

INSCRIBING THE PYRAMID OF KING QAKARE IBI:
SCRIBAL PRACTICE AND MORTUARY LITERATURE IN LATE OLD KINGDOM EGYPT

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ABSTRACT

This thesis investigates how the burial chamber of the 8th Dynasty pyramid of king Qakare Ibi at Saqqara in Egypt (c. 2109–2107 B.C.) was inscribed. It uses a holistic approach to focus on the textual programme and its unusual aspects in comparison to older pyramids. In doing so, it addresses issues of textual transmission and of scribal practice in the process of inscribing the walls of subterranean chambers in pyramids. The aim is to contextualise the texts of Ibi within the Memphite tradition of Pyramid Texts and the development of mortuary literature on different media from the late third millennium BCE Old Kingdom to the Middle Kingdom in the early second millennium BCE.

The first chapter presents the background to this research and information on king Ibi and his pyramid. The second chapter treats research on the arrangement of the texts on the walls of subterranean chambers of royal pyramids of kings and queens and compares the layout of the texts in the pyramid of Ibi with older pyramids. It then discusses in detail one section on the east wall of Ibi, where the order of spells diverges from other transmitted sequences. The unusual combination of spells and the practice of shortening spells is investigated further in the third chapter, where two sections of texts on the south wall are analysed. The fourth chapter explores garbled texts and discusses processes of copying and inscribing the texts onto the walls of pyramids. The fifth chapter analyses the modifications of the writing system in pyramids, especially the mutilation of hieroglyphs, and how this practice relates to the tradition of altering signs in pyramids. Finally, the sixth chapter synthesises the results of the preceding chapters in two sections. The first section summarises the process of inscribing pyramids and contextualises aspects of scribal practices within it. The second section concludes the thesis with a discussion of the features of the textual programme of Ibi and of how it relates to the broader transmission of mortuary literature.

Keywords

Old Kingdom – First Intermediate Period – Middle Kingdom – Pyramid Texts – Coffin Texts – mortuary literature – textual transmission – monumentalisation – mutilation of hieroglyphs – scribal practice – materiality – performances

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Old Kingdom

W	Pyramid of king Wenis, North Saqqara
T	Pyramid of king Teti, North Saqqara
P	Pyramid of king Pepy, South Saqqara
M	Pyramid of king Merenre, South Saqqara
N	Pyramid of king Pepy II, South Saqqara
An	Pyramid of queen Ankhesenpepy II, South Saqqara
Bh	Pyramid of queen Behenu, South Saqqara
Jp	Pyramid of queen Iput II, South Saqqara
Wd	Pyramid of queen Wedjebteni, South Saqqara
Nt	Pyramid of queen Neith, South Saqqara
J	Pyramid of king Ibi, South Saqqara
	Wooden fragments of Meritites II

First Intermediate Period and Middle Kingdom

P T2147	Papyrus P T2147 (MafS, Service des Antiquités)
P Gardiner II	Papyrus Gardiner II (London BM EA 10676)
P Gardiner III	Papyrus Gardiner III (Chicago P. OIM 14059)
P Ramesseum E	Papyrus Ramesseum E (London EA10753,2)
B1C	Coffin of Sepi, el-Bersha (Cairo CG 28083)
B9C, B10C	Middle and outer coffins of Amenemhat, el-Bersha (Cairo CG 28091–2)
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B16C, B17C	Inner and outer coffin of Neferi, el-Bersha (Cairo CG 28087–8)
S1C, S2C	Inner and outer coffin of Meseheti, Asyut (Cairo CG 28119–9)
	Tomb of Reherishfnakht, South Saqqara
Sen	Tomb of Senwosretankh, Lisht
L-Jmh1	Tomb of Imhotep, Lisht

New Kingdom

TT 87 Tomb of Nakhtmin, Thebes

Saite Period

TT 33 Tomb of Petamenemope, Thebes
Tomb of Radjaa, Heliopolis (Cairo JE 89503)

Introduction

The pyramid of the 8th Dynasty king Qakare Ibi (2109–2107: Allen 2015, 1) at South Saqqara is the latest inscribed pyramid known so far. It has a hybrid character, with the layout and size of pyramids designed for queens but texts produced for a king. The texts themselves present the features of the Pyramid Texts found in the 5th and 6th Dynasty pyramids, but they show many unusual aspects, notably otherwise unknown texts, whole sections copied in the wrong order, and spells arranged and compiled in ways that diverge from those of older pyramids. Observations of these points led scholars from the beginning to assert that the order and choice of spells in the pyramid of Ibi were indiscriminate and follow no recognisable pattern (e.g. Jéquier 1935, 6; Theis 2010, 328). Although the texts of Ibi—or rather a selection of them—were published in 1935, they have hardly been the subject of research. They are usually considered corrupt and outside the main tradition of the Old Kingdom and have therefore mostly been disregarded in studies on the Pyramid Texts (e.g. Allen 2015, 3; Hays 2012, 14).

The texts inscribed in the pyramid of Ibi hint at the broader body of religious literature that was accessible at that time and also at the ways in which people—from the designers of the textual programme to the carvers—interacted with that material in order to compile and inscribe the texts for the monument. My approach takes this process into account and aims to contextualise these texts within the transmission of mortuary literature, at the same time as investigating factors related to scribal practices.

AIMS AND METHODS

The principle aim of this research is to address the assumption that the Pyramid Texts of king Ibi are outside the main tradition of inscribing pyramids and to contextualise them

within the development of mortuary literature. My points of departure centre around the following questions:

- To what extent do the spells and their arrangement in the burial chamber diverge from older ones? (chapter 2)
- How can we approach such divergent sections of text? By what means were the texts compiled? (chapter 3)
- Why are some sections of texts only partially identifiable from known Pyramid Texts spells? Are these spells miscopied (garbled) or do they consist of different compositions? (chapter 4)
- Why do the modifications in the writing diverge from the development of mutilations of hieroglyphs found in older pyramids? (chapter 5)

The first chapter presents the background to this research and information on king Ibi and his pyramid. The second chapter focuses on research about the arrangement of the texts on the walls of subterranean chambers of royal pyramids and compares the layout of the texts in the pyramid of Ibi with older pyramids. It then discusses one divergent section on the east wall of Ibi. The third chapter studies the unusual combinations of spells in Ibi in more detail by investigating two sections of texts on the south wall. The fourth chapter explores garbled texts and discusses processes of inscribing the texts onto the walls of pyramids. The fifth chapter analyses the modifications of the writing system in pyramids, especially the mutilation of hieroglyphs. Parts of Chapter 3 and 5 are revised versions of sections in Alvarez (2016).

Although these different questions are all based on aspects of the texts that are visible on the walls of the burial chamber, they relate to different phases in the processes of transmission and inscription. It is necessary to take into account the multi-layered process that shaped the texts from manuscripts to the walls of pyramids. The monumentalisation of the texts, which Harold M. Hays (2012, 257–63; 2015) and Antonio Morales have discussed (2016b), involves more modifications than transmission from manuscript to manuscript, since it exploits different writing materials and adapts a text to a different context, with the consequent alteration of its scale, script, layout, and function. The text is altered by the processes of transmission, compilation, edition, and transcription, as well as by the interaction between the texts and the people involved. I use a holistic

approach in order to take these elements into account. I consider the texts from different perspectives and at different levels: at the level of the word by looking at determinatives, at the level of spells by looking at their combinations, and at the level of the walls by comparing their arrangement in different contexts. I further approach these issues comparatively and diachronically relying on the textual material available from the Old Kingdom to the Middle Kingdom.

This time-frame is chosen in order to provide a more detailed analysis of the textual transmission between the two main bodies of material evidence, inscriptions in pyramids and on coffins. I therefore take into account textual evidence found on different media: pyramids, coffins, papyrus. In line with other scholars, I consider the two corpora—Pyramid Texts and Coffin Texts—as stemming from a broader ensemble of mortuary literature (Silverman 1989, 33; Baines 2004, 21; Mathieu 2004, 259; Goebis 2008, 2–3; Hays 2009a, 105; Smith 2009, 5; Allen 2017, 29) and consisting primarily of ritual utterances (Baines 2004, 16; Smith 2017, 117). The circumstances of the archaeological context influenced the initial understanding of the transmission of Pyramid Texts and led to the hypothesis that access to such materials was at first a privilege of the kings at was only later granted to more members of the society. This so-called ‘democratization of the afterlife’ has been refuted (Mathieu 2004, 256–8; Willems 2008; summary in Smith 2009). Finally, the distinction between the two corpora has also been challenged because of the occurrence of ‘Coffin Text’ spells in pyramids and vice versa. The use of texts of similar character to Pyramid Texts spells, that is, glorifications (*s3hw*-spells: esp. Assmann 1990), in non-royal ritual performances is attested from the 5th Dynasty onwards (Mathieu 2004, 256–8; Coulon 2004, 122; Hays 2011, 127; Smith 2017, 182–3). This observation has led scholars to argue for the precedence of orality (Baines 2004, 16) and to state that the language of the Pyramid Texts alludes to ‘a conceptually oral form of discourse, which emerges from composition in oral performance’ (Reintges 2011, 47). The development of mortuary literature should be seen in relation to its interaction with the context of ritual performances (Hays 2002), as well as to the religious, cultural, and political context (Morales 2017).

