The regional significance of mortuary architecture at the Dendara necropolis, from between c.2345 BCE – 2055 BCE.

Jacob Gwiazdzinski

Submitted in fulfillment of the Masters of Research, Department of Ancient History, Faculty of Arts. October 2018.

Abstract.

The evolution of funerary traditions and mortuary features is a valuable proxy indicator of contemporaneous local cultural practices and political relations. The necropolis at Dendara presents a well suited case-study for the First Intermediate Period (c. 2160-2055 BCE)¹. This thesis attempts to determine the relative importance of Dendera, from the late Old Kingdom to the Middle Kingdom (c.2345 – 2055 BCE) through a comparative analysis of mortuary structures against examples at other Ancient Egyptian cemeteries. The study will use archaeological evidence to provide one of the most comprehensive studies of Dendara's significance during the First Intermediate Period.

¹Seidlmayer, S. 2003 The First Intermediate Period, in Shaw, I. (ed.) The Oxford History of Ancient Egypt. Oxford: Oxford University Press. pp1.

Acknowledgements.

This thesis would not have been possible if not for the resources, staff and opportunities afforded to me at Macquarie University.

I am indebted to the guidance, generosity and wisdom offered by Dr Yann Tristant who supervised this thesis. The opportunity to come to Macquarie was predicated on his willingness to dedicate his time and patience on supervising this eager student.

The support of my family has been an invaluable help in realising my academic ambitions in a challenging new environment.

I am also extremely grateful to my wonderful partner Rachel, who has been a constant source of support and tolerance in a very stressful year.

Glossary.

Assemblage A group of artefacts found in the same context.

C14 dating (Carbon 14) a radiometric dating technique

Context A homogenous layer where artefacts are found

Feature A built or excavated manifestation of human activity.

Lower Egypt The northerly part of Egypt known as such because of

the relatively flat terrain.

Nome A political region within Ancient Egypt

Superstructure Any construction built above the surface, such as

mastaba, chapels or model mastaba.

Substructure: The part of a tomb built below the surface, including

shafts and chambers.

Tradition An aspect of material culture which is consistently

applied in a particular manner.

Upper Egypt The southerly part of Egypt known as such for the cliffs

and higher terrain.

Contents.

	Abstract	
	Acknowledgements	ii
	Glossary	iii
1.0	Introduction	
1.1	Raison d'être	1
1.2	The late Old Kingdom and First Intermediate Period	1
1.3	Egyptian funerary traditions and cult places	2
1.4	The site of Dendara	4
1.5	Overview and scope of thesis	4
1.6	Methodology	5
1.7	Limitations	6
1.8	Significance and outcomes of study	7
2.0	History of work at Dendara	
2.1	Early European interest	8
3.2	Flinders Petrie and Charles Rosher (1898)	9
3.3	Clarence Fisher (1915-1917)	10
3.4	Recent Fieldwork	11
3.5	Other research	11
3.0	Critical evaluation of Slater	
3.1	Chronology	12
3.2	Categorisation	14
3.3	Regional contextualisation	16
3.4	Summary	18
4.0	Funerary structures and substructures	
4.1	Shafts	19
4.2	Offering places	20
4.3	Mastabas	21

4.4	Rock cut tombs	23
5.0	Shaft traditions	
5.1	Overview	25
5.2	Shape	25
5.3	Side chamber	26
5.4	Diagonal chambers	27
5.5	End chambers	27
5.6	Vertical position of shafts	28
5.7	Plane of shaft floors	29
5.8	Chamber interiors	29
5.9	Chamber blocking	30
5.10	Shaft finish	31
5.11	Coping wall	31
5.12	Orientation	32
5.13	Other shaft features	33
5.14	Summary	34
6.0	Shaft group traditions	
6.1	Overview	35
6.2	Organisation	36
6.3	Construction	37
6.4	Superstructures	37
6.5	Summary	38
7.0	Offering place traditions	
	Overview	40
	Model mastaba	40
7.2.1	Size	41
7.2.2	External features	41
7.2.3	Internal structure	42
7.2.4	Association with burials	43
7.3		
7.3.1	Shape	45
732	Internal structure	46

7.3.3	Association with burials	46
7.4	Summary	47
8.0	Mastaba traditions	
8.1	Overview	49
8.2	Size	49
8.3	Core types	50
8.4	Niched façade	51
8.5	Summary	52
9.0	Saff tomb traditions	
9.1	Overview	53
9.2	Forecourt	53
9.3	Portico	54
9.4	Chambers and cult space	55
9.5	Geology	56
9.6	Finish	56
9.7	Interments	57
9.8	Summary	58
10.0	Conclusions	
10.1	Summary of findings	59
10.1.1	Shafts	59
10.1.2	Shaft groups	59
10.1.3	Offering places	60
10.1.4	Mastaba	61
10.1.5	Saff tombs	62
10.2	Discussion	62
10.2.1	Significance of findings	62
10.2.2	Further research	64
11.0	References	66
12.0	Appendices	
12.1	Dynastic dates of Slater's period dates	80

12.2 Sites	covered	81
12.2.1	Abadiyeh	81
12.2.2	Abusir	81
12.2.3	Abydos	81
12.2.3.1	Abydos	82
12.2.3.2	El Arábah	82
12.2.3.3	Naga ed Der	83
12.2.3.4	El Mahasna	83
12.2.4	Asyut	84
12.2.5	Aswan	84
12.2.5.1	Qubbet el-Hawa	84
12.2.6	Beni Hasan	85
12.2.7	Ed Der	85
12.2.8	Edfu	86
12.2.9	El Badari	86
12.2.9.1	Badari / Qau / Hemmamieh	86
12.2.9.2	Matmar	87
12.2.9.3	Mostagedda	87
12.2.9.4	Zaraby	88
12.2.10	El Gozeireh	88
12.2.11	El Kab	89
12.2.12	Giza	89
12.2.13	Herakleopolis	90
12.2.13.1	Gurob	90
12.2.13.2	Harageh	90
12.2.13.3	Ehnasa	91
12.2.13.4	Sedment	91
12.2.14	Kafr Ammar	92
12.2.15	Kom El Hisn	92
12.2.16	Lahun	93
12.2.17	Memphis	93
12.2.17.1	Dashur	93
12.2.18	Meidum	94
12.2.19	Naqada	94
12.2.20	Rifeh	95

12.2.21	Riqqeh	95
12.2.22	Saqqara	96
12.2.23	Tell Ibrahim Awad	96
12.2.24	Thebes	97
12.2.24.1	Armant	97
12.2.24.2	Deir el Bahri	97
12.2.24.3	El Assasif / El Khokha	98
12.2.24.4	Qurneh / El Tarif	98
12.3 Figure	es	99
12.3.1	Napoleonic map of Dendara	99
12.3.2	Mariette's map of Dendara	100
12.3.3	Profile and plan view of shaft group	101
12.3.4	Plan view of different offering places found at Dendara	102
12.3.5	Plan view of a mastaba showing continuously niched	
	façade and hollow interior.	103
12.3.6	Plan view of gallery of Antefaqer II	104

Introduction.

1.1 Raison d'être

The work of Macquarie University at the ancient necropolis of Dendara in Egypt, resumes the study of an important site of Egypt's pharaonic past, demonstrated through the extensive and well cited work of Anita Slater (1974) who provided an early and comprehensive seriation of the First Intermediate Period ceramic assemblage and architectural features. The focus of that research was on the concentrated analysis of the necropolis' archaeology, with cursory references to parallel examples at other sites. An opportunity was seen to take Slater's comprehensive work cataloguing the different types of mortuary structures at Dendara and attempt to apply it to other First Intermediate Period cemeteries. This would involve drawing from existing literature and cartographical data to identify where the same styles of architecture have been either recognised or missed entirely in the excavation reports of other sites.

1.2 The late Old Kingdom and First Intermediate Period

The Old Kingdom (OK) was the period of four successive dynasties of royal families ruling Egypt following two dynasties of unification, approximately around 2686 BCE (Malek 2003:83)¹. The decline of the OK has been associated with the Fifth and Sixth of these dynasties, where increasing decentralisation of the country's power into the hands of regional governors called nomarchs - as the rulers of individual provinces called nomes - led to their increasing power (Seidlmayer 2003:111). The decentralisation of power was predicated upon a number of changes, Fischer notes the emergence of a 'tripartite division' of the country's nomes, which occurred during the Sixth Dynasty (Fischer 1968:65). Dendara would have fallen into the 'Southern region' of the nomes 1-9 or 10, (Fischer 1968:65-66) alongside the significant sites as Abydos, Thebes and Edfu. This eventually led to the direct challenge of the Theban nomarchs at least as early as the Eleventh Dynasty, beginning a period known as the First Intermediate Period (Seidlmayer 2003:109).

¹ The First Dynasty begins circa 3150 - 3100 BCE (Hendrickx 2006:92).

The FIP (c. 2181-2055 BCE), was the intervening period of political and military tension and then insurrection, between the two monolithic periods of relatively stable rule, which modern historians and archaeologists have termed the OK and Middle Kingdom (MK). Occupying the Ninth to part way through the Eleventh Dynasties (Malek 2003:107; Seidlmayer 2003:109), the chaos fractured the state back into opposing halves fought over the increasingly autonomous nomes. A significant feature of this chaos would have been caused by the ill-timed decision to move the royal capital during the Ninth Dynasty from the site of Memphis - near modern day Cairo - to the more southerly location of Herakleopolis Magna - the modern city of Ehnasya (Seidlmayer 2003:108). It has been argued that this political climate was being framed, if not directly caused, by a dramatic climatic event which was the cause of nationwide drought and famine (Seidlmayer 2003:108-109). The climatic conditions are recorded in autobiographical works, however the literalism of these texts has been criticised, particularly in light of more recent studies which find no stratigraphic evidence for such an event (Moeller 2005:165-167). More recently the picture of the FIP was that it was a period that allowed for greater personal autonomy and in some respects greater economic wealth, particularly in the provinces (Snape 2011:88-90). The growth in the number of 'medium sized tombs' is reflected at Dendara, and many other regional centres (Alexanian 2003:94), making mortuary contexts important proxy indicators for the diffusement of prosperity during the FIP.

The Theban usurpers eventually and violently wrestled control of the country part way through the Eleventh Dynasty, beginning the Middle Kingdom (Seidlmayer 2003:108-109). During this reunification, there was a campaign to destroy the memory of the Herakleopolitan dynasts and their supporters, with evidence from the cemeteries around the capital attesting to this ideological expunging (Seidlmayer 2003:134). In an act of consolidation and demonstrating an awareness of the power of the nomarchs to challenge the kingship, the title was retired during the MK, even if many of the duties lived on under different titles (Snape 2011:149).

1.3 Egyptian funerary traditions and cult places

The traditions surrounding the mortuary traditions of private individuals during the OK and MK would have formed the tangible practices which survived through the

material record as well as the intangible decorum and behaviours which may in many cases be either immutable or presumed too obvious to record. One of the most basic principles was that the tomb was meant to facilitate a place for offerings to sustain the Ka of the deceased, while also providing a grave for the Ka to return to (Snape 2011:62). The practice of these funerary cults can be inferred from tomb scenes, which demonstrate family or priests cleaning the monument, presenting food offerings and pouring libations (Shirai 2006:327-328). This continued offerings to the dead was intended to be two-way, with relatives asking for favours, most likely predominantly through a verbal exchange, however the chapel provided a location to deposit requests inscribed upon portable objects and even the stelea themselves (Snape 2011:83-85). While the idiosyncrasies of different types of cult place would have augmented these practices, there would have been practices which could have been applied generally to any type of grave (Shirai 2006:326).

The cult of the individual ideally began in life, with the construction of a tomb and the preparation of its furnishings usually being constructed upon the orders of the tomb owner (Shirai 2006:325). Perhaps more commonly written evidence shows that the construction of a tomb was frequently the charge of the children (Feucht 1995:86-92). There is some debate over whether the practice of offerings and other ritual elements preceded death, also, and if so, to what extent and character (See: Shirai 2006:326; Bolshakov 1991:204-218). One question for which there is poor evidence, is how prolonged the cult of the deceased was beyond the death of the individual (Shirai 2006:325). This likely would have been highly dependent on the status and role of the individual, with evidence found at Saggara suggesting the resumption of a mortuary cult of a particular priest, which was so extensive as to involve the reconstruction of his tomb (Dobrev 2017:59). The shared role of many tombs meant an ongoing interest by successive generations, at least, with evidence for the legal organisation of tomb ownership amongst multiple family members (Kokina 2017:169). This was important, as the threat of having additional graves excavated into a monument ex post facto, was a genuine and warranted concern, particularly by the end of the OK (Kokina 2017:167; Shirai 2006:333). If not built into the monuments themselves, the graves of relatives of a large tomb owner would often build their own graves and cult spaces surrounding the superstructure (Warden 2017:468).

1.4 The site of Dendara

Located at the Qena Bend and situated to the south west of the modern city, the Dendera necropolis occupies over a hundred hectares of desert, south of the Ptolemaic temple complex (Tristant 2015:129). The geology of the site is of a hard, dense gravel, bounded by the cultivated soil on the banks of the Nile and the cliffs situated several kilometres away (Slater 1974:187; Petrie 1900:21; Zignani 2001:422-427). The necropolis consists of material dating mostly to between the Fourth and Eleventh Dynasties, although there is also burials at least as far back as the Protodynastic period and as recent as the Ptolemaic (Tristant 2001: Zignani 2010:426).

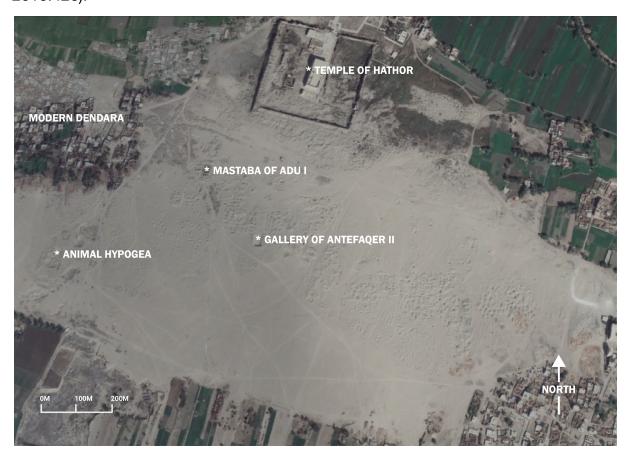


Figure 1: Aerial Photograph of Dendara necropolis and Ptolemaic temple. Google Earth 2018.

1.5 Overview and scope of thesis

This paper concerns the mortuary structures and substructures which were constructed in the period between 2345 BCE - 2055 BCE, or the period between the Fifth Dynasty and the Late Eleventh Dynasty (Malek 2003:103; Seidlmayer 2003:108). This covers the majority of the archaeological evidence in the Dendara necropolis, however, reference to traditions slightly before or after this period are occasionally made to contextualise the developments discussed.

A more detailed revision of the history of archaeology at Dendara, focusing particularly on the work conducted at the necropolis will frame the study. A critical analysis of Slater's thesis as it pertains to the present work will discuss the quality of the chronology, categorisation (typology) and how effectively the features were contextualised with other site in First Intermediate Period (FIP) Egypt.

The veracity of the claims for the uniqueness of particular features amongst other sites, such as the niched mastaba and the location of chapels over chambers (Slater 1974:380), were verified through the systematic study of the other reports, while expanding the number of cemeteries included in analysis. This was conducted through a close scrutiny of the excavation reports available at the time of Slater's writing, as well as the research since published (tables 2). This was divided into five chapters each covering a particular class of features, discussing the excavation reports and what features they reveal to have been constructed at other sites. The patterns recognised in these chapters were then summarised and discussed.

1.6 Methodology

The initial task was to determine which categories of features are present at Dendara and to determine which details of each of these features would be studied and compared across sites, with particular attention to the time available and the competency with which a comparison could reasonably be made. For example, because of Slater's typology which focuses on the length of structures, rather than the area they occupy, comparisons with other sites will similarly be based on this metric. Thirty-six other cemeteries grouped into twenty-four distinct sites with evidence of FIP material were chosen to compare against Dendara. The details of each example from these sites, relevant to this study were then tabulated, with each table was a listing the feature types found at Dendara, against which instances of their occurrence and idiosyncrasies of their form were recorded. This data is represented in tables 2 with the citations positioned against the various feature types, for each site. Slater's period dates were also converted into dynastic dates (table 1), to ensure preliminary temporal comparisons could be made across sites.

Analysis and interpretation of the texts and site plans (where they are available), was necessary to recognising features which might have been mislabeled or unclassified by the original excavators. In all, this paper investigates thirty-six cemeteries across twenty-four distinct sites, an expansion from the twenty-four cemeteries mentioned by Slater.² The reports were examined to determine how many features were present at each site. Because of the varying levels of detail amongst the different site reports, the presence or absence of a feature was the only thing recorded, rather than the proportion of graves of that type at each site. Also recorded was the the estimated temporal range of the associated burials, in order to compare, against Dendara, how the same features differed at other sites, as well as to determine in which periods certain styles were being constructed.

A list of all the sites being considered for this study (including all its associated necropolises) was also composed, with each site marked of being either the Theban or Herakleopolitan traditions at the Tenth Dynasty - the period Dendara became a nome under the control of the Theban kings (Slater 1974:19). The basis of this determination was those sites south of the Thinite nome were determined to be of the Theban tradition, and those north of it were considered to be of the Herakleopolitan tradition.

1.7 Limitations

As a 20 000 word thesis, conducted over the space of ten months, several limitations have been placed on the research. The most extensive study of each of these sites would involve the analysis of the handwritten field notes of the excavators, which are most often not published. These documents are often held in storage at universities and museums throughout the world, with each requiring much labour to properly analyse. As such, this thesis focuses primarily on what published material is available, with the exclusion of the Dendara field notes of Petrie and Fisher.

Due to the difficulty of gathering sufficient, accurate data, which Slater suggests is a difficulty even with Fisher's relatively good excavation notes (Slater 1974:225-226), a discussion of surface graves does not form a component of this thesis. As a

²see: Slater 1974:519, for full list of sites covered in that work.

related point, this researcher mostly relies upon the dates attributed by the original excavators, even where this proves problematic. 'The poor availability of statistical data and the paucity of detailed methodologies means that this thesis will not strive to compare average dimensions of structures. This has been a significant hindrance to the most objective comparisons across sites.'

Due to the constraints of this study, the researcher has chosen not to draw parallels between the minutiae of interior layouts present in the Dendara mastaba and those at other contemporaneous cemeteries, but rather to focus on a few key points highlighted by Slater:

- 1. That the large form of Mastaba had 'nearly died out at the end of the Old Kingdom' (Slater 1974:129),
- 2. That the local tradition of a multiple niched façade was unique almost only to Dendara (Slater 1974:130)
- 3. That Dendara presented a unique form of mastaba with a hollow core (Slater 1974:130).

These theories were instead evaluated against the published literature.

1.8 Significance and Outcomes of study

Dendara has already been the subject of important research papers which have had implications far beyond the study of this one site. The work of H.G. Fischer focused on revealing the administrative history of Dendara, (1968; 1955) while Slater's thesis focuses on determining the development of mortuary traditions manifest in the material record (Slater 1974:30). This thesis leverages both of these works to further contextualise the developments surviving in the archaeological record, and evaluates whether Dendara does present a number of unique or otherwise atypical forms of mortuary architecture from during the FIP.

This research also presents one of the most comprehensive analyses of shaft and chamber, as well as model mastaba construction from during the FIP. This is important to the understanding of non-elite burials from the Pharaonic era. The results of this compilation and analysis may form the basis for understanding the traditions found at other sites from the same period.

History of work at Dendara.

2.1 Early European interest (Eighteenth and Nineteenth centuries)

The investigation of Dendara as a site of interest stretches at least as far back into the era of antiquarianism, with the French naturalist, Charles Nicolas Sigisbert Sonnini reporting that by the time of his travel to the site in 1778, it had already been frequented by Europeans, intending to not only visit but also document the Ptolemaic temple (Sonnini 1799:154-155). Sonnini noted that some had gone so far as to conduct their own rudimentary excavations, which was expected and encouraged by the local emir (Sonnini 1799:155).

The first organised effort to record the site systematically and in detail followed with the French Napoleonic mission, which visited the site in 1799. It was at this point the first known map of the site was created, which, however, only eluded to the existence of ruined features in the vicinity of the necropolis (Blondeau 1817:pl.2). The map produced there (figure 2) focuses almost entirely on the temples and neglects to show any of the area of the cemetery, clearly revealing the priorities of recording the large monumental architecture.

Auguste Mariette's 1859 expedition was also primarily focused on the recording and excavation of the temple, which he states was under instruction from the French Consul General M. Mimaut (Maiette 1875:1). As part of his work there, the Egyptologist also published a more updated map of the site, as well as an exhaustive set of facsimiles on the inscriptions and wall scenes, (Mariette 1875:pl.1). Mariette also contributed his own map of the site (figure 3) which advances on the one produced by the Napoleonic expedition as it depicts the broken outline of small structures to the north and the east, formally acknowledging the presence of the cemetery on the site.

