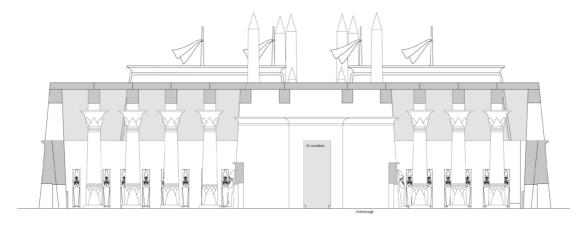


Fig. 5.10 Reconstruction of the courtyard of Pylon Four, looking west, at the end of the reign of Amenhotep II. At the end of the reign of Thutmose III only the northern half of the hall was roofed with columns. The southern half was left open.

Larché (2007), 'Nouvelles observations sur les monuments du Moyen et du Nouvel Empire dans la zone centrale du temple d'Amon', pl. LXXXI.

VI° pylône, môle nord

VI° pylône, môle sud

Façade est

mur de séparation nord
partie orientale
monolithe extérieur
index exterieur
index ext

Fig. 5.11 Plan of the granite structure between Pylons Four and Five. Arnaudiès-Montélimard (2007), 'L'arche en granit de Thoutmosis III et l'avant-porte du VIe pylône', 111 (fig. 2).

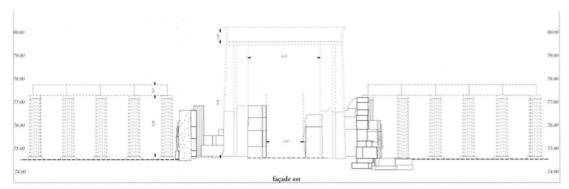


Fig. 5.12 Reconstruction of the east face of the granite archway and peristyle proposed by Arnaudiès-Montélimard.

Arnaudiès-Montélimard (2007), 'L'arche en granit de Thoutmosis III et l'avant-porte du

VIe pylône', pl. III.



Fig. 5.13 The western face of the northern granite monoliths now encased by sandstone. The remains of the vertical flange can be seen on the outer monolith. Photo: G. Smith.



Fig. 5.14 The eastern face of the southern granite monoliths now encased by sandstone. Photo: G. Smith.

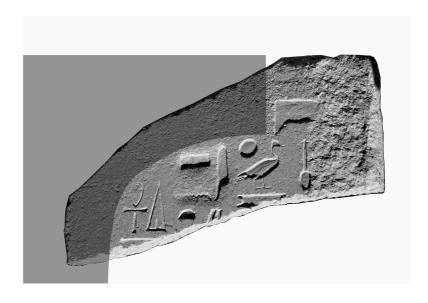


Fig. 5.15 Gabolde's proposed positioning of the cornice of the doorway between Pylons Five and Six.

Gabolde (2009), 'De la soi-disant "arche" en granit de Thoutmosis III à Karnak', 48.

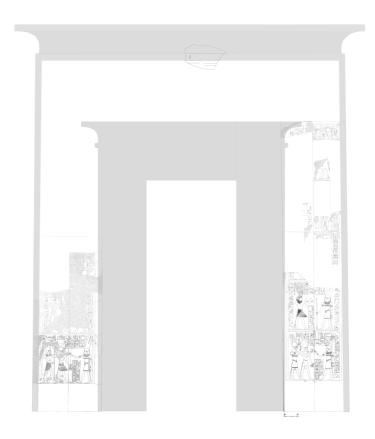


Fig. 5.16 Reconstruction of the one-tower pylon proposed by Gabolde between Pylons Five and Six.

Gabolde (2009), 'De la soi-disant "arche" en granit de Thoutmosis III à Karnak', 49.

Chapter 6

Karnak today

6.1 Overview

The following table (Table 6.1) records the major architectural elements that comprise the area of Pylons Four, Five and Six and their respective attribution to the reign of Thutmose I, Thutmose II, Hatshepsut or Thutmose III by the major works explored in this thesis. The table highlights both the consistencies in the building chronologies and the major discoveries that have been revealed during the process of re-excavation and re-interpretation.

	BORCHARDT	BARGUET	CARLOTTI & GABODLE	LARCHÉ
Pylon Four	Thutmose I	Thutmose I	Thutmose I (niches)	Hatshepsut (niches)
Peristyle to the east of Pylon Four			Thutmose I	
Obelisks between Pylons Four and Five	Hatshepsut	Hatshepsut	Hatshepsut	Hatshepsut
Encasing around obelisks	Thutmose III	Thutmose III	Thutmose III	Hatshepsut
Wooden wadj columns	Thutmose I	Thutmose I	Hatshepsut	
Sandstone wadj columns	Thutmose I/ Hatshepsut, increased by Thutmose III	Thutmose I/ Hatshepsut, increased by Thutmose III	Thutmose III (northern half only)	Thutmose III (northern half only)
Portico in northern courtyard of Pylon Four				Hatshepsut
Pylon Five	Thutmose I	Thutmose I	Thutmose I	Thutmose I (niches)
Granite elements between Pylons Five and Six	Thutmose I	Hatshepsut reused by Thutmose III	Hatshepsut reused by Thutmose III	Thutmose III
Peristyle to east of Pylon Five	Thutmose reused by Thutmose III	Thutmose I reused by Thutmose III	Thutmose I reused by Thutmose III	Thutmose I reused by Thutmose III
Pylon Six	Thutmose III	Thutmose III	Thutmose III	Thutmose III

Table 6.1. Overview of the building chronologies of Borchardt, Barguet, Carlotti and Gabolde and Larché.