My approach of Pyramid Texts diverges from existing ones in that I do not distinguish royal/non-royal and female/male beneficiaries nor do I distinguish the contexts in which these texts are inscribed: pyramids, coffins, papyrus. Although the treatment of the texts might diverge depending on these factors, I believe that they have been edited at different levels and adapted to different contexts and media, but that they are essentially

the same. Following these categories linked to the various contexts (pyramids or coffins), gender (kings or queens), and status (royal and non-royal) could be misleading in the study of the texts of Ibi. The character of the pyramid is to some extent hybrid, as it consists of a typical pyramid of queen inscribed with texts intended for a royal king, but with a significant proportion of unparalleled texts that present characteristics of those found on coffins.

By considering aspects of the texts at different levels of details and from a micro and macro perspective, I intend to address the underlying reasons for these various features of the texts and to give back dimensionality to the carved texts, by shedding light on the agency of the multiple actors involved in such a process and emphasizing the interaction with the materiality. My approach to the texts follows the New Philology, as described by Ramadan Badry Hussein:

The New Philology's dogma of text volatility and particularly McGann's view of text as 'shape-shifter' are echoed in the philosophical sub-discipline of Phenomenology, which regards text as cultural phenomenon that constantly evolves as a result of human engagement with it, either by creation, canonization, transmission, reception or modification. (2017, 299)

Within a general text-based approach, I develop a specific method for each question, which is presented at the beginning of the relevant chapter. The thesis ends by considering the relationship of the texts of Ibi with the Memphite tradition of inscribing pyramids and the development of mortuary literature in the late Old Kingdom and its aftermath.

TRANSCRIPTION AND TRANSLATION

This thesis relies on the material published by Jéquier (1935) and is complemented by photographs taken during the reopening of the pyramid of Ibi in 2015 by the Mission archéologique franco-suisse de Saqqâra (MafS).

Jéquier (1935) published diagrams of the north wall (7, fig. 4), south wall (12, fig. 5) and east wall (14, fig. 6); he did not attempt to reconstruct the west wall (Jéquier 1935, 11–12). Detailed copies of the texts on each wall are provided independently showing only sections of texts (Jéquier 1935, pls 3–14), as well as copies of unreplaced fragments (Jéquier 1935, pls 15–16). I have merged his plates in order to give a clearer overview of the texts on each wall (Pls 1; 3; 5); I also indicate Sethe numbers of the spells (Pls 2; 4; 6). The identification of the spells is based on Jéquier (1935, 15–19), and on the synoptic versions of Sethe (1908–22), updated by Allen (2013); new identifications result from the

comparison of Ibi's sequences with Hays's recurrent series (2012) and unidentified texts are indicated by dashes.

The references to the different wall sections follow the conventions of the MafS (see Berger el-Naggar *et al.* 2001, 6–9). These conventions are intended to allow a straightforward identification of the spells within the spatial context of the subterranean areas of the pyramids. Texts are located using the following system: name of king or queen/subterranean area/cardinal direction, register in roman numerals, columns in arabic numerals. Thus, Ibi/F/S I 2–4 stands for Ibi/burial chamber (F for 'funéraire') /South 1st register, cols 2 to 4.

The plates at the end of the thesis complement Chapter 2, where the arrangement of the walls is discussed. The short sections of texts studied in chapter 3 and 4 use another numbering for the sake of clarity and cross-referencing: since the purpose of these case studies is to analyse such sections in detail, a numbering starting at 1 seemed more convenient. Nonetheless, the corresponding numbers on Jéquier's plates and on the plates provided in this thesis are indicated in the caption below each figure.

The figures in the thesis show texts that are present *in situ* in solid lines, while restored hieroglyphs are given in dashed outline. Restorations of the text in Ibi are based on parallel versions in the Pyramid Texts (Sethe 1908–22 and Allen 2013) and Coffin Texts (de Buck 1935–61), and supplemented with the work of the MafS (Berger el-Naggar *et al.* 2001). My reconstruction of the texts uses the hieroglyphic font under development by Marie-Noëlle Fraisse¹, which provides all the signs typically found in the Pyramid Texts, such as mutilated hieroglyphs, and allows the user to modify or create additional hieroglyphs with Adobe Illustrator. My figures are not facsimiles as they have not been drawn directly from the monument, but I have verified my restitutions with the unpublished photographs of the MafS. The aim of these figures is to render the texts in Ibi as closely as possible to the reality of what survives so as to provide some support for textual comparisons. In chapter 4, the hypothetical originals, which would be cursive manuscripts, are displayed in hieroglyphs rather than cursive signs for the sake of clarity. Sethe's or de Buck's spell numbers are indicated to the right of each column; the order of reading is indicated by the numbers at the top of each column.

¹ A member of the CNRS and MafS, currently working on the publication of the texts of the pyramid of queen Behenu.

The restoration and the transliteration of the texts of Ibi are made on the basis of the parallel in the editions of the Pyramid Texts (Sethe 1908–22; Allen 2013) and the Coffin Texts (de Buck 1935–61). The transliteration indicates words that are in a lacuna with [...], words or parts of words that are not in their expected position and can be considered superfluous with {...}, words omitted by the scribe with <...>. The arrangement of the text of Ibi is signalled by a vertical stroke followed by a superscript number |⁷; this refers to the column of Ibi in the figure in question. Other numbers in superscript refer to footnotes, while the letters in superscript in the translation refer to the comments after the translation. The cartouches in the original do not alternate systematically between Qakare and Ibi. Where a cartouche is in lacuna, for ease of reading I restore the name in the translation consistently as ‘Ibi’.

Finally, renderings of the texts in general follow the translations of Sethe (1937), Faulkner (1969), and Allen (2015); they are only lightly annotated in footnotes. I have chosen to keep the translations as neutral as possible, without literary pretension. My aim is not to propose a new translation of the texts of Ibi at this stage, but to make visible the impact of the order and the juxtaposition of the spells on the text itself.

PAST AND PRESENT WORK ON INSCRIBED PYRAMIDS

Gaston Maspero (1846–1916) entered the pyramids of Wenis, Teti, Pepy I, Merenre, and Pepy II in 1881 and published the inscriptions in them in the *Recueil de Travaux* between 1882 to 1893 (subsequently gathered in a book in 1894). Maspero’s publication includes a transcription based on photographs and squeezes made by various scholars (Sethe 1908, ix–x). This material enabled Sethe to publish a synoptic edition of the texts of the five pyramids of kings (Wenis to Pepy II) and later to write a commentary on them (1935–39). Gustave Jéquier excavated and published the pyramids of Pepy II (1936) and his queens—Wedjebteni (1928), Neith and Iput (1933)—as well as the pyramid of Ibi (1935). In 1968, Alexandre Piankoff published the texts of the pyramid of Wenis in photographs and translation. The new spells in this additional material were then included in R. O. Faulkner’s 1969 supplement to his volumes of translation. The presentation there consisted of a conflated version of the texts rather than a synoptic edition, with the transcription using the best preserved version—that of Neith—and completed it with the others where necessary.

From 1963 onward, the Mission archéologique française de Saqqara (MafS), created by Jean-Phillipe Lauer (1902–2001) and Jean Leclant (1920–2011), focussed on the inscribed pyramids of South Saqqara and the excavation of the complex of Pepy I. So far, the mission focussed on the reconstruction, restoration, and publication of the Pyramid Texts of Pepi I (Berger el-Naggar *et al.* 2001) and on the excavation of the south and west area of the complex of Pepy I (summary in Leclant 1982; bibliography of the research on Pyramid Texts from 1882 to 1996 in Guilhou and Mathieu 1997). Several pyramids of queens were unearthed, among which two are inscribed: the pyramid of Ankhesenpepy II found in 1998 and Behenu found in 2008. The two pyramids of queens in the complex of Pepy I as well as the pyramids of Teti and Merenre are currently under study or in press (Mathieu, Berger el-Naggar and Fraisse, Bène and Isabelle Pierre-Croisiau respectively). The Middle Kingdom tomb of the high official Reherishfnahkt, which is in the complex of Pepy I and includes Pyramid Texts and Coffin Texts, is also under study. A new publication of the pyramid of Neith, including fragments found in 2012, is also in preparation (Collombert). So far, inscribed pyramids range from the end of the 5th Dynasty (Wenis), 6th Dynasty (Teti, Pepy I, Merenre, Pepy II and the queens Neith, Iput, Wedjebteni, Ankhesenpepy II, Behenu) to the 8th Dynasty (king Ibi). Allen published an updated translation (Allen 2005, revised and extended in 2015) and a synoptic version now available online (Allen 2013); the latter includes the texts from all these pyramids except the ones of Behenu.