2.2 Flinders Petrie and Charles Rosher (1898)

It was not until the arrival of Flinders Petrie, and soon after, Charles Rosher, in 1898 that the necropolis was the subject of serious archaeological attention (Petrie 1900:1), with Petrie alluding to the possibility of prehistoric (Predynastic) remains as a motivation for inquiry (Petrie 1900:1).

Petrie came to the site under the patronage of the Egypt Exploration Fund, but motivated by the urgent sense of responsibility to catalogue as much of Egypt's threatened sites as possible - something he later describes in his memoir (Petrie 1931:19). Petrie published his excavations of Dendara in 1900, reporting on the main cemetery of the OK and FIP, the Ptolemaic and Late Period cemetery, the Late Period animal catacombs, the inscriptions, as well as the artefacts of different types and materials.

Rosher was an engineer sent to the site by the American Exploration society to work under the mentorship of Petrie (Rodgers 2011), but only received a week of instruction before continuing on his own (Petrie 1900:2). While his notes unfortunately remain unpublished, copies of his plan of the site and drawings of some of the tombs he excavated, survive at the Griffith Institute in Oxford (Griffith MSS 15.3, 17.6) and the University of Pennsylvania archives (M-18-3: 1007). Additionally, the material he excavated also came to reside in the University of Pennsylvania University Museum (Slater 1974:3-5).

When he began excavations in the Dendara cemetery, Petrie noted that while there appeared to be little impact through looting, or even any scientific attempt at excavation, the superstructures of the chapels and mastabas had suffered considerable erosion and destruction (Petrie 1900:1-2). Despite this, throughout the solitary season, Petrie and Rosher excavated as many as 86 mastabas, as well as 'many dozens' of shaft tombs - which he determined to have no remaining superstructures (Petrie 1900:2; Slater 1974:131). Petrie attempted to 'classify' the tombs he excavated, in order to impose a chronology on those he considered otherwise undateable (Petrie 1900:13-22). Interestingly, the seriation of ceramics (and other funerary artefacts) was regarded as the least important method of four: the style of the tomb, the form of the tomb as well as its relative position, all being favoured as more significant (Petrie 1900:13). In terms of the accuracy of Petrie's

work, Slater's attempt to superimpose Petrie's maps onto Fisher's later survey revealed the measurements of the former to be grossly inaccurate (Slater 1974:18). This is in addition to a number of other inconsistencies and emissions in the report which make it difficult to use as a resource of the site's archaeology.³

2.3 Clarence Fisher (1915-1917)

Work on the cemetery was continued by Clarence Fisher between 1915 – 1917 divided among three seasons, which were conducted on behalf of the University Museum, University of Pennsylvania (Fisher 1918). Fisher's own motivations for excavating the site lay with the idea that Petrie's investigation of the cemetery had finished prematurely (Slater 1974:5).

Fisher's approach was to excavate as systematically as possible, being worked in parallel 20 metre squares 'leaving nothing uncleared or unrecorded' (Fisher 10 Nov 1915; Slater 1974:6). Fisher is responsible for a far greater wealth of knowledge on the site, as he re-investigated the areas of Petrie's excavations, identified an additional a further 22 mastabas, 2106 shafts, as well as excavating other areas untouched by Petrie (Fisher 11 November 1915; Slater 1974:19,131,179). Fisher also had intentions to excavate the town and within the temple walls which unfortunately did not eventuate (Fisher 24 January 1916).

The expertise which Fisher brought to his excavations at Dendara is evident in his diary, where he reveals the nuances of what he located and where, as well as noting where he did not find particular artefacts (Fisher 13 November 1915). His diary also records his evaluations of Petrie's work, where he came across it, commenting on where he thought his predecessor had missed certain parts (Fisher 15 November 1915).

Unfortunately, Fisher's death meant that the legacy of the three seasons survives only through his unpublished handwritten notes and diary (Slater 1974:5). The comprehensiveness of these notes, given each structure, and every artefact found

³ For a comprehensive critical evaluation of the issues of Petrie's report on his work at Dendara, see Slater 1974:14-21.

was provided a reference number (Slater 1974:9), makes determining the limits of Fisher's work mostly possible, for those (as Slater did) with access to them.

2.4 Recent Fieldwork

More recently, Dendara has been subject to investigation by a series of projects by the Institut Français d'Archéologie Orientale (IFAO), with work by Daumas (1973), and Zigani (2001) focusing on the Ptolemaic temple. Since 2012, the project directed by Dr Pierre Zignani has seen the excavation programme, which has involved Macquarie University as represented by Dr Yann Tristant, as well as the University of Chicago's Oriental Institute, as represented by Dr Gregory Marouard (Zigani 2013:2). Work on the necropolis has thus far focused on the systematic re-excavation and re-recording of parts of the site excavated by both Petrie and Fisher and include a more comprehensive ceramic typology, as well as to locate the earliest graves in those areas not yet explored (Tristant 2014:130-133; Tristant 2015:133).

2.5 Other research 1955 - 1974

Beyond the work of Anita Slater's PhD thesis - which will be considered in the following chapter - The assemblage of material from Dendara has also been the subject of study by Henry George Fischer, who was responsible for a detailed compendium of the OK and FIP literature, found primarily by Petrie, as well as the first comparative analysis of the structural forms present in the Dendara necropolis (Fischer 1955:4, 93-99).

Critical evaluation of Slater.

3.1 Chronology

Primary to an evaluation of Slater's work is an examination of the chronology she developed through the creation of a Dendara specific ceramic seriation, based primarily on Fisher's notes. While a study of the grave goods is largely outside of the scope of this thesis, Slater's seriation forms the basis of a number of important assumptions which are relied upon in this study and so are briefly discussed.

Recognising the cruciality of understanding the temporal relationship of each part of the site's assemblage, Slater sought to devise a local chronological sequence, rather than impose periods which were devised from another site's material (Slater 1974:44). Relying on the 'disposable' ceramic artefacts found in situ (Slater 1974:49), the objects were categorised and sub-typed, with demarcations based on shape and fabric (Slater 1974:44). The number of different forms in individual graves were recorded in matrices, so as to understand their relative occurrences in association with other forms - demonstrating patterns of increasing and waning usage which could be expressed as a series of overlapping 'battleship curves' (Slater 1974:50). From this, sixteen distinct periods, defined alphabetically from A-P (in addition to an looser period 'AB'), were formulated (Slater 1974:474). Once the ceramics could be ascribed to a 'period', a consideration of the proportion of the different types present in a tomb were used to provide it an approximate date (Slater 1974:52). Through this method, Slater was able to date 714 graves, or one third of all those excavated by Fisher, to a discrete period (Slater 1974:53-54). These period dates were then related to dynastic dates through the occurances of royal names in association with contexts of a known period date (Slater 1974:350-351, 353), paleography of more generally inscribed material (Slater 1974:356), as well as a comparison with the seriated material from the nearby Theban cemeteries (Slater 1974:361). This development of an isolated chronological system allowed for the most accurate understanding of how features at the site developed in relation to one another, rather than attempting to correlate features with uncertain dynastic or worse, chronological dates. This of course comes with

the caveat that while the development of styles can be compared with other sites, the influences of Dendara or other sites cannot simply be related to each other.

Slater identified a number of challenges to developing the seriation, which are important to mention when assessing the accuracy of the chronology. Slater was almost totally beholden to Fisher's notes for developing the different groups of forms, as of the entire assemblage Fisher excavated, and only 2% was accessible to Slater's study (Slater 1974:41). Even from this small amount, Slater noticed inaccuracies amongst the earlier material excavated (Slater 1974:41) as well as a tendency to overenthusiastically group forms together (Slater 1974:42). Further, there is the admission that certain forms continued to be used, largely unchanged throughout the entirety of Egypt's history, complicating their use in forming a seriation (Slater 1974:47). In terms of relating the periods to dynastic dates, the paucity of inscribed in situ material, as well as the difficulties of comparing the seriations of two sites in such a culturally fluid period, are also mentioned (Slater 1974:50, 362). The decision to correlate the period dates to the earlier part of the FIP is perhaps overconfident, given the uncertainty that remains with demarcating some of the earlier dynasties (Seidlmayer 2003:109).

Even under perfect conditions, ceramic seriation as a means of dating externally defined periods is considered relative, and therefore somewhat speculative (van de Velden, Groenen and Poblome 2009:3129) as compared to more concrete, radiometric methods. With this in mind, assessing the accuracy of the chronology through independent methods and external controls is essential to making sound conclusions relating to the change through time. Slater demonstrated many controls available to her which support her conclusions: aside from the aforementioned importance of using in situ objects of clearly related provenance to the tombs where they were found - therefore discounting Petrie's material wholesale (Slater 1974:125) - the data was also cleaned in other ways. 'Hundreds of pottery types' were lumped together into large enough categories to produce meaningful periods (Slater 1974:48), while forms which occurred too infrequently were eliminated from consideration (Slater 1974:49). This is perhaps the most realistic method of dealing with such an assemblage.

Due to the nature of graves as intrusive in the natural stratigraphy, comparisons between different tombs is often impossible, however of the 25 graves able to be assessed this way, 92% of these conformed to the Slater's chronological system (Slater 1974:54). This clearly demonstrates the efficacy of Slater's typology, even if it is only applied to a very limited sample. Additionally, after applying the chronology to those tombs with in situ material, Slater also recognised a largely consistent pattern of where graves were dug, which exhibited a steady 'shift' across the site (Slater 1974:51).

With all the drawbacks considered, Slater defends her chronology summarily: 'Sequence dating seems to be the only answer to the problem of dating the graves, at Dendereh at least' (Slater 1974:47). Indeed, with the ongoing issues of using C14 dating for the OK and FIP in Egypt (see: Dee et. al. 2009:1061), and the difficulty of accessing other ceramic-based radiometric methods such as archaeomagnetism and spectroscopic analysis, Slater's chronology remains the most operable method of assessing the relative development of forms at Dendara.

3.2 Categorisation

The major goal of Slater's thesis was the description and characterisation of the various tombs and superstructures which were determined to be of the FIP at the site. The thesis also intended to provide a preliminary attempt 'to determine whether Dendereh confirmed or contradicted the patterns seen at other sites or deduced from literary works' (Slater 1974:30-31).

The quality of the data she had to work with similarly presented a number of problems, albeit for different reasons affecting each source. Petrie's report is also unhelpful with categorising the portable artefacts - everything from the map he produced being totally irreconcilable with Fisher's (Slater 1974:17-18), the frequently total emission of recordings of shafts (Slater 1974:181) to the otherwise incomplete recording, or even excavation of, mastabas and other features (Slater 1974:20). Additionally, he fails to provide any explanation of his methods of excavation (Slater 1974:15, 17) so drawing any patterns from what is clearly a haphazard approach to excavation is fraught with issues. While Fisher recorded detailed measurements on the interior of the shaft and chamber tombs which were

comprehensively represented on his map (Slater 1974:12), unfortunately details of the superstructures were largely relegated to either the 1:100 scale map, or a selected number of photographs (Slater 1974:12, 30, 131). Furthermore, Slater laments the lack of analysis in Fisher's note, stating that: 'His knowledge of the site would have been invaluable in filling in gaps which inevitably must exist in the written record' (Slater 1974:6).

From this, Slater is nonetheless able to craft a useful categorisation of the various forms, being: the mastabas; the offering places of the model mastaba and chapel; as well as the graves of shafts and shaft groups. One of the forms not discussed is the gallery of Antefaqer II (figure 7), due largely because of a lack of datable material associated with it and the yet unpublished report into the similar *saff* tombs el Tarif. Indeed, Slater does not even include a plan of the tomb, despite acknowledging Fisher re-excavated it and its likely association with the el Tarif examples (Slater 1974:362), instead relying on the reader's own familiarity with Petrie's publication (see Petrie 1900:pl.XXXIII). This all goes to demonstrate that Slater primarily developed her typology from the Dendara features, rather than more appropriately, working with existing typologies. It is clear, however that the development of a grand typology of mortuary architecture was not Slater's goal, which does have advantages in highlighting local developments.

Using primarily Fisher's maps, the mastabas are categorised into seven discrete types, defined numerically from M1-M7. Slater acknowledged the existence of further forms excavated by both Petrie and Fisher which could not be categorised because of the incompleteness of the available records, but still appeared unique compared to the seven others she defined (Slater 1974:143). The degree of analysis on the mastabas remains some of the most competent to date, with Baud and Guerrier more recently identifying the need to more comprehensively study the various forms of these necropolis monuments, stating that:

'Later literature on mastabas is usually heavily based on Reiner's typology, so that descriptions are often minimalistic, if not referring to his core type number. Few studies depart from this model and detailed descriptions remain extremely uncommon, although they always pinpoint interesting data and should therefore trigger curiosity towards this kind of architecture.' (Guerrier 2011:23).

The offering places as model mastaba and chapels, are further divided, with the arbitrary distinction of 'large' (OP1) and 'small' (OP2) types (Slater 1974:163) of model mastaba defined, but largely sharing the same features, irrespective of size. These smaller imitations are distinguished from the 'true' mastabas through either 'the presence or absence of graves within the structure' (Slater 1974:128). The chapels are also distinguished for their relatively unique forms, (Slater 1974:173). It is most clearly evident here that Slater does not work from the examples found at other sites, as the similarities and differences would have probably encouraged a different characterisation of what the Dendara model mastaba are.

With regard to the other superstructure of the graves, Fisher does well to notice the inconsistent recording by Fisher (and consistent omission by Petrie) of the brick coping wall around the shaft mouth, in the tomb reports (Slater 1974:182). Information on the shaft and chamber arrangements were such that Slater was able to provide analysis on the shape, orientation, depth and number of chambers (Slater 1974:188), including correlations between the depth of shafts relative to the number of chambers. One other feature which Slater neglects, is the inclination of the floors in shafts. Like the coping wall, this is another feature which has been identified at some other FIP cemeteries, but generally recorded haphazardly (Brunton 1948:40).

Early on, Slater acknowledges the site as being primarily of Sixth - Twelfth dynasty material, however, if the omission of the gallery of Antefaqer II is any guide, she demonstrably neglects some of the material just because she could not independently date it, even where it might be of great importance to an understanding of the site within the broader FIP. As such, while her work provides an important first step in the study of the Dendara architectural forms, a consideration of wider ancillary literature would provide a more complete representation of the site.

3.3 Regional contextualisation

Slater's priorities are with analysing the Dendara material and understanding each of its elements with regard to its local importance, as a first priority, which sees the contextualisation to other sites being of considerably lesser importance. When

summarising the existence of unique forms at Dendara, she concedes 'it is quite likely that close study would reveal other local groups of special features...' (Slater 1974:397). Her discussion of the regional importance of the architectural forms, then, presents a very basic summary of what she noted is present at other sites. Even when summarising the reasons for the seemingly rare and unique forms at Dendara, she demurs that 'it is difficult to draw any definite conclusions based on it' (Slater 1974:397). Part of this may be the relative lack of attention granted to this part of the thesis, with effectively only two pages granted to a comparison of the architectural forms at other sites (see pages 395-397).

Other conclusions tend to be particularly cautious, suggesting Slater's study into other sites is daquite cursory as she acknowledges the commonality of the rectangular shaft in Egypt more broadly, and that it superseded the square variant, but does not delve into when (Slater 1974:184). Slater also claims it is not clear where the development of the east-west orientation tradition developed, despite only occurring at some other sites (Slater 1974:186), but with no further commentary on which sites these are or what the quality of the excavations there could reveal towards a likely answer. This is inline with the admission that only the general publications were considered because of time constraints (Slater 1974:375), but the presence of features on maps of other sites, which do not occur in her thesis demonstrate that her examination of these sources are not as thorough as those of Dendara. Disappointingly, this is even despite the admission that similar discrepancies of what existed in the written report and what was provided in the appendices occurred in Petrie's Dendara report (Slater 1974:363).

Slater does highlight a number of important considerations when discussing some of her theories for the reasons that the Dendara architecture is so unique. The role of geography is an particular example, Where when considering the development of the site spatially, particular areas were only accessible under later climatic conditions (Slater 1974:344). More generally where accounting for the differences between sites, Slater concludes:

'It becomes a task of juggling the preservation, the local traditions, the date, and the cultural diversity to find which is responsible for the differences between the sites,

and of course in many cases it will be found that all are involved to a certain extent.' (Slater 1974:380).

Less well supported ideas include the claim that the lower class burials 'were more standardised, and continued the [OK] tradition at most places of shafts and chambers' or that 'the Dendereh shaft is typical of those of this period.' (Slater 1974:396), which neglects the suggestion of some excavators of there being clearly distinct traditions (Brunton 1948:40); countering the idea of there being one 'typical' form.

3.4 Summary

Through critically examining Slater's chronology, typology and efforts to compare different architectural forms across sites, its effectiveness can be critically evaluated as a foundation for this thesis' own work. The meticulously formed seriation provides a chronology which could scarcely be improved upon, given current approaches to dating in Egypt continue to rely on similar methods. Likewise, alternative control methods seem to largely support the accuracy of that work. The typology of the substructures and superstructures of the site was largely hindered by incomplete data in Fisher's notes, in addition to the destructive effects which greatly affected the integrity of what remained for Fisher to record. By deciding to focus primarily on Fisher's notes as a source, a basic but sound typology emerged, while also considering the presence of a greater number of variants. Finally, the comparisons to other sites demonstrates the most room for expansion, although Slater herself acknowledges this, as it clearly formed an subsidiary purpose of the thesis of focusing on identifying and categorising the Dendara material internally.

Funerary structures and substructures.

4.1 Shafts

Variously termed shafts or pits,4 the shaft was a fundamental component of the largest elite mastaba tombs, to the more modest, standalone shaft and chamber arrangement which was also used by poorer persons. Shafts were constructed with, or without one or multiple chambers, at varying depths and with multiple other features such as the presence of 'shelves' or recesses for the provision of funerary equipment (Brunton 1927:32). It is the belief of some researchers that there was likely no or or very diminutive superstructures for the majority of people at many sites (Snape 2011:101). These and other features, such as shaft floors which were deliberately built to slope into chambers (see: Brunton 1948:40; Brunton 1927:37, 45), are acknowledged but poorly contextualised. There has been the suggestion that wealthier persons encouraged the construction of poorer tombs around the larger ones, out of a sense of social responsibility by the wealthier tomb owners, as the association would have meant it more likely for the simpler tombs to have received offerings by association (Snape 2011:101). In the case of family members, some of these were even constructed directly on the orders of the owners of the large superstructures (Snape 2011:89).

The neologism of 'Shaft Groups' (for example see figure 4) was coined by Slater to explain the phenomenon of approximately 88% of the Dendara shafts being constructed parallel to other, nearly identically designed shafts (Slater 1974:185). These were also often associated with a single wall, bounding all those in the same 'group' and often accompanied by a superstructure. This tradition has been frequently unacknowledged at other sites, with instances of large groups appearing on site maps but with very little acknowledgement in the texts.

The study of shaft tombs has been impacted by the problematic fixation on wealthy, undisturbed or novel tombs, as is seen clearly in the works of early excavators, where unproductive tombs were 'recorded but not registered, as they contained no

⁴ Petrie clearly refers to pits and shafts interchangeably in his report at Kafr Ammar (Petrie 1913:29-30).

objects, or none of any new interest' (Brunton 1937:98). This has had a massive impact into understanding the representativeness of different features of shaft tombs. Further complicating serious study is the tendency by many researchers to use terms such as 'shaft' and 'pit' interchangeably, with no clear delineation of what causes the differences, where they are made distinct (see: Jánosi 1999:27; Petrie 1913:29-30). Slater noted in her thesis that the details of the shafts found at Dendara were considered 'typical' - aside from their orientation (Slater 1974:396) while even more recently, researchers believe that the examples of one site can be generalised to represent the traditions throughout the whole country (see: Snape 2011:101,104). A fixation on the furniture of shaft tombs over the dimensions, likewise persists.

4.2 Offering places

One of the most important aspects of funerary culture was the facilitation of ongoing provisions and reverence of the deceased, through a dedicated 'cult place'. The wealthiest private owners had a chapel and serdab(s) - a chamber for the statue of the deceased - as an internal part of a mastaba (Bard 2007:157). Whereas, at the poorest end of the scale, a simple offering tray or soul house, was meant to emulate the superstructures (Niwinski 1984:806). While tombs and their cult places surrounding larger monuments have been justified as belonging to relatives, it was recognised at Saggara that cult places were instead positioned near the places of the royal cult, as a means of benefiting by proximity (Abdallah 1992:110) While most graves near large tombs probably did belong to relatives, this offers a possibility for the provincial cemeteries, where subsidiary burials were probably a mix of relatives and opportunistic others. Unlike the tombs themselves, the cult place was usually dedicated to just one person, however, during the late Old Kingdom, there arose a tradition of constructing separate cult places for other relatives (Kokina 2017:163-164). The construction of these small superstructures may have even been dependent upon regulation by the royal palace, as the request for false doors evidences (Bolshakov 1991:205), however more likely this was an economic dependence rather than a necessity for legitimation (see: Snape 2011:88).