Of note, the chronologies of Borchardt, Barguet, Carlotti and Gabodle and Larché all agree with the attribution of Pylon Five to Thutmose I and Pylon Six to Thutmose III. Alternatively, although not commonly accepted, are other attributions. According to Jacques Vandier,

Chevrier (1955) had attributed Pylon Six to the reign of Thutmose I though the reasoning of this is not provided. Similarly, Margaret Alice Murray (1931) suggested that it was possible that Hatshepsut had constructed Pylon Five and that Thutmose I had claimed it as his own²⁵⁶ and Kazimierz Michałowski (1970) attributed Pylons Four, Five and Six to Thutmose I.²⁵⁷ These attributions are now recognized as significantly outdated and based on very little, if any, archaeological evidence. Rather, they are based on an assumption that the major structural elements of Karnak were built in an outwardly fashion, ie. the earliest structures lie at the core and the later structures built surrounding this. Systematic archaeological excavations have, however, since confirmed that the building sequence does not operate in this way. Rather, the constructions in the central area of Karnak are motivated by a number of historical and religious factors creating a complex sequence of construction.

6.2 Functionality and operation of the temple during construction

The study of the architecture of the site has highlighted a number of questions regarding the operation and function of the temple that are yet to be adequately explored. The first refers to the functionality of the temple and operation during periods of construction. With massive construction works undertaken at the entrance of the temple and within the inner sacred zones of the temple its daily functionality must have been hindered to some degree. Particularly, the operation of the daily cult must have been affected by the presence of workers within the temple boundary walls and construction along the processional way must have had some effect on the temple. Perhaps the magnitude of the work undertaken at Karnak which made areas of the temple unusable for periods of time was a trigger for the additional axial way (north-south) or the addition of structures to the east of the Amun-Re temple, such as the Ahk-menu and obelisks of Hatshepsut's at the eastern entrance of the enclosure wall. Perhaps, the portico in the northern hall of the area between Pylons Four and Five proposed by Larché was used as an entry point to the temple during a period of construction to the east of Pylon Four.

The function and use of the areas of Pylons Four, Five and Six also called into question as a more complex picture of the architecture of the area is revealed. While inscriptions at the site provide information about the constructions themselves, they generally do not provide

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²⁵⁶ Murray (1931), Egyptian Temples, 80.

Vandier (1955), Manuel d'archéologie II vol. 2, 874 & fig. 420; K. Michałowski (1970), *Karnak*. Leipzig, 8-9

commentary on the function of the halls, courtyards and chambers in this area. Particularly of interest is the addition of chambers along the processional way that were constructed during the reign of Thutmose III. While the additional chambers along the central axis of the temple and the names of their doorways ("Menkheperre-is-great-of-offerings" and "Menkheperre-is-pure-of-offerings" in the chamber between the obelisks and Pylon Five) suggest ritual function. How exactly they were used and how their addition affected the procession into the temple remains unknown.

While general temple ritual and function is a well-studied area of Egyptology, the study of temple ritual and use at specific sites during the individual reigns of pharaohs may be a worthwhile area for further investigation.

6.3 The understanding of Karnak today

The historiographic assessment of the major literature regarding the excavation and architecture of the central area of Karnak has shown an interesting parallel between the increasing complexity of the temple between the reigns of Thutmose I and Thutmose III and the increasing complexity of modern scholarship's understanding of the site since the nineteenth century. While it is unsurprising that new discoveries have been made through the successive re-excavation of the area it is interesting to note that our understanding of the site is not necessarily becoming clearer and more coherent but is becoming increasingly complicated.

Although the distinct shift in attributions between the work of Borchardt and Barguet and that of Carlotti and Gabolde's is anticipated due to the advances in systematic archaeology that occurred in the second half of the twentieth and early twenty-first centuries. The distinctive, and plausible, sequence of construction proposed by Larché shows that there is work yet still to be done regarding the understanding of the building chronology of the area of Pylons Four, Five and Six at Karnak. Furthermore, Larché's concept of the building scheme as a process opens up a historical theory that deserves further study both in this area and at the entire Karnak complex.

Over the last century Karnak has been transformed from the piles of rubble faced by Mariette in 1858 into reconstructions that allow modern scholars and tourists a glimpse of the former

glory of the Karnak temple complex. During this process discoveries have been continually made regarding the remains of the temple and have informed modern scholars of the complexity of the temple and its history. As scholars, archeologists and architects continue to interact with the temple, work to reconstruct its structures and offer new historical theories, a new chapter is added to the biography of the temple. However, as the temple today stands as only a shadow of what it once was, our knowledge is still only a small glimpse into Karnak's history.

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