Since the discovery of the pyramid of Ibi in 1930 by Jéquier, its texts have barely been studied. This neglect has been justified by the unusual character of the inscriptions and their arrangement on the walls, as well as the unusual structure of the pyramid itself. In Faulkner's publication (1969), the texts of Ibi were used as a source only when all other sources were missing; the author stated that 'the pyramid in question is later than the end of the Sixth Dynasty and is not entirely in accord with the original canon' (Faulkner 1969, vi–vii). For the same reason, James P. Allen (2005, 3) does not include it in his translation. Thus, the only published translation of this set of texts so far is by Claude Carrier (2010, 2091–2331), which does not provide any philological treatment and is also often problematic. The many unidentified and often garbled texts are not mentioned in his publication, and he does not explain their absence. The garbling of the texts was mentioned by Jéquier (1935, 6) and Thomas George Allen (1950), but only Isabelle Pierre-Croisiau (2004, 263–78) and Susanne Bickel (2004, 91–117) have studied a few spells in more detail. The ensemble of the texts of Ibi has not been taken into account in studies focusing

on the relationship of the texts and their architectural contexts (e.g. Altenmüller 1972 and Hays 2012), because of the different subterranean structure of the pyramid. However, they have been considered by Antonio Morales (2013 and 2016) in his study of the transmission of the texts of Nut from the Old Kingdom to the Middle Kingdom.

My research on the texts of Ibi was undertaken in parallel to fieldwork with the Mission archéologique franco-suisse de Saqqâra (MafS). In October 2015, I had the opportunity to lead the first opening of the pyramid of Ibi in eighty years, following on from the work of Gustave Jéquier. The re-opening brought to light 458 inscribed fragments (up to 80 centimetres in length), which had not been included in Jéquier's 1935 publication. This unexpected discovery reveals that a substantial amount of new textual material will be available. Although I am not able to include this material in this thesis, this does not affect its topic directly, because my research focuses on selected case studies. One aim of this research is to develop a better understanding of the texts and how they were edited and arranged in antiquity so as to help with the reconstruction and study of those that have not yet been treated by scholars.

THE TRANSMISSION OF MORTUARY LITERATURE

To date, only the walls of eleven pyramids and a few 6th Dynasty wooden coffins, such as the coffin of Medunefer from Balat and that of Anu from Saqqara, represent the only surviving media for mortuary literature of the Old Kingdom (see Smith 2009, 2). Nonetheless, the use of the offering list as found in the Pyramid Texts is already attested in the funerary temple of the 5th Dynasty king Sahure (Borchardt 1913, pl. 63: discussed by Sethe on p. 126) and even earlier on non-royal settings (Hays 2012, 96–7; Morales 2016a, 79–96). Very little is known about the way these texts were produced, stored, and transcribed onto monuments: no design containing the arrangement of the texts to be copied on the walls has been found so far and there is no information about the people in charge of the various phases of the process nor the media used in the inscription of a pyramid.

There is also a paucity of general archaeological evidence for the period following the reign of Pepy II. To date, except for the pyramid of Ibi, no other royal tombs from the 7th and 8th Dynasty have been found. Vasil Dobrev (2017, 59), who excavated the necropolis at Tabbet el-Guesh in South Saqqara, suggests that royal tombs from the 7th–8th dynasty are likely to be found in that area. The Spanish mission's survey of Herakleopolis in 2001 brought to light evidence of a necropolis from the First Intermediate

Period, but no royal tomb has been found so far (Pérez Die 2005, 240). However, the 12th Dynasty coffin of the non-royal individual Neferi (Cairo Museum) is inscribed with texts that were originally edited for the 9th Dynasty king Wahkare Khety (Allen 1976). This suggests that mortuary literature continued to be inscribed in this period; whether those texts were inscribed on the walls of his tomb, on his coffin, or on papyrus is uncertain.

According to Jaromir Malek (1994, 207–08), Herakleopolitan kings may have been buried at Saqqara. He suggests to identify ‘Lepsius pyramid no. XXIX’ as belonging to the 9th Dynasty king Merikare. That pyramid, also called ‘the headless pyramid’, is located close to the pyramid of Teti, where evidence for a cult of Merikare was found (Willems 2008, 175). Malek’s assumption has been challenged by Zahi Hawass (2010, 153–70) and Philippe Collombert (2011, 29–30), who links the pyramid to the 5th Dynasty king Menkauhor. The suggestion of Hratch Papazian (2015, 422) that pyramids exist for other 8th Dynasty kings, Neferkauhor and Demedjibtawy, is based on the titles of two of their officials as ‘Overseer of the Pyramid-Town’ although titles ‘may have lost the specific association with a monument that it once carried’. Thus, future excavations in Saqqara may well bring to light more pyramids.

Contrasting with the scarcity of royal burial evidence is a significant amount of non-royal inscribed coffins from the provinces, mainly concentrated in Beni Hassan, el-Bersha, Meir, Asyut, and Thebes. The issue of their problematic dating is considered by Jochem Kahl (2016, 32–3), who reassesses the dating of coffins from Asyut in light of the ongoing excavations directed by him. Kahl argues that some coffins from Asyut should be dated to the beginning of the First Intermediate Period instead of the Middle Kingdom. The same problem of dating applies to the only two groups of papyri with mortuary literature found for this period: P T2147 and P Gardiner II–IV, whose dating between the late Old Kingdom and Middle Kingdom is debated; these are discussed in more detail in Chapter 4.

The study of the transmission of mortuary literature in the Old Kingdom is hampered by the scarcity of direct attestations other than the pyramids themselves. The assumption of a transmission made directly from the copy of the walls is unlikely. Christopher Eyre (2002, 12) argues that the pyramid of Wenis might have been accessible in the early Middle Kingdom, but that ‘there can indeed be no reasonable doubt that inscription themselves were copied immediately from papyrus texts’ (see also Kahl 1996, 70–2). The access to the subterranean chambers of pyramids was closed after the burial of the king; it would not be possible to access it without removing the chapel built on the opening of the descending corridor and the monolith granite blockings. Maspero’s accounts

of his excavation of the pyramids of South Saqqara makes it doubtful that anyone with other purpose than taking out valuable objects would have attempted his way in: access to the burial chamber required to penetrate the approximate 18 metres long descending corridor and to follow the looters dugged channel above the three granite blockings—which was just large enough for a slim man to crawl through it (this system was used to enter all 6th Dynasty pyramids cf. Maspero 1894, 1–2: Wenis; 87–8: Teti; 256; Pepy I; 330: Pepy II). Maspero found lamps dating from the 9th–10th century and a painted graffiti mentioning the caliph Mamoun (820 A.D.), which suggests that they were first opened then. However, the reuse of external parts of the pyramid complexes by ancient Egyptians occurs already in Giza in the construction of the Middle Kingdom complex of Amenemhat I at Lisht (Goedicke 1971). Graffiti from craftsmen and scribes dating from the Middle Kingdom/Second Intermediate Period onward are found in the pyramid complexes of South Saqqara and suggest that these monuments were visited (Navrátilová 2015, 197–203), but no evidence attests of the access to the subterranean chambers.