Larger cult places (see examples in figure 5) are predominantly categorised homogeneously under the title of 'chapels', however Slater in her study of the

Dendara material, sought to divide these into chapels and what she determined were a distinct, and in the case there, earlier tradition of 'model mastaba' (Slater 1974:161). The model mastaba was a form which Slater distinguished because of its imitation of the larger structures form and features, yet with the shaft(s) being external to the structure (Slater 1974:161). This unusual cult place has been recognised at a number of other sites, however remains poorly researched and thus very poorly understood. A complete lack of nomenclature among excavators has seen terms such as 'niched chapels' at Matmar from the Seventh to Eighth Dynasties (Quibell 1948:41), 'small mastaba', used by Naville for Sixth Dynasty examples at Abydos (1914:12, 20, 55), 'miniature mastaba', as was used for Sixth Dynasty examples at Dahshur (Alexanian, Muller and Herbich 2015:12), and even just 'cenotaph' as is used for examples at Saggara (Abdalla 1992:93). At Memphis, a related form is the stèle maison which like all the other examples has a false door set into the east side of a very small superstructure (O'Neil 2015:71, 103; Pitkin 2014:266). The most recent term identified is 'mastaba house' as referenced by Dobrev for examples of the Seventh-Eighth Dynasty from the excavations at Saggara (Dobrev 2017:54). Close examination reveals that all these examples appear to be small chapels, most usually without internal rooms, and usually a closer resemblance to the mastaba than the chapels which appear earlier and later. For the sake of simplicity, the term 'model mastaba' is preferenced in this paper, but it is clear that a greater study and categorisation of these chapel-like superstructures is necessary.

The true chapels offered the same function as a conduit for the veneration of the deceased, but differed in their form, by always providing a offering chamber, and usually having a false door placed inside (Roeten 2014:5). These chapels were not necessarily constructed even near the tombs of their owners, with examples at Balat being constructed in the village there rather than the cemetery, so as to maximise the number of offerings they received (Snape 2011:95).

4.3 Mastabas

By far the most prominent form of private funerary monumental architecture, the *mastaba* (the arabic translation for bench) were structures constructed from Egypt's early dynastic period (Snape 2011:24; Bárta 2000:5) and served as grave(s), offering

place(s) and ultimately a reflection of the rank of the individual in life. It has been argued that the term refers only to the superstructure, rather than the whole of structure and shafts (see: Jánosi 1999:37). At their most basic level, mastaba were the location of the graves of an important family member, with the commemoration of that person at the cult place either inside or attached to the mastaba, often in the place of a serdab⁵. The serdab was meant as an accessible place for relatives to provide offerings to the Ka-statue (Snape 2011:66). This evolved into the tradition of having statues of servants, which were instead placed in the burial chamber itself (Snape 2011:66-67). The immense size of the superstructures had the effect of making the area surrounding the superstructure a desirable location for the graves of family members (Alexanian 2003:93). The mastaba also played an important role in the development of whole cemeteries, as Reisner suggested that smaller examples and more simple graves were built up around the larger examples which were often built on virgin ground (Roth 1995:23). The mass of the structure was typically segmented by internal walls which are then filled by small debris (Baud and Guerrier 2011:24). Rarer examples were even left as hollow space (see: Slater 1974:130). This coincided with the re-introduction of private, 'monumental' mastaba in the provincial cemeteries (Alexanian 2003:94).

For most of their developmental history, the designs of the private mastaba were largely enforced by the designs of those constructed by the royal household (Slater 1974:129). Alexanian (2003:91), argues that the biography of Debehni demonstrates that this went beyond preference and that the sizes of tombs were regulated. This may be related to a statistical correlation between the number and significance of titles and the size of their tomb (Alexanian 2003:93). Other than proportions, the exterior of the mastabas largely followed the same basic shape, with elements such as continuously niched sides were developed during the Early Dynastic, waned dramatically during the Fourth Dynasty and were later renewed at sites like Dendara where multiple niches were reintroduced and restricted to the façade (see example in figure 6) (Roeten 2014:5). The development of the interior of the structures was even more pronounced, with an increasing preference for more and larger rooms, beginning during the later OK (Baud and Guerrier 2011:22; Snape 2011:71). From the latter part of the Fourth Dynasty additional shafts began to be added to the designs of mastaba, became increasingly popular during the FIP, a natural

-

⁵ Arabic word for 'cellar'

progression from the single shaft having multiple burials (Kokina 2017:163; Seidlmayer 1990:402-412).

The dramatic break and diversification from earlier traditions began during the late OK and can be seen in examples as far south as Abydos (Garstang 1901:20), while to the north of the country, at Saggara, Quibell noted that:

'no uniform rule seems to have been followed in constructing the Mastabas and chapels of the VIth dynasty and the funerary chambers differ from and are more elaborate than those of the two preceding dynasties...' (Quibell 1935:15).

The revolution in the design of mastabas is only one point of proof that the changing political situation led to the greater autonomy of the regional nomarchs whom facilitated a rush of cultural innovation.

The study of mastaba has been regarded as somewhat stunted, with a overreliance on the specific studies of Reisner or Junker at Giza (Baud and Guerrier 2011:23) and less attention made to the variations at other sites. Assumptions such as the correlation between size and the relative importance of the owner, have only recently been tested, which is significant because these have often been used as the prefered metric for the tombs' classifications (Alexanian 2003:88). While there has been some attention to the study of the chapel, serdab and the burials themselves, the systematic study of the differences in the organisation of chambers or the nature of their construction is regarded as being severely underserved, especially on a macro level (Baud and Guerrier 2011:22). Such simplistic analyses and focuses belie the complexity of the structures, and have severely handicapped research into the significance of particular features which could be correlated to then concurrently changing methods and/or attitudes to funerary practice. Slater's analysis of the mastabas excavated by Fisher is a criminally under-recognised template for the further study of mastaba at other sites, and across them, during any period.

4.4 Rock cut tombs

The development of rock cut tombs during the OK is thought to have begun with the examples belonging to Khafre's daughters at Giza, during the Fourth Dynasty (Jánosi 1999:32). The early examples in the Memphite cemeteries were associated with old quarries, a location more conducive for the vertical constructions than the plateau (Jánosi 1999:32). The rock-cut tomb was adopted more eagerly in Upper Egypt as it took greater advantage of the natural terrain (Snape 2011:91). Rock-cut tombs were being constructed in the provincial areas of the country from only shortly after, with simple examples at Beni Hasan existing from at least the Sixth Dynasty (Garstang 1907:37). Given the desire towards larger internal spaces, the adoption of rock-cut tombs was in a way natural development, given the increased size they afforded over mastaba (Jánosi 1999:32).

The prominence of rock-cut tombs took hold when they were adopted by the Theban kings, with those examples now being called *saff* tombs - chosen because of the row of columns fronting the façades (Seidlmayer 2003:124). Small porticos are known from examples of large mastaba in the Memphite cemeteries of the late Old Kingdom (see: Snape 2011:57; Jánosi 1999:33), and so their inclusion in the Theban tombs could be seen as an expansion of those design elements rather than a totally new tradition. The rock cut tombs also adopted other elements of the traditional royal mastaba and pyramids, such as the courtyard (Snape 2011:112), which formed a part of the template for many private rock-cut tombs, thus democratising these aspects of monumental tomb-building.

Shafts.

5.1 Overview

Shafts, both with and without chambers, present the most common 'built' feature in Egyptian necropolises, owing to their nature as one of the most accessible forms of graves other than those just below the surface. Slater notes that at Dendara, these relatively simple graves are apparently largely uniform in style, altering mostly in the number of chambers and depth of the shaft itself (Slater 1974:184). Notable differences include whether a shaft was either square or rectangular in the plan view, and whether the chambers had either square (end chamber style) or rectangular (side chamber style) openings. That these styles, and their chronological development at Dendara seem to conform to what is occurring in the rest of the country at the time (Slater 1974:185), leads to Slater remarking that 'The Dendereh shaft is typical of those of this period' (Slater 1974:396)⁶. Closer scrutiny reveals that there was diversity in almost every aspect of the shaft-and-chamber tombs form, demonstrating that at Dendara, there is several permutations of a feature which was even more varied across the country, throughout the FIP.

5.2 shape

The 'square shaft' is attributed by Slater to be the earlier type used at the site, with the assumption made that all those at Dendara were associated with a mastaba superstructure, as all but a small number definitively were (Slater 1974:215). While appearing at more sites than Slater indicated (see: Slater 1974:215), it does indeed appear to be a less common feature during the FIP with use continuing through to the Fifth Dynasty at Mostagedda, according to Brunton (1937:104), and the latest examples at Abydos and Qau dating to the Sixth Dynasty (Peet 1914:76; Slater 1974:215). This matches the timeline of when most of the square shafts were being used at Dendara, with the earliest evidence suggesting a date of the Fifth Dynasty and their construction continuing through to the Sixth Dynasty (Slater 1974:134, 141). At Matmar, examples found there, were ascribed to as late as the Ninth

⁶ Slater bases this conclusion on Brunton's 1927 survey of Qau and Resiner's 1933 survey of Naga ed Der (see Slater 194:408, Note 74).

Dynasty (Brunton 1948:39), while some examples at Saqqara appear to be even later (Quibell 1907:5). Only a single example of a square shaft of such a date is found at Dendara, in the tomb of Sennezsu, which was dated by Fischer (and reiterated by Slater) to as late as the Ninth Dynasty (Slater 1974:139). The tradition is clearly a national one, and appears to be uniformly a OK tradition. Dendara does present one of the few sites which appears to have examples from well into the FIP.

'The rectangular shaft', comparatively, is associated at Dendara with mastaba - as well as existing as standalone features with small or no superstructures at all (Slater 1974:180). These occur at Dendara from the earliest part of the cemetery's use at Dendara, through to at least the Twelfth Dynasty, spanning the entire FIP and beyond (Slater 1974:194). As the predominant shaft type at Dendara, the rest of the chapter discusses these attributes below.

5.3 Side chamber

One of the earlier designs for shafts, are those which have a chamber along the long side, known as the side chamber (Slater 1974:193). At Dendara, these present only 2% of the shaft types, and were predominantly earlier, being of between Slater's A-C periods, or of at least the Seventh Dynasty - to only as late as the earlier Eleventh Dynasty, with one Twelfth Dynasty exception (Slater 1974:194). This tradition of side chambers tending to be earlier, while difficult in some ways to pinpoint specifics on, is consistent with other sites. Examples are from Saggara (Quibell 1935:45) to Deir el Bahri (Naville 1914:2) as well as major cemeteries such as El Badari (Brunton 1927:43) and Abydos (Peet 1914:25) which all have side chambers through to varying points in the Eleventh Dynasty. In lieu of a more granular chronology such is demonstrated at Dendara (see Slater 1974:54, 473), Other sites, such as Matmar, prove important in suggesting their earlier demise where apparently no examples were constructed later than the eighth Dynasty (Brunton 1948:34). Peet notes too, that the preference for side chambers at Abydos ended after the Sixth Dynasty, despite continuing far longer at the site (Peet 1914:25). Curiously, Slater does not seem to indicate whether there is a trend for having side chambers on one particular side, perhaps suggesting that there was no preference at Dendara. This seems to be the trend at other sites, with the exception in El Badari, where they tended to almost always be on the west side (Brunton

1927:43). Evidence at Deir el Bahri is of a shaft with a chamber which was started on the west but abandoned for one on the east side (Canarvon and Carter 1912:24), suggests that this was not a rigid tradition if circumstances demanded it. Slater also mentions that these 'often occur in pairs' (Slater 1974:193), however this was not found to be commonly recorded at other sites.

5.4 Diagonal chambers

At Dendara, Fisher noted the presence of chambers constructed at the corners of shafts, which is neither a true end or side chamber type. Slater suggests that Fisher found six of these 'experimental' chambers and notes that they are similar to examples found at some other sites between the dominance of each styles (Slater 1974:194). Petrie, does not mention the presence of chambers in his publications, so we are unaware of how many more he found (Slater 1974:183). Investigating more thoroughly, these styles appear at, at least two other sites, those being El Badari (Brunton 1927:29 40) and Saqqara (Quibell 1935:57). At Abydos, there was a similar tradition of placing a chamber at one of the corners of some of the earlier square shafts (Peet 1914:29, 76). These examples, again, suggest a tradition which appeared to be a feature of the sites under Herakleopolitan influence, with the exception of Dendara, despite the presence of both end and side chambers occurring throughout the Theban controlled areas as well.

5.5 End chambers

Contrastingly, end chambers present the majority type at Dendara and have their own set of attributes to compare to other sites. One of the more prominent characteristics was whether the chamber was located on either the south or north, in the case of rectangular shafts orientated that way, or at sites like Dendara, with east-west orientated shafts. Among the north-south shafts, 22% more chambers were created at the southern end than the northern one (Slater 1974:195). This preference seems to match with other contemporaneous sites for which we have data, with El Badari having 79% of the end chambers on the south (Brunton 1927:45). Garstang reported at Beni Hasan that the majority of graves were found on the southern ends, however does not quantify this (Garstang 1907:18). At Matmar, within an area of Tenth - Twelfth Dynasty graves, the earlier were mostly

found on the south, with the later graves having a tendency of having northerly chambers (Brunton 1948:38). This would seem to be the opposite to the case at Saqqara, where the southern end chambers were more notable in the MK (Quibell 1908:6). Shafts with chambers on both sides was also recorded at other sites, such as Qurneh (Petrie 1909:2). The 12% preference for western chambers in those orientated east-west is harder to compare to the other sites this unusual form occurs, due to poor recording at those sites, such as Lahun (see: Petrie Brunton and Murray 1923:25) and Abadiyeh, however, the minimal preference at Dendara suggests that this was less standard anyway.

5.6 Vertical position of chambers

Other aspects of chamber design include their position in the shaft, both with respect to square and rectangular shafts. At the most basic level, Slater mentions that 90% of chambers were at the bottom of the shaft (Slater 1974:198), a figure which seems to correlate with the general tradition in Egypt during this time. In the cemeteries surveyed, El Badari specifically did not appear to have any shafts with chambers located above each other (Brunton 1927:45), meaning that other sites during the FIP, likewise had a mix of chambers placed at the bottom of shafts and above, although the representativeness of the 90% figure at Dendara seems difficult to prove. Other variations not present at Dendara include the deliberate lowering of chambers, such as at Mostagedda where there is at least one example with a 40cm drop (Brunton 1937:99), whereas at Saggara there are examples where the opposite is true, from the end of the OK - which have been suggested to be a countermeasure to flooding (Kuraszkiewicz 2016:32). Most examples at that site followed the Dendara trend, however, of later chambers being dug higher up (Quibell 1935:59). Slater does not indicate evidence of chambers being excavated slightly above the surface of the shaft, however more recent excavations at the site have indicated this to at least occasionally be the case (Tristant, Y. 2018 personal comm. July 13). That burials at the bottom of the shaft tended to be the prefered method of construction during the FIP appears to prove true, because of evidence from Saggara, where the clearly intrusive burials are demonstrably those typically built closer to the surface of the repurposed shaft (Quibell 1935:59).

5.7 Plane of shaft floors

A feature of the shafts is notable because of its absence at Dendara, being the tradition at some other sites of deliberately constructing the base of the shaft to slope downwards towards the chamber. Six other sites, being Badari, Matmar, Mostagedda, Lahun, Riqqeh and El Tarif all exhibited this tradition, appearing at least as early as the Fifth Dynasty at Matmar (Brunton 1948:40), and persisting through to the Eleventh Dynasty at El Tarif (Arnold 1976:11) and the Twelfth Dynasty, at least, at Lahun and Riqqeh (Petrie, Brunton and Murray 1923:34; Engelbach 1915:8). Evidence for the deliberateness of this tradition is seen at El Badari, where one shaft possessed two floor-level chambers, and so the base of the shaft slopes down from the centre toward both chambers (Brunton 1927:37). While Brunton theories that the reason these are not accounted for at further sites could have been priorities in recording (1948:40), it is worth noting that at almost all the sites surveyed, this seemed to wholey be a tradition of those sites under Herakepolitan control and influence, and seems to demonstrate the delimitation of traditions from the earliest part of the FIP.

5.8 Chamber interiors

One of Slater's observations is that the chambers associated with shafts at Dendara all shared a same basic construction, which were described as being roughly hewn of the rock and of a 'bag shape' (Slater 1974:196). This is another point of difference amongst some of the other sites surveyed, with chambers being executed in a range of different ways. At Abydos, Naville describes some of the earlier shafts of the Fifth to Sixth Dynasty as being 'roughly scooped', however, by the time of the the end chambers these were being typically 'well cut and squared off' (1914:76, 18). Mostagedda, also, had some examples of chambers with well squared walls, which Brunton reckoned were of a greater number the further along the FIP (Brunton 1937:100-103). There are also examples of chambers being even better finished, with Abydos, Saggara and Abusir having limestone slabs placed against the walls (Peet 1914:77; Quibell 1907:4; Daoud 2000:195). This was also recorded at Giza, although here attributed to the repurposing of stone from older chapels (Reisner 1937:260). There is also examples at Harageh of these simple chambers being painted (Grajetzki 2004:17). Mostagedda had slabs of marl enclosing the inside of some of the chambers (Brunton 1937:101). Kom el Hisn presented a

different tradition of bricking at the bottom of the chamber (Hamada and Farid 1943:103), while at Matmar there was bricking forming the inside walls (Brunton 1948:32-35). It can be assumed that the execution of the chambers at these sites are mentioned because of their unusual quality, thus suggesting that the rougher design of the chambers at Dendara is perhaps the more typical design during the FIP. The other sites here mentioned, all, also share that they were within the Herakleopolitan sphere of influence during the earlier part of the Tenth Dynasty, and so the simple Dendara execution of the chambers is completely consistent with what was occurring in other parts of the Theban influenced areas of Egypt.

5.9 Chamber blocking

Where there is evidence for the blocking of chambers at Dendara, it appears almost exclusively that this was achieved with bricks, presenting another tradition which could be compared to other First Intermediate Sites. Slater mentions that blocking appears in only 11% of the chambers which Fisher records, and that each one of these is mudbrick with a plaster coating (Slater 1974:200). Recent excavations have shown that this was likely present in all the examples at Dendara, and poorly recorded in the past (Tristant Y 2018, personal communication, June 16). This is something which is recorded at a number of other sites with different methods. Bricks were used at Abydos (Naville 1914:19, Garstang 1903:30), Riggeh (Engelbach 1915:4), Saggara (Quibell 1908:6), Kafr Ammar (Mackay 1912:11) as well as Qau (Slater 1974:201). Stone blocking was recorded at Meidum (Mackay 1910:25), El Kab (Quibell 1898:14), Lahun (Brunton 1924:25-26), Armant (Myers 1937:21), El Badari (Brunton 1927:35), Mostagedda (Brunton 1937:103) and Deir el Bahri - which also had examples of brick (Winlock 1942:40, 176). There are examples of chambers being blocked with pots at El Kab (Quibell 1898:14) and at Lahun, where it was concluded that this was likely an evolution of the tradition of placing jars next to the body as a means of physical protection (Petrie Brunton and Murray 1923:22). What is most apparent from these examples, is that each of these sites were under Herakleopolitan control at the start of the Eleventh Dynasty, with Dendara as the only apparent outlier. Comparatively, types of blocking recorded in other, Theban controlled sites includes stones at Abadiyeh and Hu (Petrie 1901:37, 40), and rubble at Deir el Bahri (Carnarvon and Carter 1912:23). Slater specifically calls out a particular arrangement of brick blocking at Dendara during the FIP (of a

herringbone pattern of headers on end), which appeared to only otherwise occur at Qau (Slater 1974:201). Thus the blocking of chambers at all, appears to at least be rarely attested in prior archaeological records, even if it is possible that it was more widespread. What is clear is that Dendara appears to be more influenced by the Herakleopolitan trend.

5.10 Shaft finish

Another feature of interest is the finish to the walls of the shafts themselves, with Dendara being perhaps relatively unique with having no finish at all. With regards to sites with square shafts, almost every other site surveyed had examples which had bricking along the top of the walls (see: Brunton 1937:104; Brunton 1948:29; Quibell 1907:4). At Saggara, Quibell in fact notes that this is the case for the majority of the square shafts during the FIP (Quibell 1907:2). At El Badari, bricking may have been confined to only the square shafts constructed in the looser surface (see: Brunton 1927:22), while at Harageh the shafts were noted as explicitly not having brick sides (Currelley 1905:32-33). Sites like Matmar (Brunton 1948:29), Abydos (Naville 1914:18), Tell Ibrahim Awad (Haarlem 2005:196), El Badari (Brunton 1927:34) took this a step further with having mud plaster placed over the bricks, no doubt a measure to further prevent the sides of the shaft from collapsing. Saggara also had examples of the walls being lined with rubble (Quibell 1907:6). One possible reason for the absence of such a prevalent tradition at Dendara, is the comparatively firm rock found at the site, which rendered this an unnecessary functional measure. For example, at Mostagedda, Brunton noted that the only area that the larger square shafts were found at all was where the limestone was notably firmer (Brunton 1937:104). The deepest shafts were often related to being constructed in firmer substratum, or as an attempt to reach it (see: Quibell 1935:16; Myers 1937:20).

5.11 Coping wall

A built feature Slater does mention occurs at Dendara is a bricked coping wall around at least intermittent graves. Slater theories that despite Fisher's irregular description and mapping of it, that it likely featured over every standalone shaft grave (Slater 1974:182). This is a difficult feature to compare against other sites, because of both the effects of denudation as well as excavator's biases in

recording. Coping walls are recorded at five other cemeteries, from during the FIP, both Abydos proper - which was theorised to be as high as three feet in one example - (Peet 1914:30; Loat 1923:161), the nearby cemetery of El Mahasna (Peet 1914:30), as well as Ed Der (Garstang 1901:21), El Arábah (Garstang 1901:21) as well as some particularly complex examples from the Twelfth Dynasty at Riqqeh (Engelbach 1915:2). Taken together, this seems to suggest a tradition initially of those sites under Herakleopolitan influence, with Dendara as the apparent, sole, outlier. It does not otherwise appear to be part of the Theban mortuary tradition, or else has not survived there.

5.12 Orientation

Another feature highlighted in Slater's thesis was the orientation of the rectangular shafts, where Dendara is suggested as exhibiting a relatively unique tradition of having many running east to west, from as early as the Eighth Dynasty (Slater 1974:186). Slater reckoned that this was limited otherwise to only Thebes, Abadiyeh and Naga ed Deir (Slater 1974:185). Closer examination of the relevant sites, proves this to be mostly the case, however the timeline and prevalence is worth further discussion. At Abediyeh and Hu, Petrie reckoned that the majority of east-west shafts could be dated to between the Seventh and Eleventh Dynasties, but known through to the Twelfth Dynasty (Petrie 1901:44). At Lahun, Brunton also records the presence of an example of an east-west shaft of the Twelfth Dynasty (Petrie, Brunton and Murray 1923:31). This matches what Slater suggests for Dendara where a range of at least as early as the Seventh Dynasty, through to the end of the Twelfth Dynasty (Slater 1974:186, 449). At Queneh, Petrie noted shafts which he concluded were intended to be facing east, which he could only reason were later than those oriented North to South (Petrie 1909:2). There are also a few isolated examples at a number of other sites.

At El Kab, there was a single example depicted by Quibell, however it is clear that the full extent of burials had not been found (Quibell 1898:pl.XXIV). Two more examples are seen at Kafr Ammar (Petrie 1913:pl.LXXII) while a few examples are also seen at Armant of the Fourth to Tenth Dynasties (Myers 1937:pl.III). It is also worth noting the Fifth Dynasty sloping chambers at Giza which Reisner notes was due to the local terrain (Reisner 1942:152). Slater suggests that the tradition arose

from the Dendara tradition of placing the offering place over the chamber of rectangular shafts, however, the occurrence of this same tradition at Saqqara (see: Jéquier 1929:62), where there is not evidence for east-west shafts proves this to be an insufficient explanation. What is not clear is if these are related to the square shafts which have chambers on the north and south, like which occurs at Abusir (Krejči 2011:136-137), El Badari (Brunton 1927:40) and Saqqara (Quibell 1907:2), as well as the example at Matmar of a Sixth Dynasty side chamber on the north and south (Brunton 1948:33, pl.XXV). In each of these other cases, the same idea of how the body is orientated is being exercised, as occurs with the Dendara east-west shafts. It is worth noting that the graves at these other sites are all of the earlier periods, in contrast to the trend at Dendara (Slater 1974:186).

5.13 Other shaft features

A number of other notable features are worth mentioning specifically because of their apparent omission at Dendara. The most common of these are the small recesses in shaft walls, apparently intended for placing pots. These occurred on the west side in examples as close as Abadiyeh (Petrie 1901:38) and as far away as at Saggara, (Quibell 1935:40); on the east side at sites like El Badari (Brunton 1927:25), while also having examples with recesses on the north (Brunton 1927:29) like Matmar, which also had these on the south (Brunton 1948:32-37). There are also examples where the recesses are in the floor of the shaft, such as at Saggara, which was apparently phased out during the FIP in favour of those in the sides of the chamber (Quibell 1935:40). Quibell notes that some of the small recesses were intended for the serdab statues which originally would have been placed in their own chambers (Quibell 1935:39). Another related feature which does not appear to be present at Dendara is the narrowing of the shaft towards the bottom, to form a 'shelf' for the placement of pots, seemingly to serve the same purpose, which is present at El Badari in some of the poorer shaft tombs (Brunton 1927:32). These internal niches or recesses all appeared to serve a common purpose, and the spread of their use seems to suggest a true national tradition, throughout the FIP, making their omission in Slater's analysis of Dendara problematic to a complete understanding of the sites traditions.

5.14 Summary

Slater's statement on the typicalness of the Dendara shafts, clearly demonstrates an underappreciation for the variety of traditions associated with the construction of shafts from between the OK to MK. No one tradition present at Dendara is unique to the site, however, by comparing the features to what was present at other sites, an interesting picture of the uniqueness of Dendara for the collection of traditions found there, becomes clear. Shafts and chambers tended to be more simply executed, which could be suggested to be as a result of their firmer rock at Dendara, but it is also more in line with the nature of the shafts present at the other cemeteries considered to be under Theban influence, at the start of the Eleventh Dynasty. The dates of the different features at Dendara appear to also be largely consistent with other sites in Egypt at the same time. The presence of some features is suggested to be largely the result of both better recording and better preservation at Dendara, however there do appear to be some features particularly associated with either Herakleopolitan or Theban traditions.

Shaft Groups.

6.1 Overview

At Dendara, Slater calculated that 88% of the late OK to MK shafts excavated by Fisher were arranged in parallel association with between one - fifteen other shafts (Slater 1974:204). This is significant because it suggests a level of mortuary organisation which has been rarely documented at other sites throughout the country during the period, as Slater suggests that these are 'common only at Abydos and EL Mahasna, though occasional examples occur at Sedment and Beni-Hasan, for example' (Slater 1974:204). An analysis of the available literature reveals not only that shaft grouping was more common that Slater's initial research had suggested, but that the idiosyncrasies of the way they were constructed at Dendara, largely reflects trends seen in other parts of the country. Shaft groups were found to occur at at least ten other sites in total, with examples at Abusir from the Fifth Dynasty (Barta 2001:32-40), Saggara from the Fifth Dynasty through to the Eleventh Dynasty (Quibell 1907:iii, 8; 1908:78), while examples from Kafr Ammar date to around the Sixth to the Eleventh Dynasties (Petrie 1913:30, pl.LXXII), and a range of examples from Abydos date from the Sixth - Twelfth Dynasties (Naville 1914:20; Peet and Loat 1913:23; Garstang 1901:pl.2). Later sites include Sedment with an example from the Ninth - Tenth Dynasty (Petrie 1924b:6), A single example at Matmar from the same range (Brunton 1948:39), between the Eleventh - Twelfth Dynasties at Lahun (Petrie, Brunton and Murray 1923:34; Garstang 1901:pl.2) and El Kab from the Twelfth Dynasty (Quibell 1898:14). The latest examples appear at El Arábah from between the Twelfth - Thirteenth Dynasties, A perhaps derivative tradition appears from the Eleventh Dynasty at Deir el Bahri, where a series of simple, horizontally cut(?) tombs with internal, vertical shafts were recorded (Carnarvon and Carter 1912:22). Interestingly, while Slater cites Garstang's 1903 publication for their existence at El Mahasna (Slater 1974:386), a look at the text and plates of that publication provides meagre evidence to support this, and as such, only the other cemeteries, as well as Dendara, will be considered below.

6.2 Organisation

Beyond the parallel association of the individual shafts, there are a range of other idiosyncrasies of their organisation which are highlighted by Slater, and prove useful to compare to the shaft groups which occur at other sites. In particular, the uniformity at Dendara shows that shafts of a single group almost always maintained chambers along their axis, rather than being a mix of end and side chamber types (Slater 1974:193-194). The prominence of multiple chamber shafts also contributed to there being no overriding preference for the location of shafts at one particular end (Slater 1974:195). These aspects contrast with Abydos where this does appear to largely be the case (Naville 1914:19). The single example from Matmar also seems to have all its chambers off the south end (Brunton 1948:39). The grouping at Abusir has chambers all to the west (Barta 2001:32-40), At El Arábah, while measurements and the location of chambers is not indicated, they do apparently conform to largely homogenous dimensions (Garstang 1900:pl.II). These details are unfortunately not indicated at the other sites. While it could be argued that the economic rationale of having multiple chambers in the same shaft means that this aspect of the tradition was rendered less important at Dendara, the fact that only 64% of the single-chambered shafts were found on the south suggests that overall this was not considered as important at Dendara as it was at these other sites.

The number of shafts within the groups at Dendara, ranged from between two to as many as sixteen (Slater 1974:448). This matches the range seen at some other sites, with El Arábah exhibiting groups from two to fifteen graves (Garstang 1901:pl.2), the same as at Abusir (Barta 2001:32), Beni Hasan appearing to be around ten to twelve (Garstang 1907:35-36) and El Kab having two rows of five (Quibell 1898:pl.xxiv) Smaller groups exist at Kafr Ammar which have five in one group (Petrie 1913:pl.LXXII), whereas Matmar only has as many as three (Brunton 1948:39). The largest group, however, appears at Abydos, where at least twenty-two appear in one case (Peet 1914:30), while the single example at Sedment is not far behind at twenty shafts (Petrie 1924a:pl.XC). Neither Carnarvon and Carter at Deir el Bahri, or Quibell at Saqqara report the range of the shaft groups they found. Another, albeit less common occurrence at Dendara is the deliberate organisation of ten of the groups of shafts into parallel rows (Slater 1974:206). This is a feature which seems to be paralleled only at the sites of Lahun, with an example of ten shafts being split

evenly across two rows (Petrie Brunton and Murray 1923:33) as well as Sedment with two rows of ten each (Petrie 1924a:pl.XC).

6.3 Construction

One of the particularly interesting features about the groups at Dendara is that there are a number of groups which occur with shafts which are left unfinished - a quirk which Slater reasons is evidence that the superstructure was constructed first around a preselected number of graves (Slater 1974:207). Slater references Garstang who suggested of the groups at Beni Hasan, that they were likely the invention of undertakers, traditions borne of the families themselves (Garstang 1907:47). Indeed, in addition to the partly finished shafts, Garstang also points to the uniform depth and location of chambers as evidence of these shafts all being constructed at once (Garstang 1907:46-47). Unfinished shafts as part of groups are also recorded at Lahun (Petrie Brunton and Murray 1923:33), whereas they either do not occur, or were not recorded at the other sites. Slater merely suggests that the shaft groups at Dendara were constructed for families - a suggestion perhaps supported by the close association of dates between shafts (Slater 1974:213). This is clearly the case at Deir el Bahri with the horizontally cut princesses tombs (Winlock 1942:41), while at Saggara, Quibell also assumes a familial link between the tombs (Quibell 1907:III). Shaft groups were constructed in any of the same places individual shafts were, as Slater notes that 'there is a possibility that later shaft groups might be built in a mastaba after it went out of use' (Slater 1974:159). This same idiosyncrasy is documented at the sites of El Arábah, where some groups are even constructed off-centre from the plan of the mastaba (Garstang 1900:pl.II), while individual shafts were documented by Quibell at Saggara to also be intrusive to older mastaba (Quibell 1907:2). This aspect of shaft construction is indicative of the disregard for the earlier traditions and perhaps suggest a symbolic severance and discontinuity with the nomarchs, officials and priests who built them.

6.4 Superstructures

One of the most important aspects for delimiting different groups, is the shared superstructures which commonly occurs at Dendara. Slater takes it as given that all the groups had at least a coping wall originally, even where the presence of this did

not survive (Slater 1974:204-205). Abydos also presents evidence for there being a coping wall surrounding the groups, although this was not always the case there (Peet 1914:30). The examples at Deir el Bahri occur in a paved court, and so such a coping wall likely never existed, while Petrie does not record any such wall at Kafr Ammar (see: Petrie 1913:pl.LXXII), and Quibell does not mention any remains of coping at Saggara. Likewise, there is insufficient evidence for the sites of El Arábah, Lahun and Matmar. The other shared feature are the offering places (which are described in greater detail in the following chapter) which appear in the form of either model mastaba or small chapels. At Beni Hasan, the groups are mentioned as having a chapel at the top of the near identical tombs, arranged parallel to each other (Garstang 1907:35-36). Meanwhile, Garstang mentions that those shaft groups clustered in a different part of the cemetery appear to have no associated funerary structure (Garstang 1907:43). Quibell does indicate that there was model mastaba - which he refers to as chapels - associated with the shafts at Saggara, however he also mentions that little of them remained by the time of his excavations (Quibell 1907:III). At Deir el Bahri, Slater highlighted the princess chapels as similar to those found at Dendara, and suggested to be an example of where royal influence was taken at Dendara and adapted to private burials (Slater 1974:176). Like the presence of a coping wall, there appears to be insufficient data to determine the presence of an offering structure at the other sites. While the apparent scantness of these superstructure features at other sites should not be taken as evidence of their absence with the likelihood of denudation, it still stands that Dendara provides one of the best sites for examining the extent of the tradition.

6.5 Summary

According to Slater, the presence of shaft groups at Dendara is significant because she was only able to determine their presence at the cemeteries of Abydos, El Mahasna and Beni Hasan - with the last of these, interestingly, being the only location under Theban influence until the Tenth Dynasty (Slater 1974:185). However, it appears that the shaft group is considerably more common than Slater had realised, with shaft groups also occurring in at least ten other cemeteries. While appearing from as early as the Eighth or Ninth Dynasty at Dendara (see: Slater 1974:209, Table 1), a comparison with other sites appears to position Dendara as one of the later places shaft groups appear. The early dates at Saqqara, Kafr

Ammar and Beni Hasan appear to suggest a tradition which originated around the Memphite necropolises was adopted into the Theban traditions at a later date.

Offering Places.

7.1 Overview

The most common form of architecture in the Dendara necropolis is the variety of offering places which would have served as the actionable conduits for relatives to commune with and provide offerings for the deceased. The types found at Dendara fall into three classes, the 'model mastaba' and chapels which were constructed nearby the grave or graves of the persons, as well as the cult places of offering trays and soul houses which were placed at the individual graves as a more economical alternative. From Fisher's excavations, 343 model mastaba and 93 chapels were found, while a minimum number of individuals (MNI) of 302 offering trays⁷ were recorded (Slater 1974:20; 301). An evaluation of this ubiquitous component of funerary practice at Dendara and a comparison with what occured at other sites, is essential to understanding the full picture of Egyptian mortuary tradition.

7.2 Model mastaba

The most prominent type of offering chamber at Dendara are what Slater termed the model mastaba, these being smaller, imitation mastaba superstructures, without an internal shaft (Slater 1974:161). Similar and well recorded examples were found at Saqqara from the Seventh or Eighth Dynasty (Dobrev 2017:54) and Dahshur from between the Sixth to Twelfth Dynasties (Alexanian, Muller and Herbich 2015:12-13; Morgan 1895:41), however determining their presence at other sites was more difficult. In addition to the already mentioned difficulties in recognising the same structure under different names, an additional complication in the study of these superstructures is the lack of attention and thus detail regarded to them by their excavators. These examples are usually are only apparent from report maps, and are as such ascribed no labels, such as at the undated examples at El Kab (Quibell 1898:pl. XXIV) and the undated examples at Meidum (Mackay 1910:28, 36). Further examples are so incompletely described and mapped that they can not be

⁷ Slater refers to soul houses as a form of offering tray, similar to Niwinski in his comprehensive study of offering trays (Niwinski 1984:806-813).

positively ascribed the term, see for example Sixth to Eleventh Dynasty examples noted by Petrie at Giza's southern cemetery (Petrie 1907:1907:8; pl. Vlc). Out of uncertainty, and a lack of reference by subsequent excavators, the Giza examples will be excluded.

7.2.1 Size

The size of the Dendara model mastaba occupies a range as low as half a metre to as much as fifteen metres long (Slater 1974:169; 441). Despite this, 85% were between 0.5 and 3 metres in length (Slater 1974:441). Comparisons with other sites are difficult, given the tendency of some excavators to describe rather than quantify their findings, for example, at Giza, Naville only records that many of the examples there were 'small' (Naville 1914:2). There is at least one example from the site which is 1.10 metres in length (Naville 1914:21), and that the largest example was as much as 5.25 metres in length (Peet 1914:35). From that it can be concluded that there were examples of approximately 1.50 and 4.50 metres long (Garstang 1900:pl. XXXII). At Saggara, the size extends from approximately one to five metres, in a single case, but most examples seem to be under three metres (Dobrev 2017:54). The example recently recorded at Dahshur was indicated to be of 1.84 metres in length, and the excavators do not indicate that this is unusual compared to the other examples found there (Alexanian, Muller and Herbich 2015:12). Quibell does not provide a scale for his diagrams of the examples from El Kab nor does he mention any dimensions in his text, but it can be seen that the examples there do range in size and appear to be at least two shafts width long (so approximately two-plus-metres) (Quibell 1898:pl.XXIV). In light of these other examples, the model mastaba at Dendara would seem to be of similar size to those at other sites, at least when considering the smaller examples.

7.2.2 External Features

The external shape of the model mastaba at Dendara has a few notable features as well, for example Slater mentions that all the examples recorded faced local east, and that all of the examples seemed to have originally had a fender wall around the same side (Slater 1974:149; 165; 169). The presence of a fender wall is consistent with the examples found at Dahshur (Alexanian Muller and Herbich 2015:12), Lahun

(Petrie Brunton and Murray 1923:pl. XXXVI) Matmar (Brunton 1948:35), and Saqqara (Abdallah 1992:93; Dobrev 2015:55). Details from Abydos and El Kab are not sufficient to reveal if a fender wall was present there as well. The placement of the facades on the eastern side was also recorded at Abydos (Peet 1914:20), Dahshur (Alexanian et. al. 2015:12) Meidum (Mackay 1910:28) and Saqqara (Dobrev 2017:55) while the examples from El Kab have the façades on the north-east (Quibell 1898:pl.XXIV). At Saqqara there are examples with the façade on the west (Abdallah 1992:93) as well as the east (Dobrev 2015:54), while the examples at Matmar also had west-facing façades (Brunton 1948:35). With regards to the external plan of the Dendara model mastabas, it could be said that they appear to be of the same type found at most other sites. Unfortunately a similar comparison can not be made of the shape of their roof, as no fully preserved examples has yet been found (Slater 1974:164), as is also the case at most of the other cemeteries examined.

Other elements of the Dendara model mastaba included having the same niched façades and offering chambers as the true mastabas they were imitating (Slater 1974:161). The presence of a niche is known from examples at Dahshur (Alexanian, Muller and Herbich 2015:12; Morgan 1895:41), Meidum (Mackay 1910:28), as well as an undated example from El Kab (Quibell 1898:21). The large example at Saqqara had a series of internal niches facing west (Abdallah 1992:107-108) while it is not clear from the smaller examples more recently excavated there (see: Dobrev 2017:54). The examples from Abydos were so denuded as to not be able to tell. Demonstrably then, niches were likely an essential element of the model mastaba at all the sites they occured, with Dendara instituting the form most common.

7.2.3 Internal structure

At Dendara, Fisher also identified that a great number of the model mastabas, including all of what Slater identified as 'large', were of a hollow internal structure (Slater 1974:162). Slater does not mention what proportion of the smaller examples were hollow, but the lack of any specification, unlike with the larger examples, would suggest that at least some of them were solid. At Abydos, Peet identified examples which he reckoned to be of the Sixth Dynasty, whereas, the hollower examples were thought to belong to a later period (Peet 1914:20; 55). Unfortunately Petrie's reports from Giza, as well as Quibbel's reports from El Kab do not seem to

provide enough information to reveal if the examples were solid or hollow, and while Petrie ascribed the Giza examples to be of between the Sixth and Eleventh Dynasty (Petrie 1907:8), even such a vague determination was not provided by Quibell for El Kab. Contrarily, the small example from Dahshur documented by the German Institute was hollow, and suggested to be of around the Sixth Dynasty (Alexanian Muller and Herbich 2015:12). At Matmar, the interior was described as being two square metres, also suggesting a large hollow space (Brunton 1948:35). An example from Saqqara, suggests that large solid examples existed during the MK (Abdallah 1992:93; 110), however most of the earlier examples found appear to be hollow (Dobrev 2017:55).