The textual material preserved through the pyramids and the coffins implies the existence of a developed manuscript culture. According to Baines (2004, 17–18), the practice of writing down texts may have arisen between the 2nd and the 3rd Dynasty, perhaps first in a tabular form and later in a continuous form from the 4th Dynasty onwards. This suggests that there was a developed scribal and archival tradition:

Several lines of reasoning suggest that an archive tradition existed from no later than the time when syntax began to be notated. This tradition would have maintained manuscripts of religious compositions on papyrus or leather so that they could be transmitted in archives and exploited in rituals or carved for the almost purely symbolic or magical purpose of the Pyramid Texts. (Baines 2012, 27)

According to Eyre (2013, 311), texts would have been stored in archives and libraries, in the palace and or temple, but there is no clear evidence for their location from before the 12th Dynasty. Mortuary literature is likely to have been stored in the House of Books (*pr mdʒt*), but there is only an indirect reference to that institution in the 5th Dynasty archives of Neferirkare (Parkinson forthcoming, 16). A late Middle Kingdom archive was also found in one of the storerooms of the mortuary temple of Pepy I (Berger el-Naggar 2004, 85–6); however, architectural modifications indicate that this room was readapted during the Middle Kingdom (Berger el-Naggar 1999, 29). A 6th-Dynasty letter found in the temenos of the pyramid of Djoser suggests that the room was used during the late Old Kingdom (Gunn 1925, 245). According to Gunn ‘It may be that at that time some of the rooms were

utilised as a bureau in connection with the royal building works on the desert'. Eyre (2013, 312) further argues that 'scribes of the House of Life were not only concerned with papyrus books, but with the production of monuments.' Although titles of some Old Kingdom officials refer to a *pr mdjt*, this title does not provide any indication of how they were involved in the inscription of monuments. The process of inscribing pyramids would have required several people with different skills—the designer of the textual programme, copyists, draughtsmen, carvers, painters—and levels of literacy (see further Chapter 4). The preservation of texts would have also required their regular re-copying onto new papyrus rolls simply so as not to become worn out (Bagnall 2006, 358–9; Eyre 2013, 336).

According to Morales (2017, 129), political changes and sacerdotal institutions would have transformed the transmission of mortuary literature. The sacerdotal class of Heliopolis and Memphis would have been both involved in the entextualisation and canonisation of the textual programme in a threefold process (Morales 2017, 4–5). A first adaptation characterised by the 'entextualization of the body of oral materials that formed the Pyramid Text corpus' would have occurred during the 5th Dynasty. The term 'entextualisation', which I also use in my thesis, is defined as a 'fixation in writing' while 'textualisation' refers to further textual editing (Morales 2016a, 70; 73; 75; also Hays 2015). A second adaptation would have been related to the inscription of pyramids of queens in the late 6th Dynasty. This undertaking would have aimed to 'define the alteration of the corpus and the emergence of a series of mechanisms and principles for the adjustment of the Pyramid Texts to the new settings in which they were later used'. Finally, a recension phase would have occurred in the mid-11th Dynasty in order to adapt the text for private mortuary monuments.

The transmission of mortuary literature across different areas of Egypt is also debated. The existence of the 6th Dynasty coffin of Medunefer from Balat (Valloggia 1986), at some distance from the Residence, suggests that the dissemination might have started already quite early. Non-royal mortuary texts then occur all over Egypt on coffins until the late 13th Dynasty, but their diffusion is not homogenous between Upper and Lower Egypt (Allen 1996, 15; Willems 2008, 172–89). In order to account for the concentration of inscribed coffins in three major locations—the Memphite area, Middle Egypt (from Qaw el-Kebir to Beni Hassan), and Thebes (Willems 2008, 173)—scholars argue that textual transmission would have been tightly linked to political contexts. Louise Gestermann (2004, 215) proposes, on the basis of a stemmatic analysis of CT 404, that Montuhotep II is likely to have transferred the archives from Memphis to the House of Life

of Hermopolis, close to el-Bersha; they would have been transferred later to Thebes. Willems (2008, 184) further discusses the presence of Coffin Texts in Middle Egypt and Thebes can be linked not only to the change of capital, but also to the nomarchal system. The Middle Kingdom official Iha from el-Bersha, who was a nomarch in Thebes and responsible for a House of Life in Hermopolis, could have acted as a link in the transmission of texts to Thebes (Willems 2014, 177; 189).

However, the texts preserved on the Middle Kingdom coffin of Neferi coffin from el-Bersha that refer to the Herakleopolitan king Wahkare Khety hint at a continuity with the Memphite tradition (Schenkel 1978, 36). Moreover, Lilian Postel's (2005) study of the transfer of a northern variant of offering invocations support a transmission from Memphis, and then Herakleopolis, before appearing in various locations of Middle Egypt. The assumption of single centralised archives is likely to simplify a more complex reality in which texts would have been produced and stored in different parts of Egypt, including some for which no specific evidence is preserved. For instance, Gestermann (2004, 213) states that it is difficult to distinguish the status of el-Bersha from that of Asyut, since the latter was a highly regarded cultural centre, and that there is evidence of contacts between Asyuti elites and artists with scholars from the Residence (Kahl 2007, 15–16; 152). Indeed, several scholars have underlined the possibility that different traditions contributed to the Coffin Texts. Willems (2008, 178) supposes that other genres of texts might have been produced in Heliopolis and in Memphis in parallel to the material used in the pyramids, and that at various points in the Middle Kingdom they would have been transmitted onto coffins. In the process, different traditions could have been merged (Gestermann 2004, 207), and centres of production in Middle Egypt might have coexisted with those in the Memphite area (Bène and Guilhou 2004, 82).

According to this overview of textual transmission of Pyramid Texts and Coffin Texts, the designers of Ibi's texts would have had access to Memphite archives, since the royal archive would not have been moved to another place before the late Herakleopolitan period (Gestermann 2004, 215). The texts of Ibi also fall within Morales's 'second adaptation', which he described as the process in which the material was altered to fit the smaller subterranean chambers of queens's pyramids. Since the content and form of the texts of Ibi are at a crosspoint between textual arrangement intended for kings within the structure of a pyramid of queens, I address, in this thesis, questions related to how far the adaptation undertaken for Ibi was deliberate rather than mechanical and how far the

processes involved differ from those of 5th–6th Dynasties of both kings and queens. I attempt a more holistic assessment of the material processes involved.

THE PYRAMID OF KING QAKARE IBI

The pyramid of king Qakare Ibi is located in South Saqqara, close to the causeway of Pepy II (Fig. 1.1 and 1.2). The structure of a pyramid was first recognised by Richard Lepsius (1872–1873, pl. 34), who labelled it ‘Steinpyramide No. XL’. Gustave Jéquier identified the owner, king Qakare Ibi, during his excavation in 1930. He found fragments in the burial chamber bearing Pyramid Texts with the names of the king alternating between two cartouches ($k^3-k^3-r^c$) (𓄎𓄏𓄏𓄏), with the mutilated human signs showing only the upper part of the body, and (jbj) (𓄎𓄏𓄏).

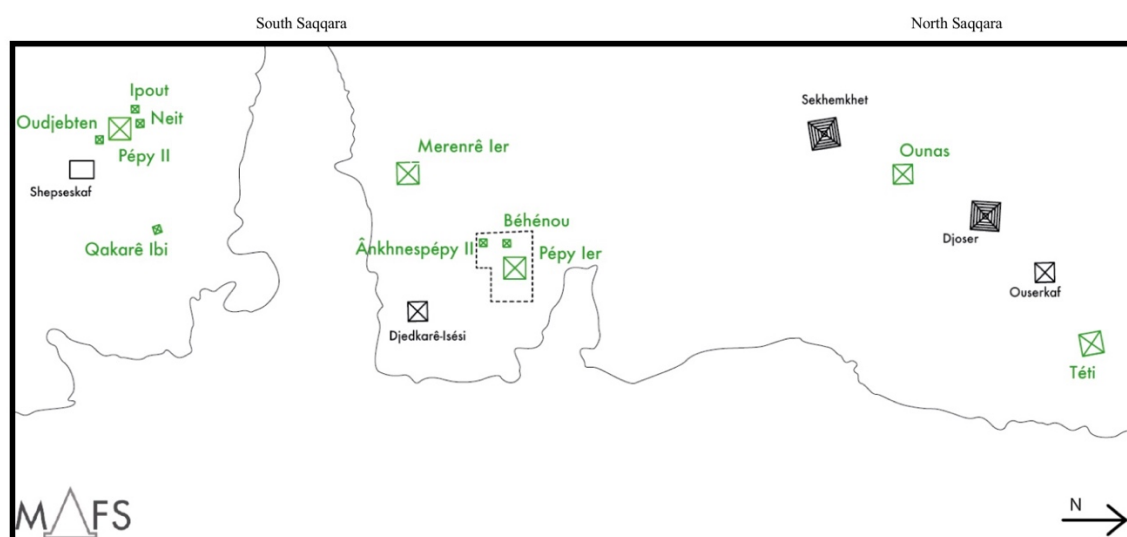


Fig. 1.1: Schematic map of Saqqara, showing identified pyramids (accessed 28.10.2017)