7.2.4 Association with burials

Another important consideration is the an examination of how burials are associated with these offering places. At Dendara these were often seen to be associated with both individual shafts and shaft groups (Slater 1974:165), and apparently were designed to cater to as many graves (Slater 1974:165). Associated graves were placed on both sides, and in many cases the graves were designed to have at least some of the chambers underneath the structures (Slater 1974:167). Having shafts immediately associated with the structures, was common to all the sites, for example: Abydos (Naville 1914:21), El Kab (Quibell 1898:pl. XXIV), Dahshur, (Alexanian, Muller and Herbich 2015:12-13; Morgan 1895:41), Meidum (Mackay 1910:28) and Saggara (Dobrev 2017:54). At Saggara, there was instances of model mastaba being placed away from shafts completely, especially with the case of the larger examples (Abdallah 1992:107-108; 110). This was apparently also the case at Matmar (Brunton 1948:35). The construction of cult places away from the place of burial has been identified as a rare but not unheard of tradition during this period (Kokina 2017:169). With regards to the model mastaba being constructed above the location of the chamber, Slater does specify that some of the earlier, north-south shafts did have the model mastaba on the west side, but that even during this period, that was not seen as the rule (Slater 1974:170). This was a trend also identified at Abydos, where it was noted that there was an earlier tradition⁸ of having some model mastaba placed in such a way as to not be on top of the chamber (Peet 1914:20). At other sites, the location of the model mastaba over the burial

-

⁸ Peet suggests this to be of the Sixth Dynasty (Peet 1914:20)

chamber was apparently common, with examples from Dahshur (Alexanian, Muller and Herbich 2015:12-13; Morgan 1895:41), Saggara (Dobrev 2017:55) being apparent, and the examples at El Kab and Meidum not being noted. A particular example of a model mastaba excavated by the German Archaeological Institute, which has the superstructure covering the burial shaft of an infant, one of the few examples of this type noted (Alexanian et. al. 2007:6-7). The answer to how the structures were associated, temporally, to the graves, was mostly avoided by Slater, who suggested that it was 'unlikely' they were built ahead of time (Slater 1974:172). This is seen as even more likely to be the tradition, given the model mastaba of Hennua, as the asymmetrical construction of the niched facade could be seen as a reaction to the way which the graves themselves were constructed (Slater 1974:166). The way which even unfinished graves were associated with model mastaba at Abydos (Peet 1914:35) would suggest instead that the graves and superstructure were all constructed at one time, which was supported by examples at Saggara also (Abdallah 1992:107). This would appear to be an adequate and most likely explanation at Dendara as well.

7.3 Chapels

An apparent development of the offering place from the model mastaba at Dendara are the more pedestrian, free-standing chapels which Slater reckoned to have been favoured later, and towards the end of the FIP (Slater 1974:175). The structures were described as being either a square or quadrangle, with an opening to a central chamber on the east, in the position of the niche on a model mastaba (Slater 1974:173). Slater identifies the structures as being distinct from the model mastaba (Slater 1974:173), but this may be because of their denuded state at the site, as identical structures at El Arábah of the Twelfth Dynasty are described by Garstang as being 'mastaba shaped' (Garstang 1900:21). Likewise, the same ambiguity of form is expressed at Mamar of supposedly Seventh-Eighth Dynasty examples (Brunton 1948:35; 41). Otherwise, the same basic design was mirrored at Abydos from the Twelfth Dynasty (Ayrton, Currelly and Weigall 1904:10; pl. XV), in examples of the Tenth Dynasty at Saggara (Quibell 1907:2) as well as Deir el Bahri of the Eleventh Dynasty (Carnarvon and Carter 1912:27). Pertinent Chapels were also found at the sites of: Abusir, which dated from as early as the Fourth Dynasty (Reisner 1935:72), Sedment, where a Ninth Dynasty example had an entry on the

south east, although cut into the hillside (Petrie 1924:15); Ihnasya al Madina, where they were systematically destroyed (Seidlmayer 2000:134); and Kafr Ammar, where a perhaps Fifth Dynasty chapel was cut under the surface and entered by way of a sloped forecourt (Mackay 1912:19-20). In some instances even, it is not apparent if the excavator is describing a free-standing chapel or the tomb itself (see: Engelbach 1915:22). As such, the style of chapels from between the period of the end of the OK to the MK was more varied than the model mastaba, and the forms at Dendara are perhaps less typical than the model mastabas were of traditions in other parts of the country. Similarities appear strongest with the examples at Abydos, El Arábah and Deir el Bahri, which mirrors Slater's own basic assessment (Slater 1974: 176).

7.3.1 Shape

Slater describes the structures at Dendara as being mostly between 1-4 metres in length and measuring only as large as 4 metres long, commonly with a fender wall (Slater 1974:173-174). Smaller, imitation chapels, consisting of the same design but constructed of only a single brick in length, were also classified by Slater as being of the chapel subtype (Slater 1974:173-174). The chapels are particularly difficult to compare to examples from other sites, given the scarcity of information detailed. As a result, a comparison can only be made to the examples of Saggara, Abydos, kafr Ammar and Deir el Bahri. Smaller, independent chapels (of unrecorded proportions) were prefered at Saggara (Quibell 1907:111), as they were at Deir el Bahri (Carnarvon and Carter 1912:27), however in both instances the excavators neglect to mention proportions. At Abydos the example there was also described as being square, however measurements were not provided (Ayrton, Currelly and Weigall 1904:10). At Kafr Ammar, the interior was recorded as 4.24 by 1.04 metres. As such, a comparison across sites with regards to the size of the chapels is difficult, however, it is apparent that they were typically smaller in size than the model mastaba, much like the examples at Dendara. The presence of a fender wall was much less commonly observed at other sites, however Quibell did note an example which had a surrounding temenos wall at Saggara (Quibell 1907:61). Meanwhile at El Arábah, Garstang points out that there was instead a few examples which had a bricked path leading to the chapel instead (Garstang 1900:21).

7.3.2 Internal structure

The chapels at Dendara are relatively simple designs, although Slater does describe that the walls of the larger examples are relatively thick, but of brick construction (Slater 1974:173-174). A single unusual example could be suggested as the the chapel carved into the natural layer, in the forecourt of the saff tomb of Intefager II (discussed further in the following chapter). Parallels to this tradition can be seen in the examples at Ihnasya al Madina and Kafr Ammar. This is similar to the tradition of being cut into the cliff face, as was seen with chapels at Sedment and Beni Hasan. Brick construction was noted at all of the other sites already mentioned, and although thickness of the walls was in no case recorded, it can at least be inferred from Garstang's El Arábah report as being almost a quarter of the width of the whole building (See Garstang 1900:pl. XXXII). The one other example was the stone walled chapels found at Saggara, which Quibell dated to be of the Tenth Dynasty (Quibell 1908:18). The only other notable feature of the chapels at Dendara would have been the inclusion of an offering stelae into the structures designs, despite none remaining in situ at the site (Slater 1974:175). The thicker walls and placement of stelae are features explicitly mentioned at the sites of Deir el Bahri (Carnarvon and Carter 1912:27), El Arábah (Garstang 1900: 21-21 pl. XXXII) and Abydos (Ayrton 1904:10), however, it can generally be assumed to have originally been a staple at all sites, including of course Dendara.

7.3.3 Association with burials

As with the model mastaba, the association of the funerary chapels with particular graves is an important aspect of funerary chapels to be considered in order to understand their purpose and use. At Dendara, an exegesis of Slater's analysis suggests that all the examples there were placed in immediate association with graves, and generally most graves had the chapel positioned over the chamber (Slater 1974:175-176). As Slater, points out, this is parallel to the custom of the model mastaba at the site (Slater 1974:175). This is apparently not consistent with all other sites, however, as some examples at Abydos were found divorced from any close-by graves (Ayrton, Currelly and Weigall 1904:10), as was the case at Kafr Ammar (Mackay 1912:20). It was only at the sites of Deir El Bahri (Carnarvon and Carter 1912:27), Sedment (Petrie 1924:15) and El Arábah (Garstang 1900:22) the

examples were found immediately in association with graves. While a possible explanation for there not being more chapels associated with graves is the effects of destructive attrition, the common presence of chapels without any nearby graves is more difficult to explain, but could suggest reasons for the locations of the graves themselves, at Dendara. A possible explanation is offered by Abdallah, where the location closer to the place of the royal cult could be a means of attracting a greater share of offerings, than if the structures were located beside the graves of their owners (Abdallah 1992:110). Considering this, the location of the chapels (and model mastaba) at Dendara, directly at the graves, could be a result of an economy of space at the site, with no space nearer the temple complex, to have them built. The location of the graves and therefore cult places nearby the large mastaba could have then offered the next greatest chance of increasing the traffic of offerings, even if the owner was not a direct relative of the grave owner at all.

7.4 Summary

By evaluating the similarities and differences between the cult places found at Dendara and other parts of the country, it is clear that Dendara presents one of the best locations for evaluating the extent of the diversity of forms. Model mastaba were positively identified as being at only six of the twenty-four other sites surveyed. It is also apparent that aside from the early example at Giza, and the undated examples at Meidum and El Kab, all the sites outside Dendara appear to have their features dated to between the Sixth and Eight Dynasties⁹, meaning that Dendara is one of the latest sites in the country that they were being constructed, which was continuing to use this form of cult space. Otherwise, model mastaba at Dendara appear to largely conform to the styles present at other parts of the country during the FIP.

While the distinction between the model mastaba and chapels at other sites appears less clear, the structures which Slater identifies as distinct structures, present their own distinct pattern of construction through the FIP and through into the MK. While the earliest examples are those at Kafr Ammar and Sedment, the earliest freestanding examples were apparently found at Saqqara and Deir El Bahri. Slater notes that the chronology of the chapels at Dendara (based on the

-

⁹ Petrie does suggest a range of the Sixth to Eleventh Dynasties for the Model Mastabas at Giza.

associated graves) is part way through the Eleventh Dynasty, and then from the Twelfth Dynasty onwards. Unlike the model mastaba, and when considering the other dates and the location of the other examples, this suggests that the standalone, brick chapel was a form which may have been inspired from the Theban traditions, rather than the Memphite ones, which then spurred a resurgence of the chapel superstructure throughout the country. These apparently unique histories of development provides a compelling reason to differentiate the two traditions, at Dendara, as it reveals an interesting facet of the way that mortuary traditions were developed at Dendara and other sites. Being present at only six distinct sites, or a total of seven of the forty cemeteries investigated, suggests that, like the model mastaba, Dendara presents one of the best corpus of chapels. particularly with the otherwise unrepresented miniature constructions which might appear to be precursors to the Twelfth Dynasty soul houses which are also prevalent at the site¹⁰.

¹⁰ Niwinski (1984:809) suggests that 'soul houses' are generally agreed to date from the Twelfth Dynasty onwards. See: Slater 1974:300-315, for discussion of forms and chronology of offering trays and soul houses at Dendara.

Mastabas.

8.1 Overview

Slater mentions that with the end of the OK, in many of the nomes the mastaba was replaced with rock-cut tombs as the prefered place for the interment of the nobles and other high officials - a tradition mostly ignored at Dendara (Slater 1974:129;176). Petrie and Rosher Identified 86 different mastabas, while Fisher independently identified 22 (Slater 1974:20, 131). It has been noted that the study into mastaba has been underserved (Baud and Guerrier 2011:22), whilst there also being an acknowledgement that the plurality of forms is extensive. While the mastaba at Dendara were subcategorized into seven distinct styles by Slater, this chapter will focus on the most important features, being: the large size of mastaba at Dendara, the prevalence of mastaba of different core types and the presence of niched facades, and how these representative these features were at other parts of the country between the Fifth Dynasty and FIP.

8.2 Size

The suggestion by Slater that large mastabas were a rarity during the FIP (Slater 1974:129-130) is a claim of particular significance. The size of the larger Dendara mastabas excavated by Fisher was as much as 44.30m in length (Slater 1974:147). This tradition of building smaller mastaba from the later OK onwards has been reiterated by more recent researchers (see: Baud and Guerrier 2011:22), suggesting that successive research has to date has largely supported Slater's claim. Few examples appear to survive at other sites from between the Seventh to Eleventh Dynasties at all. For examples recorded at Abydos, Petrie notes there was partial remains of a Seventh Dynasty mastaba, however he neglects to note anything of the size or its composition (Petrie 1902:34). Denuded examples from the Twelfth Dynasty were also noted, however their size was difficult to ascertain (Peet and Loat 1913:24; Aytron, Currelly and Weigall 1904:15). Two examples of either the late OK or FIP were also located at Mendes, however with proportions of only 5 metres by 6

metres, these were considerably smaller than some of the examples occurring at Dendara (Mumford 1996:3-4). A large example is found at Abusir from the Firth Dynasty, being 41.23 by 19.30 metres (Bárta 2000:339). It is also worth mentioning the massive mastaba at Dara, improperly recorded, but of as much as 138 by 144 metres in proportions which is only tentatively included because of a possibility that this may in fact be a royal monument (Seidlmayer 2000:132-133). Smaller mastabas of the FIP are also known at Gurob (Engelbach and Brunton 1927:1), and at Mendes (Lopinto 2014:171), At Edfu, there was medium sized mastaba belonging to Fifth or Sixth Dynasties (Aksamit 2011:381), while another example was found at Meidum from the Fourth to Sixth Dynasties (Mackay 1910:36). Pertinent mastaba of unreported proportions were noted at Dahshur (Alexanian and Seidlmayer 2002:3) and Abadiyeh (Petrie 1901:pl.XXIV). At Naga Ed Der, there was 'small' mastaba which were being constructed continuously through to the Twelfth Dynasty (Reisner 1908:1-6), however whether these were true mastaba or model mastaba is not clear from the publications. Examining the evidence from before the FIP, it is clear that the examples constructed during the Fifth and Sixth Dynasties were of approximately the same sizes, with examples at Abadiyeh of up to 17 metres in length (Petrie 1901:XXIV), Edfu, of up to 20 metres in length (Moeller 2009:117), Giza of up to 20.3 by 11.1 metres (Weeks 1994:71), Meidum of up to 31.7 by 5.5 metres (Mackay 1910:36), of up to 15.8 by 10.9 metres at Kafr Ammar (Mackay 1912:11) and at El Gozerieh, of unknown proportions (see: Fakhry 1947:55); proving this to be true. At Saggara, there is a comparatively small private mastaba date up to the Sixth Dynasty (Murray 1905:1). This compilation agrees with statements such as by Seidlmayer (2000:130), who state that: 'From cemeteries in the Herakleopolitan controlled areas, there are remains of small mastabas and a cultural tradition with much in common with the earlier OK', while also demonstrating that diminishing size was also a feature being favoured at provincial sites as well.

8.3 Core types

A further tradition highlighted by Slater is the proliferation of the mastaba without a filled core, which she terms 'hollow mastaba', versus 'solid mastaba' which have brick and rubble cores (Slater 1974:130). It would thus be useful to assess the proportionality of this style of construction, or even just its survivability at other sites, during the same period. Hollow mastabas (Slater's type M4-M7 and M2)

represent at much as 80% of the mastaba at Dendara, are present from between as early as the Fifth Dynasty as late as the Eleventh Dynasty, ranging size from less than 11 metres to up to 35 metres (Slater 1974:130-145, 437), all of which to say that almost the entire range of features of the mastaba at Dendara are applicable to the hollow mastaba. Such a prolific form of mastaba appears at vanishingly few other sites during the same period, with perhaps the strongest evidence only occurring at Abydos, where one example was described as having a core of just sand (Aytron, Currelly and Weigall 1904:15). However, examples may possibly also come from Meidum (Mackay 1910:36) Abusir (Bárta 2000:24) or even Mendes (Mumford 1996:3-4). At all other sites, the core was described as having rubble and brick, or else it could be interpreted that this was likely the case. The unusual prevalence of the hollow mastaba at Dendara and its apparent rareness at other sites could be seen as presenting a unique mortuary tradition, or, more likely a testament to the superior preservation of superstructures at the site.

8.4 Niched façade

One of the most notable features of the Dendara mastaba was the adoption of multiple niches set in the eastern façade, which Slater suggests is a tradition which does not occur at sites other than Abadiyeh and Dendara after the Fourth Dynasty (1974:149). It is important to distinguish this from the surviving tradition of larger mastabas which did have two niches, such as is seen at Giza (Weeks 1994:71). This is pertinent to the example at El Gozerieh, which, despite Fischer's discussion of the Fifth - Sixth Dynasty monuments, states they do not possess niched façades (Fischer 1968:57), the only published information from the site appears to indicate at least the presence of a second niche (see: Fakhry 1947:55). While it is possible that the monument had additional niches, It is likely that this is a form of the older two-niched tradition, rather than the multiple niched tradition seen at Dendara. Despite this, it is worth noting that even the Fifth Dynasty examples at Dendara already exhibit multiple-niched facades (Slater 1974:150). Sites presenting the tradition of the true, multiple niched façade included Abadiyeh - as Slater had indicated - where looking at Petrie's plans for the cemetery it appears that one example definitely existed there, with ten niches and which was reckoned to be of the Sixth Dynasty, (Petrie 1901:37, pl.XXIV) however Petrie was inconsistent with recording the presence of niches. Beyond this, niched façades were found to be

almost as uncommon as Slater had stated, with a pertinent example only found at the cemetery of Dahshur. A example was also located at Lahun, except ascribed by Petrie to be of the Twelfth Dynasty (Petrie Brunton and Murray 1923:pl.XLVIII). The example at Dahshur, of a mastaba with four niches on the east of the structure, was dated to be about the Fifth Dynasty (Alexanian et al 2003:7-8). At Giza, it is the use of a multiple niche in a rock face, rather than a mastaba which could demonstrate the application of the same tradition to a different context, however the broad range of its date as between the Fourth and Sixth Dynasty casts doubt on its relevance (Petrie 1907:pl.VIIc). Slater noted that the number of these niches was not standard, and varied dramatically depending on the size of the superstructure (Slater 1974:151), and this is consistent with the examples found at these other sites.

8.5 Summary

The manifold variation among mastaba during the late OK and FIP presents a wealth of information, even when considering a single site, and so a comparison across sites of the varying minutiae would be so lengthy as to border upon pointlessness. Despite this, there are key and very distinctive features exhibited by many of the mastaba at Dendara that offer very little in the way of parallel to any other sites at the same period. The continued construction of large scale private monuments, the construction of mastaba with hollow cores, as well as the presence and indeed prevalence of a repeating niched façade, all present very little precedent amongst the large proportion of investigated cemeteries of the FIP.

Saff tombs.

9.1 Overview

During Petrie's excavation of the mastaba and shaft graves which cover the Dendara necropolis, he also cleared another tomb he called 'the gallery of Antefager II' which presents the only known example of this tomb at Dendara (Petrie 1901:21). This 'portico' tomb, named for their eponymous pillared facades, these tombs have been more recently referred to as saff tombs and were familiar to Petrie because of his work at Qena on the tombs of the Intef kings, which he declared the Dendara example to be Derivative of (Petrie 1901:21)¹¹. Slater does not discuss the tomb at all, other than briefly mentioning that Fischer had later cleaned it (Slater 1974:33) and so a systematic comparison to other examples has never before been conducted. While rock-cut tombs of the late OK to MK are known from many sites such as Beni Hasan (Garstang 1907:18), Naga ed Der (Reisner 1908:2), Asyut (Khal 2012:12) and others, the saff tomb is a clearly distinct and yet significant form rarely attested at other sites. Of those cemeteries surveyed, Saff tombs were only found to be present during the Eleventh Dynasty at El Tarif (Qena) (Arnold 1976:73), From the late Eleventh Dynasty at Deir El Bahri (Winlock 1920:19), from the 'MK at El Assassif (Winlock 1942:7) as well as a single example from before the New Kingdom at Qubbet el Hawa (Vischak 2014:42). One of the two examples located at El Khokhta can be dated to some time within the FIP (Fábián 2017:85). Almost all of these other sites are within the locality of Thebes itself, meaning that the gallery of Antefager is a very rare example of a true saff tomb known to have been constructed outside of the capital.

9.2 Forecourt

The forecourt of Antefaqer's saff tomb is most notable for being cut at an oblique angle into the natural level, and subsequently of a relatively long shape, with the gravel retained as the forecort's surface. This is similar to some of the examples at

¹¹ See Petrie, W.M.F. (ed.) 1909 Qurneh. British School of Archaeology in Egypt and Egyptian Research Account Fifteenth Year. London: university College.

El Tarif, where the tombs were lowered into the natural rock where the cliff-face for a sufficient façade was not available (Arnold 1976:23). Despite this, the forecourts were still generally described as having a 'flat foreground', and were in some instances artificially lowered into the substratum (Arnold 1974:43; Seidlmayer 2000:124). Even the earliest rock-cut tombs demonstrated this to be an essential element of the mortuary architecture (Vischak 2014:42), and so it is no surprise that, that is the case here as well. In some instances, some of the private examples, were said to be artificially lowered. Builders also made use of the local hills at El Khokha to ensure a horizontal forecourt (Fábián 2009:55) while at Assasif the tomb was cut into what was already a flat causeway (Winlock 1942:7). At Lahun, there is an independent chapel for the tomb of Anpy which is similarly constructed into the side of a hill, with a small portico entrance, and even here the builders make sure to have the forecourt be horizontal (Petrie, Brunton and Murray 1923:26). Only at Deir el Bahri is the sloped forecourt paralleled, albeit in a single example, whereas the majority of the tombs at the site otherwise facilitate the more conventional, flat forecourt (Winlock 1920:13; Winlock 1942:19). The reason for this apparently stylistic difference is of course because the natural terrain at Dendara is mostly flat, with the nearby cliffs located as much as half a kilometre away from the rest of the cemetery (Slater 1974:3).

9.3 Portico

At Dendara, the gallery exhibits only four columns in its portico, with each one of these being carved from the natural bedrock and finished into four roughly equal sides, while at each end a pilistar had also been carved (Petrie 1900:21). By looking at the other cemeteries, the number of pillars is demonstrated to be anything except standard, with the non-royal examples at El Tarif having anything from between one to as many as twelve (Arnold 1976:43). The number found in the royal tombs however ran to as many as fifty columns, across two rows, and with the royal tomb of Saff El-Dawaba having as many as fifty columns in total (Arnold 1976:pl.LV). At the site, Arnold also noted that the number of exterior columns appeared to correlate more to the wealth of the individual, rather than being an indicator of the age of the structure (Arnold 1976:44).

At Assasif, the 11-12th Dynasty example excavated by Winlock included eight columns (with pilasters) which were all four sided. The example at Deir el Bahri has nine columns, and no pilasters, and is distinct for the columns being octagonal, rather than the apparently more common four-sided variety (Winlock 1942:19). The funerary chapel of the Twelfth Dynasty architect Anpy at Lahun also has a portico of four columns, however lacks the pilastars which are found with the example at Dendara (Petrie, Brunton and Murray 1923:26, pl.xxvii). Examples excavated by the Hungarian mission at El Khokhta was dated to either the FIP or early MK, and has eight four sided columns and two pillastars in one case, and five square shaped pillars in the other (Fábián 2009:56). At El Assasif the example was documented as having eight pillars and two pillastars (Winlock 1942:7). The example at Deir el Bahri exhibited nine, octagonal columns (Winlock 1920:15-16), perhaps suggesting the number of sides to a column being an additional marker of wealth. The simple example at Qubbet el-Hawa has a portico of only two pillars (Vischak 2014:43).

9.4 Chambers and cult space

The Dendara saff is relatively simple, being one long corridor behind the portico, with a chamber and two pillars constructed nearly halfway through, with the end of the corridor turning ninety degrees to the west, with a much smaller chamber at the end of a smaller and narrower corridor (Petrie 1900:pl.XXXII). There is also another, much smaller chamber placed to the east of the portico, which Petrie also reckoned to be associated with the tomb. He interpreted the lack of any associated burials as meaning that this was the chapel which facilitated offerings for those buried inside the tomb (Petrie 1901:21). This idea of a small chapel, accessed from the portico is also seen at the site of El Khokha, where a small room was cut and accessed next to the main burial chamber, but built separate from it (Fábián 2017:85). The main chamber was a small construction with only a single pillar (Fábián 2009:56). At Deir El Bahri, the example there was constructed with two decorated, internal, cult space chambers, which Winlock theorised to belong to relatives of the tomb owner (Winlock 1974:16). The main chambers were described as being too small to support internal columns (Winlock 1920:15). The internal chambers at El Tarif, likewise, are described as being small, and 'more or less square, [with] either one or two symmetrical pillars' (Arnold 1974:43). It was also discovered there that the private tombs with more than one pillar were generally later (Arnold 1976:44). At El

Assasif, the example there was described as having chambers behind the portico, with two of these indicated on Winlocks map, but the tomb is also indicated to be larger and Winlock does not provide a complete plan (See: Winlock 1942:7). This is similar to what was found at Qubbet el-Hawa, with a small chamber having two internal pillars (Vischak 2014:43).

9.5 Geology

It is worth passing brief comment on the nature of the rock in which these tombs were hewn, since it can be used to elucidate the reasons why the tombs were constructed where they were. At Dendara, The rock into which the example at Dendara was hewn was described as a hard gravel, (Slater 1974:187; Petrie 1900:21), with the fragility of such a material contributing to the variously eroded state of the tomb as it stands. The example at El Assassif, was described as being hewn into a layer of 'loosely cemented sandstone' (Winlock 1942:7). At El Khoka, the examples there were 'cut in tafla [marl clay] between two solid bedrock layers' (Fábián 2017:85). Even at El Tarif, the gravel and marl layer was just described by Arnold as being 'bad quality' (Arnold 1976:72; Seidlmayer 2000:124), which makes the construction of the royal tombs there particularly strange given the examples at the nearby Deir El Bahri were supported by firmer limestone (Winlock 1920:15). With the dates of these sites all being of the Eleventh Dynasty, and assuming that the El Asasif tomb is of this period also, it can be concluded that the construction into poor quality rock was endemic to that period, and only what is probably the latest example, that at Deir El Bahri, reflects a conscious effort to build these tombs in firmer stone. As such, the decision to build the saff tomb at Dendara is perhaps less confusing when viewed from a purely geological position, given that the construction into poor quality stone was the norm, although a lack of later examples perhaps

9.6 Finish

Petrie does not comment on the finish of the tomb, and neither does Slater in her account of Fisher's excavations. As such, it must be assumed that the finish of the tomb had always been as rough as it presently is, with no plaster stucco or stone blocks to sure up the walls. While Petrie was also the first to systematically document the examples at Qurneh/El-Tarif, he noted that by the time of his arrival

they had were already in a much dilapidated state (Petrie 1909:3). Arnold also noted that there was very little in the way of internal decoration, which he noted contributed to the difficulty of dating the tombs (Arnold 1976:42). This is also the case at El Khokha, where the pertinent saff tombs found there were found to have had some plastering on roughly hewn walls, however, no decoration was noted (Fábián 2009:56; Fábián 2017:86). The pattern at all these cemeteries is that the tombs were fairly roughly constructed, perhaps suggesting at the inexperience of constructing larger tombs in the rockface. The example at Dendara is one of the larger than some of the other private tombs here considered, and suggests another motive which was first noted by Petrie at Rifeh. At that cemetery, a large rock-cut tomb which the excavator dated to between the Seventh and Twelfth Dynasties was found, with the rough finish there being attributed to the original conception of the space as a rock quarry (Petrie 1907:11). He suggests that this provides a reason for the large chambers of the rock-tombs of the nomarchs at Asyut and Beni Hasan, as they fulfilled the dual purpose of acquiring stone for the local monuments, whilst also allowing the nomarchs to construct their tombs (Petrie 1907:11). While the substratum rock at Dendara is of poor quality (discussed below), it would have provided sufficient material for the construction of more transitory buildings. While the suggestion is not put forward that all saff tombs were intended as sources of stone, it is a possible explanation at Dendara as it would have allowed the procurement of stone adequate for the core-fill of larger structures relatively easily compared to sourcing it from the more the distant cliffs. The one exception appears to be in an example found at Deir el Bahri, where Winlock noted that the tomb had a decorated interior, including limestone reliefs (Winlock 1920:16). Unfortunately he did not detail the nature of the interiors at El Assassif.

9.7 Interments

Intrinsically tied to the design and intention behind the saff tombs is understanding the interments associated with them. At Dendara, five shafts were sunk inside the tomb, with Petrie noting that none was found in the forecourt or portico that could be in connection with it (Petrie 1900:21, pl.XXXIII). This is perhaps one of the more crowded examples of a saff tomb, with those at El Khokha having only one contemporaneous burial (Fábián 2017:85); there being two in two, dedicated chambers at Deir El Bahri, as well as one in the portico itself (Winlock 1920:15, 31);

an unknown number inside the tomb at El Assasif, as well as a burial in the courtyard (Winlock 1942:7); while at El Tarif, as the site with the most examples of private saff architecture, there was some examples with as many as twelve or more graves occupying the same tomb (Arnold 1976:44). As such, the nature of the Dendara as a tomb for multiple family members, rather than as a monument to a single person, not only reflects the other tombs at Dendara, but also the other saff tombs at other cemeteries.

9.7 Summary

The Dendara saff tomb is a rare example of the idiosyncratic monumental tomb of the Eleventh Dynasty outside the royal necropolises as, it is a style which is almost entirely synonymous with Thebes. In the inscription found by Petrie in the tomb, Antefaqer refers to himself as 'first after the king', which would support the idea of it being constructed for a particularly important noble (Petrie 1900:51). That the tomb was constructed into the roughly horizontal surface is perhaps the most notable feature as compared to other sites, as the other design elements appear quite varied from site to site and even within them. Certainly the construction in poor rock was not uncommon. With regard to the dating, Petrie reasoned that the epithet *m3't hrw* 'true of voice' demonstrated that it was no earlier than the Eleventh Dynasty, and presuming the pattern of number of internal pillars is an indicator of age, then it is likely that the Dendara saff was constructed in the later part of that Dynasty.

Conclusions.

10.1 Summary of findings

10.1.2 Shafts

The construction of shafts at Dendara from the Fifth to the Eleventh Dynasties reflects a number of traditions which were common to other sites contemporaneously, particularly those to the north. The development of square shafts to rectangular shafts, as well as side chambers through diagonal chambers and then eventually end chambers are all features found at other sites across Egypt. One distinction at Dendara is that there appears to be no examples of well-finished chambers, which do appear at some more northerly sites, albeit rarely. The use at Dendara of bricks for blocking chambers is inline with other sites to the north Dendara, however, this appears to be a particular interpretation of a national tradition, given that blocking with other materials was found at northerly sites also.

10.1.3 Shaft groups

The Shaft groups at Dendara appear to be consistent with the examples found at other sites, and while there are instances of particularly large groups there, they are otherwise a standard interpretation of the tradition. During the Tenth Dynasty, the sites which present evidence of shaft groups could be demarcated into only Deir el Bahri within the Theban sphere of influence, as well as Dendara, Abydos, Lahun, Matmar, Kafr Ammar, Sedment, Beni Hasan and Saqqara within the Herakleopolitan controlled part of the country. This then appears to be a tradition mostly of Lower and Middle Egypt, with Dendara being the most southerly location for their use before the Middle Kingdom. The earliest site is apparently Saqqara, however by the Sixth Dynasty examples were appearing at Abydos, suggests that the tradition was relatively quick in spreading south. By examining the evidence from other sites, it appears almost certainly that shaft groups were constructed at once, or at least parts of them were, given the presence of unfinished or empty shafts at a number of sites. While the largest number of shafts in a group is amongst the largest groups at

any site, the number of shaft groups present at a site is perhaps a more significant point, with a far greater importance than at any of the other sites surveyed.

10.1.4 Offering places

The range of the large majority of examples from Dendara reflect lengths which are consistent with other sites from the same period, however the much larger examples appear to have precedent at no other site. With the model mastaba, the presence of a niched façade placed on the east side, was the most common form of the superstructure seen at other sites, even if other variations existed. The hollow examples were also apparently the most common type at other sites. Dendara model mastaba appear to only be directly associated with graves, rather than there being examples built nearer a cult, as was seen at a few other sites. This is possibly because if examples like this were constructed at Dendara, likely they would have been built closer to the temple walls, meaning that they would have either been destroyed, or else covered by the later temple walls or surrounding debris. Placing the superstructure on top of the chamber appeared to be a common tradition at other sites.

Unfortunately the identification of chapels proved difficult with many researchers neglecting to clarify whether these were standalone or was situated in a larger tomb. In addition, the chapels, and especially those constructed of mud brick, are some of the most vulnerable superstructures to destruction through either erosion or deliberate malfaisance, owing to their relatively small size and brick construction. This might explain why these were relatively uncommon at other sites from this period. The presence of a fender wall is probably as likely to have been preserved as the rest of the superstructure, so its absence from most other sites perhaps suggests this was more common at Dendara. The size of the chapels and the use of thick walls is also commonly found at other sites. The location of chapels was even more commonly not next to graves at other sites, and so the absence of such examples is perhaps even greater evidence that there was cult places located near the temple which have since been destroyed or obscured.

10.1.5 Mastabas

The presence of 'large' and 'monumental' mastaba at Dendara during the FIP appears to be a tradition which is considerably less common than at other sites during the same period. Which, according to Alexanian (2003:93) supposedly suggests Dendara to be an incredibly important nome for the concentration of powerful persons, at least during the late OK. During the FIP, this likely remains the case until it comes under the influence of the Theban kings during the Tenth Dynasty, where the site remained a respected and well-funded centre.

The composition of solid-core mastaba appears to be largely consistent with the other sites studied, however, the prevalence of hollow types seems basically unparalleled. This perhaps supports the theory of a greater degree of preservation at Dendara, given it is unlikely that the form only appears at this one site. If the examples at Abydos, Meidum and Mendes are other instances of the same tradition, this possibly suggests Dendara was at least the most southerly site which the hollow mastaba was constructed. Slater's categorisation and rough chronological timing of the different types present at Dendera reveals a rough pattern of construction from the north-west to later examples tending more towards the south east (see figure 1) (Slater 1974:478). Despite this, there is enough examples of later mastaba being constructed in earlier parts of the cemetery that this clearly was not a rigid system. One possible explanation for this is that later tombs were constructed near earlier ones as a legitimising effort, just as smaller tombs were constructed around larger ones with the same goal. This was a well documented practice within Egyptian necropolises (see: Richards 2005:77).

Slater was correct in determining the rarity of the niched façade at sites outside of Dendara, with only Dahshur presenting another example from the FIP, while at Lahun, the example constructed during the Twelfth Dynasty was almost certainly inspired by the owner seeing the examples at one of the other three sites. The niched mastaba tradition may be linked to the earlier Fifth Dynasty tradition of having multiple niches inside the funerary temples of the Sixth Dynasty (Jánosi 1999:36). Combined with the prevalence of shaft groups, a picture emerges of Dendara presenting a particular emphasis on family affinity - with both traditions broadcasting the importance of kinship.

1

¹² See: Alexanian 2003:90, for classification system.

10.1.6 Saff tombs

The features of the saff tomb found at Dendara largely conform to those found in the private tombs at Thebes from the Eleventh to Twelfth Dynasties. The presence of a forecourt, a portico of four columns and a front internal chamber with four columns are all features found within the range of examples typical of those other sites. Even the choice to construct into the gravel substratum, rather than the cliffs typical around Thebes is not too unusual, given the similar quality of rock. The quality of the finish of the Dendara example, also, appears to be consistent with the examples found in the Theban necropolises.

The construction at Dendara at all, of course suggests the both the importance of Dendara to the Theban kings during the Eleventh Dynasty, as well as the loyalty of the officials to their own city. That a Dendara official could be so well connected with the Theban court as to be familiar with the tombs being constructed there ¹³, and yet choose not to be buried amongst the other officials who were being buried in the royal cemetery.

10.2 Discussion

10.2.1 Significance of findings

The large number of traditions which Dendara has in common with Abydos can be explained by the relative importance of that site, with Fischer noting that Abydos was more directly governed by the royal administration to as late as the end of the Sixth Dynasty, and was the location of the overseers of Upper Egypt (Fischer 1968:69; 201-202). The connection to Dendara can be explained through the increased political emphasis of cult temples during the latter part of the Sixth Dynasty (Daoud 2000:204), meaning Dendara was likely the most important site nearest Abydos, at least. In fact, the frequency with which different traditions seen only north or only south of Dendara appear to overlap at the site, suggests it was a culturally significant site to both the Herakleopolitan and Theban kings, which may

¹³ It is also quite possible that the construction of the unique saff tombs was as regulated as the mastaba tombs were

have been a deliberate effort. The variation of mortuary traditions during this period suggests not only an isolation between the two spheres of influence, but suggests that Dendara was well connected to both traditions. The presence of uncommon traditions at Dendara suggests that the site enjoyed some cultural prosperity despite the ongoing conflict. The development of newer traditions suggests that both capitals attempted to establish distinct identities, while the commonness of these traditions at lesser sites demonstrates the effectiveness the centres had in extending their influence.

The continuous political prominence of Dendara is reinforced by the literary record, given the clear importance of Dendara held by the Sixth Dynasty Memphite kings, as well as the adoption of the title 'beloved of Hathor, mistress of Dendara' by the Eleventh and Twelfth Dynasty Theban kings (Jánosi 2010:10). The titles of the Eleventh Dynasty nobles *Antefa* and *Beba*: 'first after the king' with *Antefa* also holding 'treasurer and confidential friend (Petrie 1900:50-51).

The traditions of the multiple niched façade and large amount of shaft grouping both appear to suggest an effort to reinforce the importance of familial bonds and the importance of lineage at Dendara. This is interpreted by this author as having been a cross-societal effort to foremost present themselves as loyal to Dendara, and perhaps make the administrators and common people there appear less concerned about taking a side in the ongoing tensions. This idea is supported by the timing of the introduction of the multiple niched façade, as well as the majority of the shaft groups which coincides with the beginning of the FIP. The overlap of northern and southern traditions at Dendara suggests they effectively straddled the conflict by appearing to be as neutral a city as possible.

Above everything it suggests organisation and succession. That future generations were to be buried alongside their grandparents, as the duties at Dendara are the main importance for the citizens of the site. An appeal to familial succession is particularly pronounced with the shaft groups, as they indicate the intention for successive generations to be buried in the same plot, demonstrating an ongoing continuity at the site. This would have conveyed a message to both factions that the people of Dendara were most concerned by their duties there, and to the temple of Hathor therein, and that concerns outside the site were less important than might

be the case at cities which did not likewise emphasise a bond to a shared heritage of their city. The effectiveness of this tactic can be seen in the deliberate destruction of the funerary monuments at sites sympathetic to the (defeated) Herakleopolitan kings at the start of the MK, as compared with the untouched condition of the monuments at Dendara. By appealing to their self-importance Dendara would have successfully avoided the wrath of whichever side would have rose victorious. The presence of a saff tomb at Dendara supports the effectiveness of the inhabitants of Dendara to remain a largely apolitical and self-important site, while also reinforcing its importance to the identity of its inhabitants.

10.2.2 Further research

Even at Dendara, there is much incomplete information which could further contribute to a picture of provincial traditions. The mastabas studied by Petrie, for example, were excavated only with the intent of finding their outline, rather than to determine the internal characteristics of the rooms (Slater 1974:20). A targeted investigation closer to the temple walls, or even closer to the temple would prove useful to determining whether there were cult places constructed closer to the original temple, as was the case in other areas. This would also serve as a proxy indicator for reinforcing the importance of the temple from during this period, given that nothing of the original temple remains.

Greater attention should be given to the proper recording of the most basic and common graves, as these are more representative of funerary culture for the majority of the Ancient Egyptians, as compared to the monumental tombs of the select elite. So poor is the present understanding of the diversity of features of shaft and chamber tombs that Qau, a site which presents clearly an atypically homogenous tradition, can be presented as a representative of how all shaft tombs were constructed, for a period of hundreds of years (see: Snape 2011:104). This exposes the lack of a systematic study of these tombs to date, and the need for a typology of grave superstructures and substructures of the FIP which goes beyond the present study. Slater's own thesis, as well as for example Resiner's spatially limited typology (see: Reisner 1942:86-177) exposes the problems of a single site approach, as is also raised by Bárta (2000:48). The need is for such a study to be applicable and inclusive of all known sites in Egypt, so as to better understand

similar structures represented distinctly by different local traditions. Foremost should be a national typology of model mastaba graves and a better understanding of how these cult places bridge the true mastaba and the chapel, as well as how other, similar cult places, like the *stèles maison* can be related.

References.

Abdallah, A. 1992 The centopath of the Sekwaskhet Family from Saqqara. *The Journal of Egyptian Archaeology* 78(1):93-111.

Adams, M.D. 2005 Community and Society in the First Intermediate Period: an archaeological investigation of the Abydos settlement site. Unpublished PhD thesis to department of archaeology, University of Pennsylvania.

Aldred, C. 1998 *The Egyptians*. London: Thames and Hudson.

Alexanian, N., S.E. Muller and T. Herbich 2015 Report about the excavations done by German Archaeological Institute in Spring 2015.

Alexanian, N., A. Nerlich, R. Schiestl, S.J. Seidlmayer 2007 *The Necropolis of Dahshur, Fourth Excavation Report* Spring 2007. Berlin: Free University of Berlin.

Alexanian, N., H. Becker, M. Müller, S.J. Seidlmayer 2003 *The Necropolis of Dahshur, Second Excavation Report Spring 2002*. Berlin: Free University of Berlin.

Alexanian, N. 2003 Social Dimensions of Old Kingdom Mastaba Architecture. In Hawas, Z. and L.P. Brock (eds) *Egyptology at the dawn of the twenty-first century:* proceedings of the Eighth International Congress of Egyptologists, Cairo. Cairo: American University in Cairo Press, pp.88-96.

Alexanian, N., S.J. Seidlmayer 2002 *The Necropolis of Dahshur, First Excavation Report Spring 2002*. Berlin: Free University of Berlin.

Arnold, D. 1976 *Gräber des Alten und Mittleren Reiches in El-Tarif*. Mainz: Verlag Philipp von Zabern.

Askamit, J. 2008 The necropolis at Tell Edfu: an overview. *Polish Archaeology in the Mediterranean* 20(1):379-386.

Ayrton, E.R. and W.L.S. Loat 1911 *Pre-Dynastic Cemetery at El Mahasna Mahasna*. London: Egypt Exploration Fund.