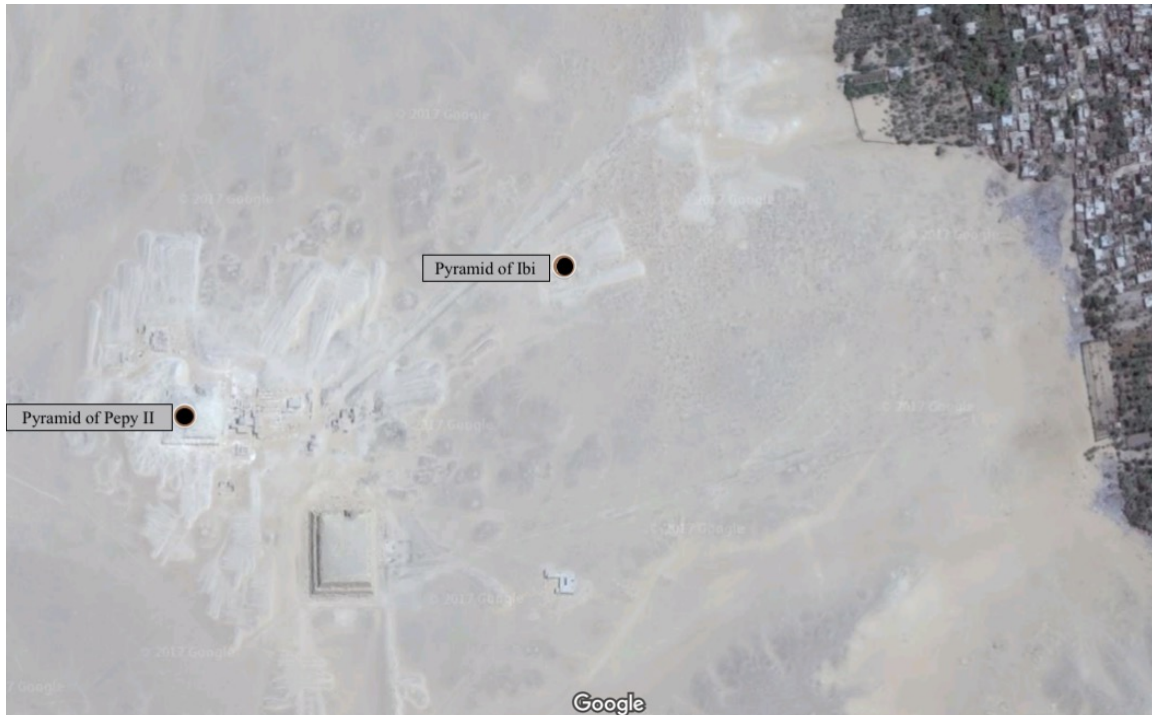


Fig. 1.2: Google Earth view of the pyramid of Ibi and its surroundings (accessed 28.10.2017)

The name of king Qakare Ibi is otherwise only found in the Abydos and Turin king lists. The 53rd entry of the Abydos king list (Mariette 1869, pl. 43, 53; von Beckerath 1984, 37–8) indicates  (*kʷ-kʷw-rʿ*); the standing human figure is fully written but damaged. According to Kim Ryholt (2000, 99, n. a, and 2004, 149), the plural strokes at the end of the name might be a mistake of the scribe. It could also be an alteration that happened over time or a restitution of the scribe based on the common form *kʷw-rʿ* of the following kings. The cartouche  is found in the Turin king list (Gardiner 1959, pl. ii; Ryholt 2000, 91; 95 in col. 5/10). The writing of the name with the calf has been found so far only once in the south wall of the burial chamber of Ibi, but this occurrence shows that the variant is contemporaneous with the king (Jéquier 1935, 21 and pl. ix, col. 328; discussed in Chapter 5).

Ryholt's (2000, 88; Fig. 1.3) repositioning of fragments n. 43 and n. 61 in the Turin king list has provided new information about the reign of Ibi. Ibi ruled both earlier and longer than previously thought. This new interpretation places Ibi as the fifteenth king after Pepy II and lengthens his reign from one year (Jéquier 1940, 99) to two years, one month, one day. The position of Ibi just before the total of the 6th to 8th Dynasties in the Turin king list places his rule during the 8th Dynasty, around 2150 B.C. (end of the Old Kingdom *c.* 2575–2150: Baines 2011, 27), or his rule around 2109–2107 B.C. according to

Allen (2015, 1). According to Renate Müller-Wollermann (2014, 2) ‘the kings of the 8th Dynasty were ephemeral: all their reigns combined probably lasted about one generation, or 50 years at the most.’

Table 1. The Kings of the Sixth and Seventh/Eighth Dynasties

Reconstructed Succession	Abydos Canon	Turin King-list
Teti	34: Teti	5/1: [. . .], [. . . years], 6 months, 21 days
Userkare	35: Userkare	5/2: [. . .], [. . .]
Meryre Pepi I	36: Meryre	5/3: [. . .], 20 years
Merenre Nemtyemsaf I	37: Merenre	5/4: [. . .], 44 years
Neferkare Pepi II	38: Neferkare	5/5: [. . .], 90 [+ x] years
Merenre Nemtyemsaf II	39: Merenre Nemtyemsaf	5/6: [. . .], 1 year, 1 month, (0 days)
Netjerkare Siptah	40: Netjerkare	5/7: Nitocris Siptah, [. . .]
Menkare	41: Menkare	5/7: [Lacuna, 6 years]
Neferkare	42: Neferkare	
Neferkare Neby	43: Neferkare Neby	
Djedkare Shemai	44: Djedkare Shemai	
Neferkare Khendu	45: Neferkare Khendu	
Merenhor	46: Merenhor	
Neferkamin	47: Neferkamin	
Nikare	48: Nikare	
Neferkare Tereru	49: Neferkare Tereru	
Neferkahor	50: Neferkahor	
Neferkare Pepi-Sonb	51: Neferkare Pepi-Sonb	5/8: Neferka(re) Khered-Sonb, [. . .]
Neferkamin Anu	52: Neferkamin Anu	5/9: Nefer(kamin), [. . .]
Qakare Ibi ^a	53: Qakaure	5/10: Ibi, 2 years, 1 month, 1 day
Neferkaure	54: Neferkaure	5/11: [. . .], 4 years, 2 months, (0 days)
Neferkauhor Chui . . . (?) ^b	55: Neferkauhor	5/12: [. . .], 2 years, 1 month, 1 day
Neferirkare	56: Neferirkare	5/13: [. . .], 1½ years

Fig. 1.3: Ibi’s position in the king lists, after Ryholt (2000, 99, table 1)

Some scholars include the 7th and 8th Dynasty in the Old Kingdom (e.g. Baines and Malek 2002, 35; Seidlmayer 2000, 118; Willems 2010, 81–100; Hays 2012, xxv; Allen 2015, 1; Papazian 2015) and others in the First Intermediate Period (e.g. Grimal 1992, 140; Lehner 1997, 164; Assmann 2002, 81; Barta 2005, 177; Baud 2010, 63–80; Theis 2010, 321–2). Although the First Intermediate Period was usually described as deriving from the collapse of the Old Kingdom and characterised by ‘phenomena such as social disruption, economic distress, (...) artistic decline, administrative chaos, declining royal power and so on’ (Willems 2010, 82), scholars now argue for a smoother transition with ‘no traumatic signs of a crisis’ (Moreno Garcia 2016, 94; see also Gee 2015, 65; Müller-Wollermann 2014, 1–9). According to Hratch Papazian’s reinvestigation of the sources from the late Old Kingdom:

... the Eighth Dynasty should not be regarded as being far removed in terms of chronological distance or character from the Old Kingdom proper. ... the current state of evidence should permit the inclusion of the Eighth Dynasty within the Old Kingdom and

the extension of the unified character of the Egyptian state until the threshold of the Herakleopolitan period. (2015, 24)

Jéquier's account of the site from the time of his excavations (1935, 21; 1940, 99) described the pyramid of Ibi as modest, with a semi-royal architecture, and as representative of the historical context following a '6th Dynasty in its death-throes'. The pyramid is indeed much smaller, as well as more similar in design to those of queens than to the standardised dimensions of their male counterparts. The base of the pyramid of Ibi is 60 cubits (Jéquier 1935, 3), that is, 31.50m, whereas the base of most of the pyramids of kings—from Djedkare-Isesi onwards—reaches 150 cubits or 78.75m (Lehner 1997, 17; for a detailed architectural account of pyramids of 6th Dynasty kings, see Labrousse 1996). The internal layout is also similar to the pyramids of queens with a bipartite arrangement, instead of the standard tripartite form of pyramids of kings (for pyramids of queens see Bène 1999, 33–40; Labrousse 1999, 106–155 and 2005, 203–13; for a summary genealogy of 6th Dynasty queens see Berger el-Naggar 1994 and Callender 2015, 39–51).