Ayrton, E.R., C.T. Currelly and A.E.P. Weigall 1904 *Abydos Part III.* Boston: Egypt Exploration Fund.

Baud M. and E. Guerrier 2011 Mastaba core structure: New data from fourth dynasty elite tombs at Abu Rouwash, in Strudwick, N. and H. Strudwick (eds) Old Kingdom, New Perspectives: Egyptian Art and Archaeology 2750-2150 BC. Oxford: Oxbow Books.

Bard, A. (ed.) 2007 An Introduction to the Archaeology of Ancient Egypt. Carlton: Blackwell Publishing.

Bárta, M. 2005 Architectural innovations in the development of the royal tomb during the reign of Nyuserra. In, Janosi, P. (ed.) *Structure and significance: thoughts on Ancient Egyptian architecture*, Vienna: Verlag der Österreichischen Akademie der Wissenschaften.

Bárta, M. 2001 Abusir V, the Cemeteries of Abusir South I. Prague: Set Out.

Bárta, M. 2000 The non-royal cemeteries at Abusir South - early Fourth and early Fifth Dynasties at Abusir. In, Bárta, M. and J. Krejčí (eds) *Abusir and Saqqara in the Year 2000*, Praha: Academy of Sciences of the Czech Republic Oriental Institute. pp.341-346.

Blondeau, A. 1817 Denderah in Commission des sciences et arts d'Egypt. Description de l'Égypte Paris: Imprimerie impériale.

Bolshakov, A.O. 1991 The Moment of the establishment of the tomb-cult in Ancient Egypt. *Altorientalische Forschungen* 18(2):2014-218.

Brunner, H. 1936 Die Anlagen Der Ägyptischen Felsgräber: Bis zum Mittleren Reich. Glückstadt: Verlag J.J. Augustin.

Brunton, G. 1948 *Matmar: British Museum Expedition to Middle Egypt, 1929-1931*. London: Bernard Quaritch ltd.

Brunton, G. 1937 Mostagedda and the Tasian Culture. London: Bernard Quaritch.

Brunton, G. 1930 Qau and Badari III. London: British School of Archaeology in Egypt.

Brunton, G. 1927 Qau and Badari I. London: British School of Archaeology in Egypt.

Carnarvon, G.H. and H. Carter 1912 *Five Years Explorations at Thebes: A record of work done 1917-1911*. London: Oxford University Press.

Chudzik, P. 2018 The Middle Kingdom tombs of Asasif: work in the 2015/2016 season. *Polish Archaeology in the Mediterranean* 26(1):185-198.

Chudzik, P. 2016 Middle Kingdom Tombs of Asasif: Archaeological Activities in 2015. *Polish Archaeology in the Mediterranean* 25:289-302.

Curelley, C.T. The cemeteries of Sedment and Gurob. In Petrie, W.M.F. (ed.) 1905 *Ehnasya 1904*. London: Bernard Quaritch.

Daumas, F. 1973 Derechef Pepi Ier à Dendara. Revue d'Égyptologie, 25(1):7-20.

Daoud, K.A. 2000 Abusir during the Herakleopolitan Period. In, Bárta, M. and J. Krejčí (eds) *Abusir and Saqqara in the Year 2000*, Praha: Academy of Sciences of the Czech Republic Oriental Institute. pp.193-206.

Dee, M.W., C. Bronk Ramsey, A.J. Shortland, T.F.G. Higham and J.M. Rowland 2009 Reanalysis of the chronological discrepancies obtained by the Old and Middle Kingdom monuments project. *Radiocarbon*, 51(3):1061-1070.

Doyon, W. 2014 On archaeological labour in modern Egypt, in, Carruthers, W. (ed.) Histories of Egyptology: Interdisciplinary measures.

Edwards, I.E.S., C.J. Gadd and N.G.L. Hammond 1971 (eds) The Cambridge Ancient History. Cambridge University Press: Cambridge.

El-Khadragy, M., J. Khal and E.M. Engel 2004 The First Intermediate Tombs at Asyut Revisited.

Engelbach, R and G. Brunon 1927 *Gurob*. British School of Archaeology in Egypt and Egyptian Research Account [41] (24th year). London: British School of Archaeology in Egypt.

Engelbach, R. 1923 Harageh. London: Bernard Quaritch.

Engelbach, R. 1915 *Riqqeh and Memphis VI*. London: British School of Archaeology in Egypt.

Fábián, Z.I. 2017 Re-use and modification of a *saff*-tomb on the south slope of El-Khokha, Thebes. In, Kóthay, K.A. (ed.) *Practices in Late Period And Graeco-Roman Egypt, Proceedings of the International Conference held at Museum of Fine Arts.* Budapest, Museum of Fine Arts, 17-19 July 2014.

Fábián, Z.I. 2009 The middle Kingdom on el-Khokha: *Saff*-tombs, in Bács, T.A., Z.I. Fábián, G. Schreiber and L. Török (eds) *Hungarian Excavations in the Theban Necropolis A Celebration of 102 Years of Fieldwork in Egypt*. Budapest: Mester Nyomda.

Fakhry, A. 1947 A report on the inspectorate of Upper Egypt. *Annales du service des antiquitiés de l'Égypt* 46(1):25-62.

Feucht, E. 1987 Das Kind im Alten Agypten: Die Stellung des Kindes in Familie und Gesellschaft nach altagyptischen Texten und Darstellungen. New York: Frankfurt am Main.

Firth, C.M., J.E. Quibell and J.P.Lauer 1935 Excavations at Saqqara the Step Pyramid. Cairo: Le Caire Imprimerie de L'Institut Français.

Fischer, H.G. 1968 Dendera in the Third Millennium B.C., down to the Theban domination of Upper Egypt. New York: J.J. Augustin.

Fischer, H.G. 1955 Denderah in the Old Kingdom and its aftermath. Unpublished PhD thesis to department of Archaeology, University of Pennsylvania.

Fisher, C. 1917 The Eckerley B. Coxe Jr. Egyptian Expedition. *The Museum Journal*, 8(4):211-237.

Fisher, C. 1918 Dendera. Unpublished diary.

Franzmeier, H., F. Höflmayer, W. Kutschera and E.M. Wild 2011 Radiocarbon evidence for New Kingdom tombs: Sedment 254 and 246. Ägypten und Levante 21(1):15-29.

Garstang, J. 1909 Excavations at Abydos, 1909: preliminary description of the principal finds. *Annals of Archeology and Anthropology*. 2(1):125-129.

Garstang, J. 1907 The burial customs of ancient Egypt as illustrated by tombs of the Middle Kingdom: being a report of excavations made in the necropolis of Beni Hassan during 1902-3. London: Constable.

Garstang, J. 1903 Maḥâsna and Bêt Khallâf. London: Bernard Quaritch.

Garstang, J. (ed.) 1901 El Arábah. London: Bernard Quaritch.

Google Earth Pro 7.3.2 2018 Dendera Temple Complex, Qism Qena, Dandarah, Qena, Egypt 26°08'16.63" N, 32°40' E, elevation 0M. 3D Map, viewed 29 December 2018.

Grajetzki, W. 2004 *Harageh an Egyptian burial ground for the rich, around 1800 BC*. London: Golden House Publications.

Hamada, A. and M. El Amir 1947 Excavations at Kôm El-Ḥisn season 1943. *Annales du Service des Antiquités de l'Égypte* 46(1):101-141.

Hassan, S. 1954 *The Mastabas of the Seventh Season and Their Description*. Excavations at Giza, 1935-1936 vol. vii. Cairo: Government Press.

Hendrickx, S. 2006 Predynastic - early Dynastic chronology. In, Hornung, E., R. Krauss and D.A. Warburton, *Ancient Egyptian Chronology. Handbook of Oriental Studies*, Leiden: Brill.

Jánosi, P. 2010 Montuhotep-Nebtawyre and Amenemhat I: observations on the Early Twelfth Dynasty in Egypt. *Metropolitan Museum Journal* 45(1):7-20.

Jéquier, G. 1929 *Fouilles a Saqqarah*. Cairo: Impr. de l'Institut Français d'Archéologie Orientale.

Kemp, B. 1989 Ancient Egypt: Anatomy of a Civilisation. Routledge: London.

Khal, J. 2012 Asyut and the Asyut Project. In, Khal, J., M. Khadragy, U. Verhoeven and A. Kilian (eds) Seven Seasons at Asyut. First Results of the Egyptian-German Cooperation in Archaeological Fieldwork, The Asyut Project 2, Wiesbaden: Harrassowitz Verlag.

Kilian, A. 2016 Offering trays. In, Khal, J., U. Verhoeven and M. El-Khadragy (eds) *The Asyut Project*, volume 3 Wiesbaden: Harrassowitz Verlag.

Kokina, E. 2017 Alone or together: for whom were the private tombs of the Old Kingdom built? In, Bárta, M., F. Coppens and J. Krejčí (eds) 2017 *Abusir and Saggara in the year 2015*, Prague: Faculty of Arts, Charles University.

Kroenke, K.R. 2010 The Provincial Cemeteries of Naga ed-Deir: A Comprehensive Study of Tomb Models Dating from the Late Old Kingdom to the Late Middle Kingdom. Unpublished PhD thesis to Department of Near Eastern Studies, University of Berkeley, Berkeley.

Kurkiewicz, K.O. 2016 Architectural Innovations influenced by climatic phenomena (4.2 KA event) in the late Old Kingdom (Saqqara, Egypt). *Studia Quaternia*, 33(1):27-34.

Lange, E. 2015 The So-called Governors' cemetery at Bubastis and provincial elite tombs in the Nile Delta: state and perspectives of Research. In Miniaci, G. and W. Grajetzki (eds) *The World of Middle Kingdom Egypt (2000-1500 BC)*. Volume 1, Middle Kingdom Studies 1. London: Golden House Publications.

Lilyquist, C. 1979 Ancient Egyptian Mirrors from the Earliest Times through the Middle Kingdom. Deutscher Kunstverlag: Berlin.

Lopinto, A 2014 Mortuary Variation at Mendes in the First Intermediate Period. *The 65th Annual Meeting of the American Research Centre in Egypt* (Abstract booklet), Portland, April 4-6.

Lyman, L. and M.J. O'Brien 2004 A history of normative theory in Americanist archaeology. Journal of Archaeological Method and Theory 11(4):369-396.

Mackay, E. 1910 Far Western Tombs in Petrie, W.M.F. (ed.) *Medyum and Memphis III*. British School of Archaeology in Egypt and Egyptian Research Account Sixteenth Year. London: University College.

Mackay, E. 1907 The VIth dynasty. Zaraby and Zowyeh. In Petrie, W.M.F. (ed.) *Gizeh and Rifeh*, pp.10-11. London: Bernard Quaritch.

Mackay, E. Kafr Ammar. In Petrie, W.M.F. and E. Mackay 1915 *Heliopolis, Kafr Ammar and Shurafa*. Boston: Egypt Exploration Fund.

Malek, J. 2003 The Old Kingdom in Shaw, I. (ed.) *The Oxford History of Ancient Egypt*. Oxford: Oxford University Press.

Mariette, A. 1880 Abydos. Description des Fouilles. Paris: Imprimerie Nationale.

Mariette, A. 1875 Dendérah: Description générale du grand temple de cette ville. Paris: Librairie A. Franck.

Mariette, A. 1870 Dendérah: description générale du grand temple de cette ville. Paris: Librairie A. Franck.

Marouard, G. 2016 Dendara: 2015-2016 Annual Report. University of Chicago.

Michałowski, K. (ed.) 1937 *Tell Edfou*. Fouilles Franco-Polonaises Rapports 1. Le Cairo: Imprimerie de l'Institut Français d'Archéologie Orientale.

Moeller, N. 2009 Tell Edfu. In, Stein, J. (ed.) *Oriental Institute 2008-2009 Annual Report.* Chicago: University of Chicago pp.117-125.

Moeller, N. 2005 The First Intermediate Period: A time of Famine and Climate Change? Ägypten und Levante 15(1):153-167.

Mond, R. and O.H. Myers 1937. *Cemeteries of Armant I*. London: Egypt Exploration Society.

Moreno García, J.C. 2014 The Cursed Discipline? The peculiarities of Egyptology at the turn of the twenty-first century. In: W. Carruthers (ed.), Histories of Egyptology: Interdisciplinary Measures, pp50-63, Routledge: London.

Morgan, J.D. 1895 Fouilles a Dahchour. Vienna: Adolphe Holzhausen.

Mumford, G. 1996 A First Intermediate Period cemetery and late Old Kingdom mastaba first at Mendes (1992-94). *ATPN* May, pp.3-4.

Murray, M.A. 1905 Saqqara Mastabas Part I. British School of Archaeology in Egypt and Egyptian Research Account (Tenth Year), London: Bernard Quaritch.

Myers, O.H. and H.W. Fairman 1931 Excavations at Armant, 1929-31. *The Journal of Egyptian Archaeology* 17(3/4):223-232.

Naville, E. 1914 Abydos. The Journal of Egyptian Archaeology 1(1):2-8.

Naville, E. 1914 *The Cemeteries of Abydos Part I. 1909-1910*. Boston: Egypt Exploration Fund.

Naville, E., P.E. Newberry and G.W. Fraser 1891 *The Season's work at Ahnas and Beni Hasan*. London: Gilbert and Rivington.

Niwinski, A 1984 Seelenhaus. In Helck, W. (ed.) *Lexikon der Ägyptologie. V,* Wiesbaden: Harrassowitz Verlag.

O'Connor, D.B. 2000 Society and individual in early Egypt. In Richards, J. and M.V. Buren (eds) Order, legitimacy and wealth in ancient states, pp.21-35, Cambridge University Press: Cambridge.

O'Connor, D.B. 1985 The 'centopaths' of the Middle Kingdom at Abydos. In Posener-Kriéger (ed.) *Mélanges Gamal Eddin Mokhtar* BdÉ 97. Cairo Institut Français D'Archéologie Orientale du Caire, pp.161-177 and pl. I.

O'Connor, D.B. 1974 Political Systems and archaeological data in Egypt: 2600-1780 B.C. *World Archaeology* 6(1):15-38.

O'Neil, B. 2015 Setting the Scene: The Deceased and regenerative cult within offering table Imagery of the Egyptian Old to Middle Kingdoms. Oxford: Archaeopress.

Peet, T.E. 1914 *The Cemeteries of Abydos II*. London: Egypt Exploration Fund.

Peet, T.E. and W.L.S. Loat 1913 *The Cemeteries of Abydos III*. London: Egypt Exploration Fund.

Petrie, W.M.F. 1931 Seventy years in Archaeology. Cambridge: Cambridge university Press.

Petrie, W.M.F., Brunton, G. and M.A. Murray 1923 *Lahun II*. London: British School of Archaeology in Egypt.

Petrie, W.M.F. and G. Brunton 1924 *Sedment II*. British School of Archaeology in Egypt and Egyptian Research Account Twenty-Seventh Year. London: University College.

Petrie, W.M.F. and G. Brunton 1924 *Sedment I*. British School of Archaeology in Egypt and Egyptian Research Account Twenty-Seventh Year. London: University College.

Petrie, W.M.F., G.A. Wainright and A.H. Gardiner 1913 Tarkhan I and Memphis V. London: British School of Archaeology in Egypt,

Petrie, W.M.F. (ed.) 1909 *Qurneh*. British School of Archaeology in Egypt and Egyptian Research Account Fifteenth Year, London: University College.

Petrie, W.M.F. 1907 *Gizeh and Rifeh*. British School of Archaeology in Egypt and Egyptian Research Account Thirteenth Year, London: Bernard Quaritch.

Petrie, W.M.F. 1905 *Ehnasya 1904*. Twenty-sixth memoir of the Egypt Exploration Fund, London: Bernard Quaritch.

Petrie, W.M.F. 1902 *Abydos Part I.* Twenty-second memoir of the Egypt Exploration Fund, Boston: Egypt Exploration Fund.

Petrie, W.M.F. 1901 *Diospolis Parva the cemeteries of Abadiyeh and Hu 1898-9*. Special extra publication of the Egypt Exploration Fund, London: Egypt Exploration Fund.

Petrie, W.M.F. 1900 *Dendereh*. Seventeenth memoir of the Egypt Exploration Fund, Boston: Egypt Exploration Fund.

Petrie, W.M.F. and J.E. Quibell 1896 *Naqada and Ballas 1895*. London: Bernard Quaritch.

Phillips, P.J., J.A. Ford and J.B. Griffin 1951 Archaeological survey in the mississippi alluvial valley, 1940-1947. Harvard University, Peabody Museum of American Archaeology Ethnology, Paper No. 25.

Pitkin, M. 2014 The distribution and dating of Egyptian false doors and funerary stelae of the First Intermediate Period: a preliminary analysis. In, Pinarello, M.S., J. Yoo, J. Lunkdock and C. Walsh (eds.) *Current Research in Egyptology 15*, London: Oxbow Books.

Quibell, J.E. 1923 Excavations at Saqqara (1912-1914). Cairo: Le Caire Imprimerie de L'Institut Français.

Quibell, J.E. 1908 Excavations at Saqqara (1906-1907). Cairo: Le Caire Imprimerie de L'Institut Français.

Quibell, J.E. 1907 Excavations at Saqqara (1905-1906). Cairo: Le Caire Imprimerie de L'Institut Français.

Quibell, J.E. 1898 El Kab. London: Bernard Quaritch.

Reisner, G.A. 1942 A History of the Giza Necropolis, Volume I. Harvard: Harvard University Press.

Reisner, G.A. 1937 Note on overbuilding and intrusive burials at Gizah. *Journal of Egyptian Archaeology*, 23(2):260.

Reisner, G.A. 1935 Report on the Egyptian Expedition during 1934-35. *Bulletin of the museum of fine arts* 33(199):69-77.

Reisner, G.A. 1913 New Acquisitions of the Egyptian Department. *Museum of Fine Arts Bulletin*, 11(6):53-66.

Reisner, G.A. 1908 *The Early Dynastic Cemeteries of Naga-Ed-Dêr Part I*. Leipzig: J.C. Hinrichs.

Richards, J. 2005 Society and death in ancient Egypt: mortuary landscapes of the Middle Kingdom. New York: Cambridge University Press.

Roth, A.M. 1995 A cemetery of palace attendants. In Manuelian, P.D. and W.K. Simpson (eds) *Giza Mastabas volume* 6. Boston: Museum of Fine Arts.

Roeten, L. 2014 The decoration on the cult chapel walls of the Old Kingdom Tombs at Giza, a new approach to their interaction. In, Weippert, M.H.E., T. Schneider, E. Frahm, W. R. Garr, B. Halpern, T.P.J. van den Hout and I.J. Winter (eds) *Culture and History of the Ancient Near East*, volume 70. Boston: Brill.

Rodgers, J. 2017 Charles H. Rosher Dendereh records. Finding aid prepared for Penn Museum Archives, Pennsylvania.

Rzeuska, T. 2011 Medium Revisited. Remarks on the Late Old Kingdom Topography of the Site. pp.712-716 In Bárta, M., R. Coppens and J. Krejčí (eds) *Abusir and Saqqara in the Year 2010* Prague: Charles University.

Sayce, M.A.H. 1905 Excavations at Ed-Dêr. *ASAE* 6(1):159-167.

Seidlmayer, S. 2003 The First Intermediate Period, in Shaw, I. (ed.) *The Oxford History of Ancient Egypt*. Oxford: Oxford University Press.

Seidlmayer, S. 1990 *Gräberfelder aus dem Übergang vom Alten zum Mittleren Reich*. Heidelberger Orientverlag.

Shaw, I. 2003 (ed.) The Oxford History of Ancient Egypt. Oxford: Oxford University Press.

Shirai, Y. 2006 Ideal and reality in Old Kingdom private funerary cults. In, Bárta, M. (ed.) *The Old Kingdom Art and Archaeology: Proceedings of the Conference,*Prague: Publishing House of the Academy of Sciences of the Czech Republic.

Slater, A.R. 1974 The archaeology of Dendereh in the First Intermediate Period. Unpublished PhD thesis to department of Archaeology, University of Pennsylvania.

Slater, A.R. 1970 Dendereh and the University Museum 1898-1970. *Expedition* 12(4):15-20.

Snape, S. 2011 *Ancient Egyptian Tombs: The Culture of Life and Death*. Oxford: Wiley-Blackwell.

Sonnini, C.S. 1799 Travels in Upper and Lower Egypt undertaken by order of the old government of France, H. Hunter. (trans.), VOLS.1-3, London: John Stockdale.

Sowada K.N. 2010 Forgotten cemetery F at Abydos and Burial Practices of the late Old Kingdom. In Woods, A., A. McFarlane and S. Binder (eds) Egyptian *Culture and Society: Studies in Honour of Naguib Kanawati*. Volume 2, Cairo: Du Consel Suprême des Antiquités de L'Égypt.

Tristant, Y. 2016 Recherches sur la nécropole de Dendera, In, Institut Français D'Archéologie Orientale *Rapport d'activité de l'Ifao*. Supplément au Bulletin de L'Institut Français D'Archéologie Orientale 116, pp.133-140.

Tristant, Y. 2014 Recherches sur la nécropole de Dendera, In, Institut Français D'Archéologie Orientale *Rapport d'activité de l'Ifao*. Supplément au Bulletin de L'Institut Français D'Archéologie Orientale 114, pp.120-133.

Van de Velden, M., P.J.F. Groenen and J. Poblome 2009 Seriation by constrained correspondence analysis: a simulation study. *Computational Statistics and Data Analysis* 53(8):3129-3138.

Vermeersch, P.M., E. Paulissen, P. Van Peer, S. Stokes, C. Charlier, C. Stringer and W. Lindsay 1998 A Middle Paleolithic burial of a modern human at Taramsa Hill, Egypt. *Antiquity* 72(277):475-484.

Vischak, D. 2014 Community and Identity in Ancient Egypt: The Old Kingdom cemetery of Qubbet el-Hawa. London: Cambridge University Press.

Weeks, K.R. 1994 Mastabas of Cemetery g6000. In, Manuelian, P.D and W.K. Simpson (eds) Giza Mastabas volume 5. Boston: Museum of Fine Arts.

Winlock, H.E. 1942 Excavations at Deir el Baḥri 1911-1931. New York: The Macmillan Company.

Winlock, H.E. 1920 The Egyptian Expedition 1918-1920: II. Excavations at Thebes 1919-1920. *The Metropolitan Museum of Art Bulletin* 15(12):12-32.

Yoshimura, S. and M. Baba 2008 Recent discoveries of intact tombs at Dahshur North: burial customs of the Middle and New Kingdoms. pp.545-556, In Kousoulis, P. and N. Lazaridis (eds) Proceedings of the Tenth International Congress of Egyptologists. Bristol: Peeters.

Zignani, P., G. Marouard, Y. Tristant 2013 Dendera. Architecture de l'espace sacré et environnement. In, Institut Français D'Archéologie Orientale Rapport d'activité de l'Ifao. Supplément au Bulletin de L'Institut Français D'Archéologie Orientale 113, pp.136-142.

Zigani, P. 2001 Cartographie de Dendara, remarques sur l'urbanisme du site. *Bulletin de site*, 101(1):415-447.

Appendices.

12.1 Table 1: Dynastic dates of Slater's period dates

Period	Dynasty	c. B.C.E.
A	7-9th	2180
AB	9th	
В	10th	2140
С	11th	
D		2120
Е		
F		2100
G		
Н		2080
I		~2070
J		2060
K		
L		2040
M		
N		2020
0	12th	
Р	12th	

(Slater 1974:54, 473)

12.2 Tables 2: Sites covered

12.2.1 Abadiyeh

Feature	Evidence
Shaft	(Petrie 1901:31-44)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	(Petrie 1901:32); (Slater 1974:386)
rock-cut tomb	<u>-</u>

12.2.2 Abusir

Feature	Evidence
Shaft	(Daoud 2000:195); (Bárta 2000:48)
Shaft group	-
Chapel	(Bárta 2001:1)
Model mastaba	-
Mastaba	(Krejči 2011:136-137); (Baud and Guerrier 2011:22-24, 32) (Bárta 2000:339).
rock-cut tomb	-

12.2.3 Abydos

12.2.3.1 Abydos

Feature	Evidence
Shaft	(Naville 1914:5-6, 18); (Sowada 2010:224); (Garstang 1909:127); (Peet 1914:19-20, 25, 27, 29, 41, 48, 76-77) 77)
Shaft group	(Petrie 1902:34); (Naville 1914:19); (Peet and Loat 1913:23-24); (Peet 1914:30)
Chapel	(Slater 1974:174); (Abdallah 1992:110); (Ayrton, Currelly and Weigall 1904:10)
Model mastaba	(Naville 1914:2, 20-21); (Peet 1914:36-40, 50)
Mastaba	(Peet and Loat 1913:24); (Ayrton, Currelly and Weigall 1904:15)
rock-cut tomb	-

12.2.3.2 El Arábah

Feature	Evidence
Shaft	(Garstang 1901:21)
Shaft group	(Garstang 1901:pl2)
Chapel	(Garstang 1901:22)
Model mastaba	-
Mastaba	(Garstang 1901:20, pl.XXXI-XXXII),
rock-cut tomb	

12.2.3.3 Naga ed Der

Feature	Evidence
Shaft	(Slater 1974:386-387); (Reisner 1908:1, 9, 66)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	(Reisner 1908:1, 6)
Rock-cut tomb	(Reisner 1908:2)

12.2.3.4 El Mahasna

Feature	Evidence
Shaft	(Garstang 1903:28)
Shaft group	(Slater 1974:386)
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	-

12.2.4 Asyut

Feature	Evidence
Shaft	(Khal 2012:12)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	(Khal 2012:12); (El-Khadragy, Khal and Engel 2004:237-240)

12.2.5 Aswan

12.2.5.1 Qubbet el-Hawa

Feature	Evidence
Shaft	(Vischak 2014:42)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	(Vischak 2014:42)

12.2.6 Beni Hasan

Feature	Evidence
Shaft	(Slater 1974:388); (Garstang 1907:15, 18, 34, 44-46, 51)
Shaft group	(Garstang 1907:35-36, 39, 42-43, 47)
Chapel	(Garstang 1907:51)
Model mastaba	-
Mastaba	-
rock-cut tomb	

12.2.7 Ed Der

Feature	Evidence
Shaft	(Sayce 1905:160, 165-166); (Slater 1974:384)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	-

12.2.8 Edfu

Feature	Evidence
Shaft	(Michalowski 1937:2)
Shaft group	_
Chapel	-
Model mastaba	-
Mastaba	(Slater 1974:383); (Michalowski 1937:4-6); (Aksamit 2011:381)
rock-cut tomb	

12.2.9 El Badari

12.2.9.1 Badari / Qau / Hemmamieh

Feature	Evidence
Shaft	(Brunton 1927:25, 27-29, 32, 34-40, 43-45); (Brunton 1927:2, 5, 72-73); (Slater 1974:201); (Slater 1974:387); (Brunton 1930:1)
Shaft group	_
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	

12.2.9.2 Matmar

Feature	Evidence
Shaft	(Slater 1974:388); (Brunton 1948:32-40, 54-55)
Shaft group	(Brunton 1948:39)
Chapel	(Brunton 1948:35, 41)
Model mastaba	(Brunton 1948:35)
Mastaba	-
rock-cut tomb	

12.2.9.3 Mostagedda

Feature	Evidence
Shaft	(Slater 1974:387); (Brunton 1937:98-104)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	-

12.2.9.4 **Z**araby

Feature	Evidence
Shaft	(Mackay 1907:10)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	_

12.2.10 El Gozeireh

Feature	Evidence
Shaft	-
Shaft group	-
Chapel	(Fakhry 1947:25)
Model mastaba	-
Mastaba	(Slater 1974:130); (Fakhry 1947:55)
rock-cut tomb	_

12.2.11 El Kab

Feature	Evidence
Shaft	(Quibell 1898:6, 13-14, pl.XXIV);
Shaft group	(Quibell 1898:14, pl.XXIV)
Chapel	-
Model mastaba	(Quibell 1898:21, pl.XXIV)
Mastaba	(Quibell 1898:3)
rock-cut tomb	-

12.2.12 Giza

Feature	Evidence
Shaft	(Reisner 1913:58); (Reisner 1942:152)
Shaft group	(Petrie 1907:vi)
Chapel	(Reisner 1935:72)
Model mastaba	(Petrie 1907:8)
Mastaba	(Maspero 1914:132); (Hassan 1953:xii); (Petrie 1907:pl.VII c)
rock-cut tomb	

12.2.13 Herakleopolis

12.2.13.1 Gurob

Feature	Evidence
Shaft	(Slater 1974:389); (Currelley 1905:36); (Engelbach and
	Brunton 1927:4, pl.i)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	(Engelbach and Brunton 1927:1)
rock-cut tomb	-

12.2.13.2 Harageh

Feature	Evidence
Shaft	(Engelbach 1923:2, 8)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	-

12.2.13.3 Ehnasa

Feature	Evidence
Shaft	(Naville 1891:6); (Petrie 1905:3)
Shaft group	-
Chapel	(Seidlmayer 2000:134)
Model mastaba	-
Mastaba	(Lopinto 2014:171)
rock-cut tomb	_

12.2.13.4 Sedment

Feature	Evidence
Shaft	(Slater 1974:388); (Currelley 1905:32-33); (Petrie 1924:4, 15)
Shaft group	(Petrie 1924:pl.XC)
Chapel	(Petrie 1924:15)
Model mastaba	-
Mastaba	-
rock-cut tomb	(Petrie 1924:2)

12.2.14 Kafr Ammar

Feature	Evidence
Shaft	(Slater 1974:389); (Mackay 1912:11, 30-31); (Petrie 1913:29-30, pl.LXXII)
Shaft group	(Petrie 1913:LXXII)
Chapel	(Mackay 1912:19)
Model mastaba	-
Mastaba	(Mackay 1912:11, 19); (Petrie 1913:pl.lxxii)
rock-cut tomb	

12.2.15 Kom El Hisn

Feature	Evidence
Shaft	(Slater 1974:390); (Hamada and El Amir 1947:103-104, 111);
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	-

12.2.16 Lahun

Feature	Evidence
Shaft	(Slater 1974:389); (Petrie Brunton and Murray 1923:16-17, 22-24, 31); (Brunton 1924: 25-26, pl.XXIII)
Shaft group	(Petrie Brunton and Murray 1923:31-34)
Chapel	-
Model mastaba	-
Mastaba	Petrie Brunton and Murray 1923:10, 26, 30, pl.XXVII, XLVIII)
rock-cut tomb	(Petrie Brunton and Murray 1923:26)

12.2.17 Memphis

12.2.17.1 Dahshur

Feature	Evidence
Shaft	(Yoshimura and Baba 2008:241-244, 552, 546)
Shaft group	-
Chapel	-
Model mastaba	(Alexanian Muller and Herbich 2015:12)
Mastaba	-
rock-cut tomb	-

12.2.18 Meidum

Feature	Evidence
Shaft	(Mackay 1910:24-25, 33), (Rzeuska 2011:712)
Shaft group	-
Chapel	-
Model mastaba	(Mackay 1910:28)
Mastaba	(Mackay 1910:36)
rock-cut tomb	_

12.2.19 Naqada

Feature	Evidence
Shaft	(Slater 1974:385), (Petrie and Quibell 1896:3-7)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	(Petrie and Quibell 1896:3)
rock-cut tomb	_

12.2.20 Rifeh

Feature	Evidence
Shaft	(Petrie 1907:13)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	(Petrie 1907:11)

12.2.21 Riqqeh

Feature	Evidence
Shaft	(Engelbach 1915:2, 4-10, 25);
Shaft group	-
Chapel	(Engelbach 1915:22)
Model mastaba	-
Mastaba	-
rock-cut tomb	_

12.2.22 Saqqara

Feature	Evidence
Shaft	(Quibell 1907:2-4, 6-7); (Quibell 1908:18-19, 74); (Quibell 1935:16, 40, 57-40); (Kurkiewicz 2016:32);
Shaft group	(Quibell 1907:iii, 8, 17); (Quibell 1935:Pl 51); (Quibell 1908:78)
Chapel	(Quibell 1907:iii); (Quibell 1908:15, 18); (Quibell 1935:36-37 61, 64); (Lilyquist 1979:171); (Abdallah 1992:111)
Model mastaba	(Abdallah 1992:93, 95, 107-108); (Dobrev 2017:54-56); (1929:62); (Jéquier 1929:62)
Mastaba	(Seidlmayer 2000:130); (Quibell 1904:15, 17,); (Quibell 1907:17, pl.II-III); (Quibell 1923:vi, 1); (Jéquier 1929:62)
rock-cut tomb	_

12.2.23 Tell Ibrahim Awad

Feature	Evidence
Shaft	(Haarlem 2005:195-197)
Shaft group	A
Chapel	A
Model mastaba	A
Mastaba	A
rock-cut tomb	_

12.2.24 Thebes

12.2.24.1 Armant

Feature	Evidence
Shaft	(Myers and Fairman 1931:229); (Myers 1937:20-21, pl.III)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	(Myers and Fairman 1931:224)

12.2.24.2 **Deir el Bahri**

Feature	Evidence
Shaft	(Carnarvon and Carter 1912:6, 23, 24); (Winlock 1942:40, 98, 176)
Shaft group	(Carnarvon and Carter 1912:6); (Slater 1974:176); (Winlock 1942:41)
Chapel	(Carnarvon and Carter 1912:27)
Model mastaba	-
Mastaba	-
rock-cut tomb	(Winlock 1942:19)

12.2.24.3 El Assasif / El Khokha

Feature	Evidence
Shaft	(Slater 1974:384)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	(Winlock 1942:7)

12.2.24.4 Qurneh / El Tarif

Feature	Evidence
Shaft	(Petrie 1909:2); (Arnold 1976:11)
Shaft group	-
Chapel	-
Model mastaba	-
Mastaba	-
rock-cut tomb	(Petrie 1909:3); (Slater 1974:385); (Seidlmayer 2000:124); (Arnold 1976:23, 25, 42-44)

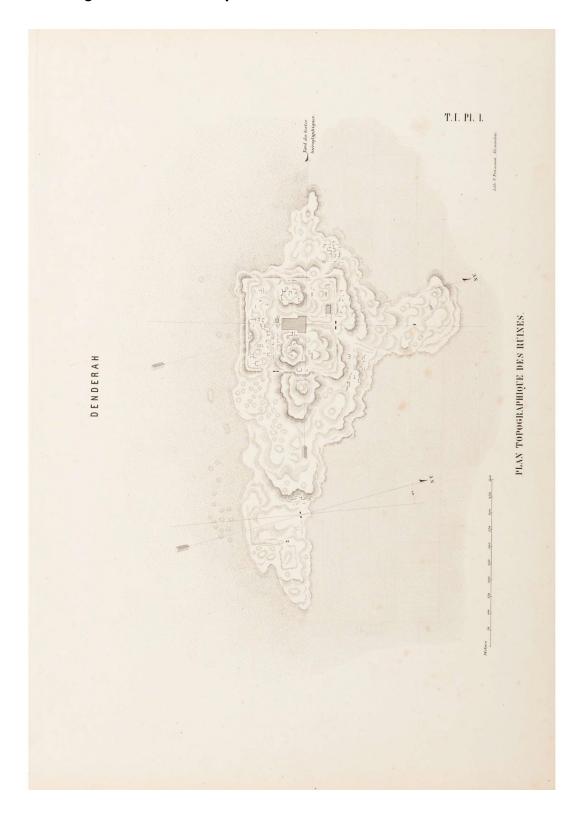
12.3 Figures

12.3.1 Fig. 2: Napoleonic map of Dendara



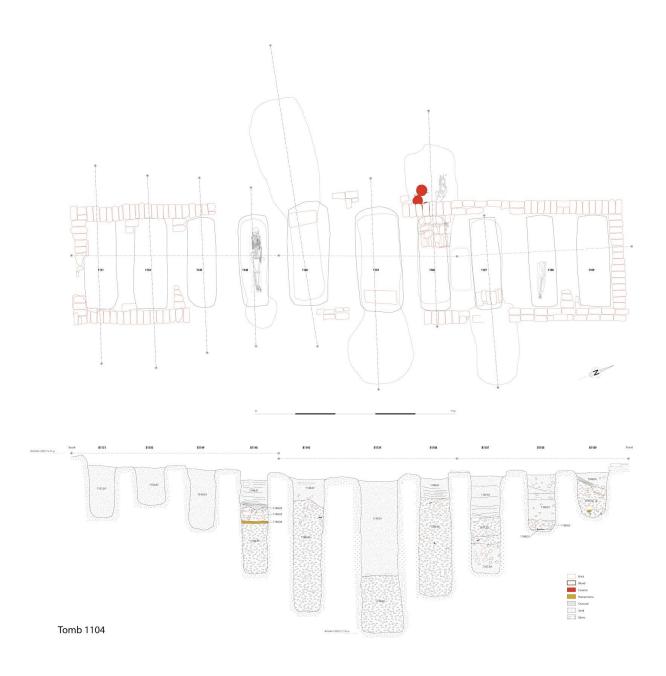
Source: Blondeau, A. 1817 Denderah in Commission des sciences et arts d'Egypt. Description de l'Égypte Paris: Imprimerie impériale.

12.3.2 Fig. 3: Mariette's map of Dendara



Source: Mariette, A. 1870 *Dendérah: description générale du grand temple de cette ville*. Paris: Librairie A. Franck.

12.3.3 Fig. 4: Profile and plan view of shaft group



Source: Tristant 2017.

12.3.4 Fig. 5. Plan view of different offering places found at Dendara

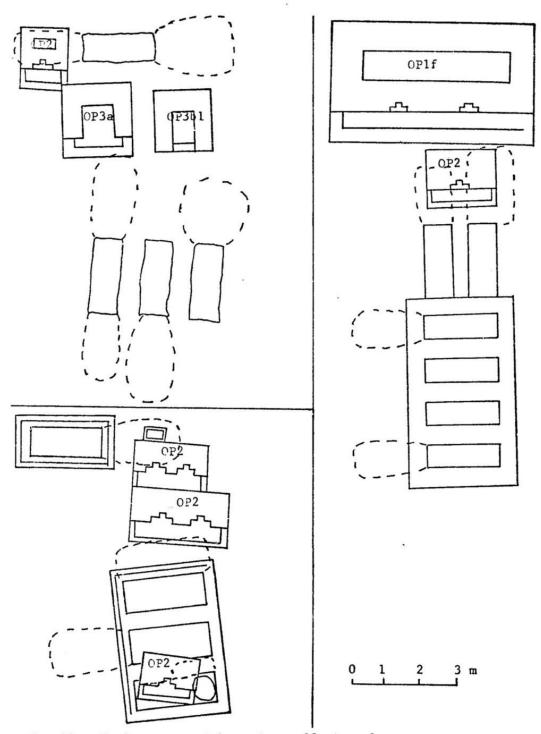
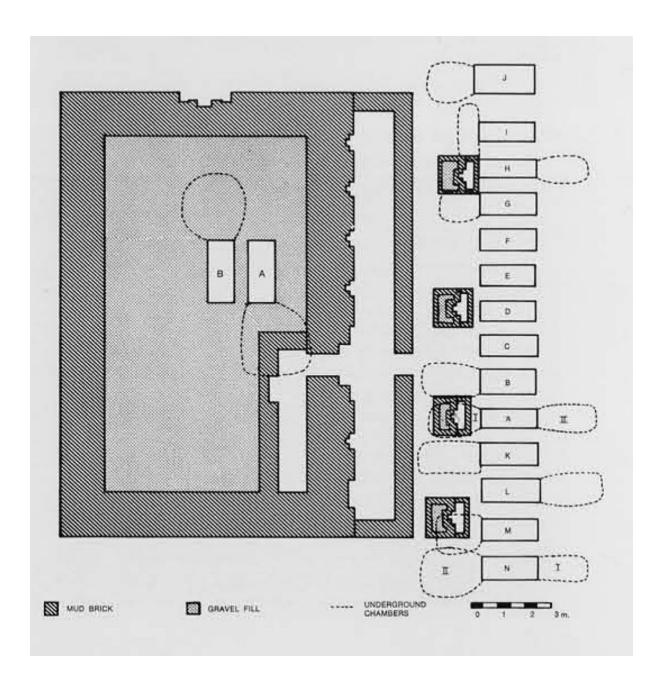


Fig. 32. Shaft-groups with various offering places

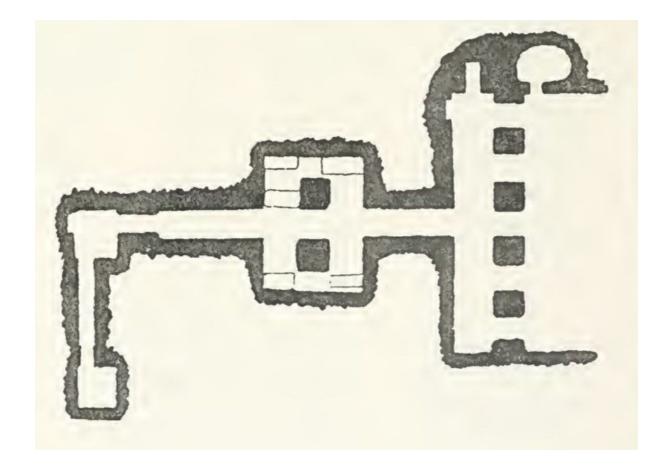
Source: Slater, A.R. 1974 The archaeology of Dendereh in the First Intermediate Period. Unpublished PhD thesis to department of Archaeology, University of Pennsylvania. p.507.

12.3.5 Fig. 6 Plan view of a mastaba showing continuously niched façade and hollow interior.



Source: Slater, A.R. 1970 Dendereh and the University Museum 1898-1970. Expedition 12(4):16.

12.3.6 Fig. 7 Plan view of gallery of Antefaqer II



Source: Petrie, W.M.F. 1900 *Dendereh*. Seventeenth memoir of the Egypt Exploration Fund, Boston: Egypt Exploration Fund. pl.xxxiii.