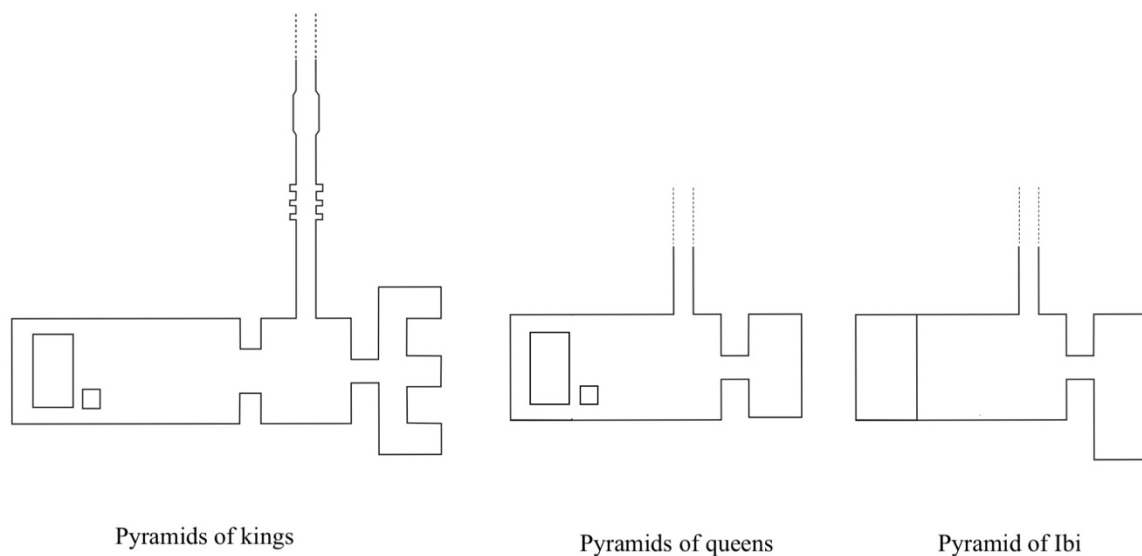


Fig. 1.4: Subterranean structures of Old Kingdom pyramids (based on Mathieu 1999, 14, fig. 1, for pyramids of kings, and on Bène 1999, for pyramids of queens)

Fig. 1.4 shows the standard structure of the subterranean areas of pyramids of 5th and 6th Dynasty kings (left), 6th Dynasty queens (centre), and the 8th Dynasty king Ibi (right). The kingly tripartite arrangement is first found in the uninscribed interior chambers of the pyramid of Djedkare-Isesi (5th Dynasty) and consists of a burial chamber, an antechamber and a serdab. From Wenis onwards, the burial chamber, antechamber, and

entrance to the antechamber are covered with texts carved on the walls; the descending corridor is only inscribed in Pepy I. A similar layout and decoration occur for pyramids of queens in the complex of Pepy I—Ankhesenpepy II and Behenu—and then in the complex of Pepy II—Neith, Iput II, and Wedjebteni. The structure of the subterranean areas of the pyramids of queens is smaller than that of kings and lacks an antechamber and a gabled ceiling. As shown in Fig. 1.4, the pyramid of Ibi shares the design of pyramids of queens, except that three sides of the sarcophagus are embedded in the walls (see further below), and that the serdab is slightly extended.

The length between the westernmost part of the burial chamber and the easternmost part of the serdab is up to 18 metres in pyramids of kings, with the dimension of the burial chamber being standardised to 14/15 cubits long, 6 cubits wide, and approximately 6 cubits high, that is, approximately $7.33 \times 3.14 \times 3.14\text{m}$. The east and west walls of burial chambers and antechambers with the gabled ceiling also offered more surface for the inscription of texts, with a height between 4.91m and 5.04 in kings' pyramids (Labrousse 1996, 210–11, tab. xxviii–xxi). The pyramids of queens, which have only an inscribed burial chamber, present a surface of $6 \times 3 \times 3\text{m}$ (Jéquier 1933, 14), except for that of Ankhesenpepy II, which is $7 \times 3.15 \times 3.70$ (Leclant and Labrousse 2006, 104) and Behenu: $6.47 \times 2.89 \times 3.44$ (Fraisie pers. comm.).

In its dimensions, the pyramid of Ibi is thus closest to the pyramid of queen Ankhesenpepy II, with a base of 60 cubits square. The pyramid of Behenu is a significantly smaller at 50 cubits (Leclant and Labrousse 2006, 104; Berger el-Naggar and Fraisie 2008, 1, n. 4); those of queens of Pepy II are smaller still at 40 cubits. The dimension of the burial chamber of Ibi is also closer to that of Ankhesenpepy II with the following dimension: $6.30? \times 3.14 \times 3.46\text{m}$ (Labrousse forthcoming). As mentioned in the next section, I have identified fragments that belong to the westernmost part of the north wall. This implies that the wall needs to be placed further back from the sarcophagus, which could amend the length of the burial chamber to 7 meters as in the case of Ankhesenpepy II.

The unusual layout and location of the pyramid has led scholars to assume that Ibi usurped the existing pyramid of a queen (Stadelmann 1985, 204; Billing 2011, 60; Callender 2011, 258–60; Morales 2017, 31, n. 124) and enlarged its base (Jánosi 1996, 50). Callender (2011, 258–60) suggests that the pyramid might have been built for the Nitocris of the king lists, since her name is that of a female ruler. Its isolated location would support the assumption that its owner was a queen unrelated to Pepy II, since she was not buried in his complex. However, the gender of Nitocris is challenged by Ryholt (2000, 97), who

argues that there was no female ruler, proposing to identify the Nitocris Siptah of the Turin king list with Netjerkare in the Abydos king list (Fig. 1.3). Moreover, according to Audran Labrousse's reinvestigation of the pyramid of Ibi in 2015–16, the construction of the pyramid is actually of a high standard, and there is no evidence that its base was enlarged as Janosi has suggested. The texts in the burial chamber were also originally inscribed for Ibi: there is no evidence for alteration from another owner's name.

Labrousse (forthcoming) further argues that the location of Ibi's pyramid on the edge of the plateau and its size might have been pragmatic decisions to build a pyramid in a time of reduced resources and short reigns. The state of the pyramid complex—with no enclosure, no casing stones, a simplified mudbrick mortuary temple, and the unfinished decoration of Pyramid Texts—suggests that Ibi died unexpectedly. The texts, although carved, show significantly different levels of treatment: the lower registers are carefully carved (0.5cm depth), whereas the upper ones are barely incised. These unusual features of the pyramid could be more plausibly related to the need to complete it quickly rather than resulting from the political context.

JÉQUIER'S RECONSTRUCTION OF THE TEXTS

Photographs and notebooks of Gustave Jéquier are preserved at the Musée d'ethnographie de Neuchâtel (MEN; journal legs IV n°3)², Switzerland, and provide some insights into his excavations of the pyramid. Jéquier worked partly on the pyramid of Ibi during two seasons, 1930–31 and 1931–32. During these seasons, he worked in various areas of South Saqqara, including excavations of the pyramids of Khendjer, Neith, Iput, and Wedjebteni.

The excavation in the area of the pyramid of Ibi started on 18 February 1930. The substructure of the pyramid was almost completely destroyed, leaving only the first course of stones in the north-east corner of the pyramid. Inscribed fragments from the walls of the burial chamber were found outside the pyramid at the beginning of the excavation in 1930. Although it is not clear whether the pyramid had any casing-stones, the ancient workers carrying the stone blocks removed a significant amount of limestone blocks, including parts of the ceiling and walls of the burial chamber. Jéquier (1935, 25) identified a path paved with reused stelae running from the Mastaba of Shepseskaf past the northwest corner of the pyramid. According to him, this made it possible to move limestone blocks from

² I am grateful to Marc-Olivier Gonseth, curator of the MEN and Isadora Rogger, assistant curator.

surrounding monuments, including the pyramid of Ibi. Most of the pyramids of Saqqara were dismantled in earlier time in similar fashion. Labrousse (1996, 176–7) suggests that this might have happened during the Mamluk Sultanate, 13th–15th centuries CE, since material from this period was found in the complexes of Pepi I, Merenre and Pepi II. Although, the dismantlement might have started earlier (e.g. Goedicke 1971: on the reused Old Kingdom blocks in Amenemhat I's complex at Lisht). The removal of these important blocks from the burial chamber reduced the inscriptions on the walls to fragments and destroyed a significant proportion of them.

Jéquier started to rebuild the walls in the pyramid on 14 December 1930, at the beginning of the following season of fieldwork. This work was done by completing what remained of the north and south walls and by restoring the east and west walls in the positions that he proposed they had occupied (Jéquier 1935, 4–5). However, the identification of new fragments during the 2015 mission of the MafS has challenged Jéquier's reconstruction of the west wall. Because he lacked points of reference, he inferred the placement of the entirely destroyed west wall solely on the basis of just a few elements. He placed it alongside the sarcophagus, but an assemblage of inscribed fragments which I identified during the 2016 MafS mission belongs to the west end of the north wall. This implies that the north wall needs to be placed further back from the sarcophagus and also that his reconstruction of the texts on the north wall needs to be reviewed (Alvarez in preparation).

No other mention of the work on the texts is found in Jéquier's notebook. In his published excavation reports (Jéquier 1930 and 1932), he wrote that he did not have time to work on the texts of Ibi during the first season and had to postpone it to the following season because of the discovery of the nearby pyramid of Neith. The pyramid of Neith was indeed discovered less than two weeks after the pyramid of Ibi. The well-preserved state of its texts, the amount of stone vessel material found in its burial chamber, required most of his attention (Jéquier 1930, 43–4). The following season, shortage of funds also slowed him down, so that he focused on the restoration and study of the monuments found during the previous seasons. He recorded that more work was undertaken in the pyramid of Ibi, which allowed him to identify and replace more fragments and to reduce the gaps in the texts on the walls. He stated that the copy of the texts was undertaken directly on site in 1930 and was revised several times by himself, and subsequently by Kurt Sethe on the basis of photographs (Jéquier 1935, 6). The latest direct access to the monument was probably

at the end of the season in 1932, when ceilings were built to secure the pyramids of Neith and Ibi (Jéquier 1932, 47).

Some extant archival photographs show the state of the walls as they were found during the 1930 excavation, while others show the reconstructed walls with replaced fragments. Some fragments had to remain on the ground because of their size and weight, but they nevertheless appear in illustrations in the publication (Jéquier 1935, 7; 12; 14). The replacement of the fragments on the walls was feasible both through studying their edges and by looking at the quality of the carving of the hieroglyphs, which is more careful on the lower registers, and almost illegible on the upper ones. In less obvious cases, however, he had to rely on the content of the text and on parallels in the previously known Pyramid Texts, but this work was hampered by the very incomplete state of texts, scarcity of parallels, and by the fact that the east, west, and south-west corner walls of the burial chamber had been completely destroyed.

A comparison between Jéquier's publication and the photographs of the Musée d'ethnographie de Neuchâtel reveals that some fragments were not included in the publication. Furthermore, Jéquier did not mention that more fragments actually remained in the burial chamber. He published 40 fragments on two plates (Jéquier 1935, pl. xv–xvi), but 458 more inscribed fragments (up to 80 centimeters in length) were found in October 2015 when I had the opportunity to take part in the first reopening of the pyramid of Ibi since 1932. This unexpected discovery reveals that a substantial amount of new textual material will be available.

The texts of Ibi and the tradition of inscribing pyramids

The inscription of texts on the walls of the subterranean chambers of pyramids was introduced under Wenis at the end of the 5th dynasty and was followed by his successors, all of whom included increasing proportion of textual material, with the peak in a single pyramid being reached under Pepy I. The size of the total corpus increased threefold between Wenis and Pepy II (Hays 2009a, 59–60). Texts were also inscribed in pyramids of queens, but only from Pepy I onwards. Queen Ankhesenpepy II, wife of Pepy I and Merenre and mother of Pepy II, is usually considered to have been the first queen who benefited from an inscribed pyramid, because of her status of regent (Leclant and Labrousse 2006, 104). However, the newly discovered inscribed pyramid of queen Behenu in the complex of Pepy I might challenge this view. Her dating is unclear, but her position within the pyramid complex of Pepy I, her very large mortuary temple, and the quality of the decoration suggest that she had an important status.

The subterranean structures of late Old Kingdom pyramids display a standardised layout. Pyramids of kings exhibit a tripartite arrangement with a burial chamber, an antechamber, and a serdab (Hays 2012, II, 639), whereas pyramids of queens have a bipartite arrangement with only a burial chamber and a serdab. Although this difference between pyramids of kings and queens is well-defined, the pyramid of Ibi departs from the pattern with its arrangement in a single inscribed chamber instead of two. This reduction in size also reduced the amount of space available for carving texts. Since the distribution of the texts in pyramids of kings follows similar patterns, the question arises how the texts of Ibi are arranged and how closely they relate to previous usage.

In this chapter, I first present a brief overview of research on Pyramid Texts, focusing on the continuing debate over the possible relationship between texts and the architecture of the substructure. I then characterise the content of the texts and their

arrangement in the pyramid of Ibi so as to discuss its layout in comparison to older pyramids. Finally, I assess the arrangement in relation to cosmographic interpretations of the subterranean areas of pyramids. The aim of this chapter is to investigate the textual programme in order to highlight similarities and divergences between the pyramid of Ibi and the existing tradition of inscribing pyramids.

THE ARRANGEMENT OF THE TEXTS ON THE WALLS

The inscribed pyramids of kings—especially the well-preserved pyramid of Wenis—have been at the centre of research on understanding the corpus of the Pyramid Texts. One major trend of research has focused around a possible meaning of the architectural layout of the subterranean rooms in pyramids. According to Stadelmann (1991, 373–87), a tripartite arrangement can already be demonstrated in the previously uninscribed royal tombs from the early dynastic onwards. Such approach examines the development of the internal design of pyramids into a tripartite division—burial chamber, antechamber, and serdab—at the end of the 5th Dynasty (Djedkare-Isesi) together with the almost contemporaneous addition of texts carved on the walls from king Wenis onwards (Mathieu 2017, 375–6). The idea that the internal display materialises geographic locations of the Afterworld is based on the assumption that the texts account for the architectural structure of the pyramid itself by revealing the symbolic meaning of ‘previously mute stone chambers’:

Distinct architectural patterns and elements may, just like Egyptian iconic art, have functioned as a language *in itself*. A vaulted instead of a pointed roof, an upper instead of lower compartment, and a 90° corridor turn – all might to the contemporary theologians and ritualists have communicated as much information as a full body of liturgical texts. (Billing 2011, 64)

Opinions on the meaning of the texts and the order of reading have changed since the first discussions of this type. Siegfried Schott (1950, 150) proposed that the layout of the texts written inside the pyramids related to the burial rituals. According to him, the texts inscribed at the entrance of the pyramid expressed the opening ritual of the ceremony performed at the valley temple and the ones next to the sarcophagus were the last ones to be performed at the pyramid itself. Alexandre Piankoff, in his publication of the texts of Wenis, also considered the layout of the texts as ordered from the entrance towards the burial chamber of the pyramid:

In the Pyramid of Unas we find that the rebirth, the rising from the primeval waters, takes place in the corridor leading into the Pyramid; in the Antechamber he ascends to heaven, travels in the barge of the sun, and absorbs the substance of the gods; in the Sarcophagus

Chamber his final exaltation takes place, and he is enfolded in the embrace of his father Atum, the All. (1968, 19–11)

However, Kurt Sethe (1931, 9–10) had earlier argued for a reading towards the outside of the pyramids, and in this he was followed by Paul Barguet (1971, 14), who argued that the presence of *PT* 313–321 in the corridor and their content, which he interpreted as concluding rituals, supported the ordering of the texts from inside the burial chamber to the corridor. Joachim Spiegel further proposed (1956; 1971, 20) an ‘anti-clockwise reading’ from the left wall of the entrance to the burial chamber and back to the entrance.

Spiegel followed on Schott’s assumption that the texts were related to the order of ritual performances while proposing that rituals were at specific locations in the pyramids because they were to be directly executed there. Schott (1950, 208) also proposed to interpret the distribution of the texts in the rooms of the subterranean chamber as ritual related to different main religious centres: Buto (burial chamber), Memphis (antechamber), and Hierakonpolis (serdab). This idea of identifying rooms of the subterranean areas and geographical locations also influenced Spiegel (1971, 22–5), who proposed interpreting the internal layout as a horizontal representation of the cosmos. According to him, the burial chamber is to be understood as the Underworld *dwꜣt*, the antechamber as the horizon *ꜥꜥt*—where the deceased is transfigured—and the serdab as the sky *ꜥꜥꜥw*. Continuing these architectural interpretations, James P. Allen (1989; 1994, fig. 5) changes slightly Spiegel’s identification of cosmographic spaces by removing the uninscribed serdab from the king’s symbolic journey of renewal and by considering a reading of the texts from the inside of the pyramid to the outside:

In its nightly journey from death to rebirth, the spirit of the deceased was thought to pass through these rooms and corridors, beginning in its union with its mummy lying in the sarcophagus and ending with its emergence from the pyramid. The subterranean layout of the pyramid represents an architectural expression of two views of this journey—like the two concepts of the Sun’s nightly journey, complementary rather than competing: it represents both a womb and birth canal, and a miniature version of the passage from the Duat through the Akhet and to the sky. (Allen 2015, 11)

According to him (Allen 1994, 28), the identifications of spaces within the subterranean chambers suggests that the Pyramid Texts are a forerunner of the Amduat: ‘the pyramid substructure can be read as a concrete expression of the Amduat’s title: *shꜣw n ꜥt jmnt* “Description of the Hidden Space”’. According to the cosmographic theory, the texts and the architecture complement each other to help the deceased in his transfiguration into an effective *ꜥꜥ*-spirit.

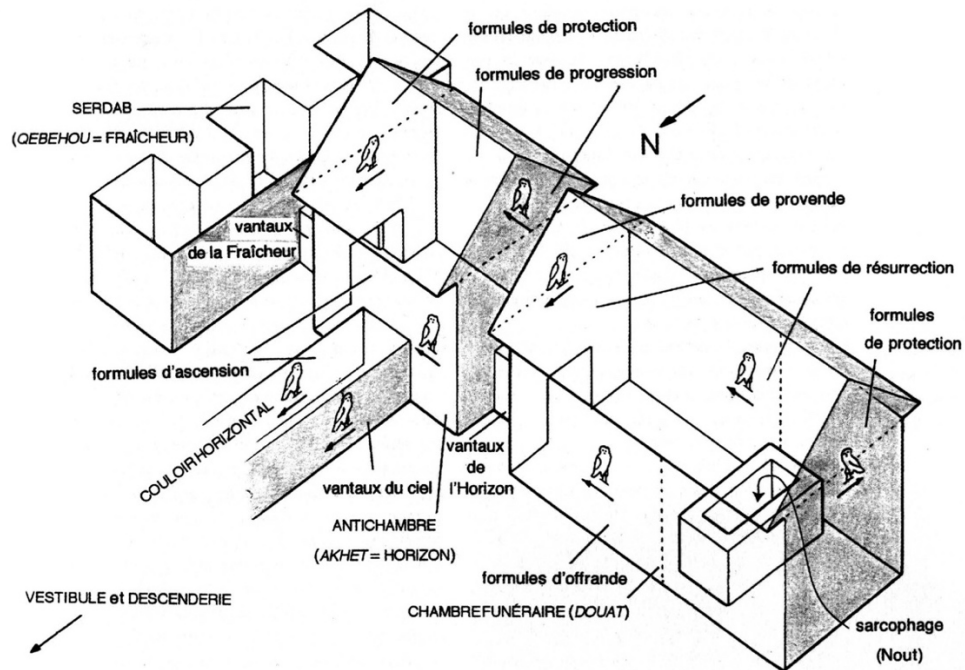


Fig. 2.1: Cosmographic journey of the deceased from the sarcophagus to the corridor in the pyramid of Wenis (Mathieu 1999, 17, fig. 3)

Bernard Mathieu also follows Allen's cosmographic identification and reading of the architectural components of the subterranean chambers, but he argues for the inclusion of the serdab in the symbolism of the internal structures as the 'sanctuary' (2017, 378) linked to the House of Osiris. Fig. 2.1 shows Mathieu's reconstruction of groups of texts and their function in relation to the journey of the deceased king from the sarcophagus (representing Nut) in the burial chamber (representing the Duat) to the antechamber (the Akhet) and up the corridor (ascent to the sky) in order to leave the pyramid and reach the indestructible stars.

Mathieu goes further in his identification of the relationship between texts and architecture by identifying spells that he suggests were inscribed in specific locations on the walls in order to indicate the transition between different cosmographic spaces. He provides (2017, 415–59) a list of a hundred of spells with a 'strategic' position in the subterranean chambers, that is, with a location at the beginning or end of a wall or section of a wall. These identifications are based on at least two of the three following criteria: 'le caractère stratégique des formules dans plusieurs pyramides, la détermination de séquences canoniques insécables, et, naturellement, l'analyse du contenu des textes' (2017, 409, §13).

According to him (2017, 410–11), 53 spells are related to specific cosmographic areas, while 21 spells do not belong to a sequence but are thematically identified with a particular location. His identification relies on 60% of similarities in the position of the spells he considers in two pyramids, and 12% in half of the ten pyramids considered in his study (he does not include Ibi).

An example of Mathieu's method is *PT* 302, which he places in his list of spells with a strategic position (2017, 405). This identification is based on the occurrence of this spell above the opening of the ascending corridor in the pyramids of Wenis and Teti, which he interprets as indicative of the ascent of the spirit. Nonetheless, the location of this spell is different in the pyramids of Merenre and Pepy II, where it occurs on the easternmost part of the north wall of the burial chamber. There, the spell does not have the same clear relationship to architecture, but he implies that its role in this position is to demarcate a section of texts on the wall.

The identification of the cosmographic organisation which Mathieu proposes for Wenis (Fig. 2.1) is not evident in later pyramids (Osing 1986). Nils Billing states (2002, 67) that 'the editors of corpus W[enis] made an extensive use of the architectural arrangement of the burial apartments in their realisation of the process of regeneration'. According to him (Billing 2002, 68–71), this same cosmographic programme is found in Teti, whereas a divergence is observed in the later pyramids of Pepy I, Merenre, and Pepy II. Despite these variations, Billing emphasises (2011, 54) that the texts and their spatial arrangement still function as 'a monumentalization of the king's passage and transformation through the netherworld'.

Harold M. Hays also argued against those approaches as well as on Allen's cosmographic interpretation (also Barta 1981, 19). He claimed (2009a, 217) that there is no semantic relationship between Pyramid Texts and the layout of the subterranean areas of the pyramids and that, despite the fact that the tomb possessed a general symbolic meaning, the precise geography of cosmographic regions cannot be attributed to individual subterranean locations in the tomb on the basis of textual mentions of those regions in the Pyramid Texts. Hays argued that groups of spells were used in an oral form outside the mortuary context and were then adapted to be inscribed in the subterranean chambers of pyramids. According to him, this process of monumentalisation implied a recontextualisation and adaptation of the material that related in part to the tradition established by the organisation in the pyramid of Wenis, and in part to pragmatic concerns linked to the available space:

Thus, the movement of texts is one of the indications that the groups did have lives of their own external to the pyramids. (...) In sum, editorial acts influencing the arrangement of text took place on two levels: outside the pyramids, the modification of the composition and order of existing rituals and collections, which afterwards had an effect on how texts were disposed within pyramids. (Hays 2012, 80)

He therefore concluded that the order of the texts developed in relation to the development of ritual practices in the setting of performance, and not in relation to a specific location on the walls of the subterranean areas. The only architectural distinction that he takes into account, is the one in two main rooms—burial chamber and antechamber—to separate sacerdotal from personal texts.

One of Hays's criticisms (2009a, 203) of the methodology used by proponents of the cosmographic approach is its inapplicability to the pyramids of queens and of Ibi, but both Allen (2015) and Mathieu (2017) argue for its validity. Allen states (1994, 27) that the role of the antechamber in the substructure is essential, since the Akhet is the place from which the glorification of the deceased will proceed. Therefore, 'the absence of a separate antechamber made necessary an adjustment in the layout of these texts from that of the kings' pyramids' (Allen 2015, 301). He argues, for instance, that the arrangement in the pyramid of Neith was adjusted by including texts usually found in the antechamber inside the burial chamber. According to him (2015, 302), 'Neith's layout thus compensates for the missing passage and antechamber by assigning texts normally found in these rooms to the bottom of the south wall and the top of the east wall.' Mathieu supports Allen's view that the same relationship between groups of texts and cosmographic areas occurs in pyramids of queens. He argues that Ankhesenpepy II's east wall incorporates three different spaces into one: the south, east, and west walls of the antechamber would be merged into the east wall of the burial chamber and thus function as a 'paroi tridimensionnelle dans laquelle se forme l'espace occupé par l'antichambre dans une pyramide royale' (2015, 75).

Mathieu further argues that different mechanisms were adopted to distinguish the cosmographic spaces despite the lack of an antechamber. According to him, the space around the sarcophagus has to be understood as a separate unit in pyramids of kings and queens, because 'texts of the Akhet' are present in this area. He supports this assumption by the use of different visual markers: the presence of palace façade pattern, the orientation of the texts, or the presence or absence of *ḏd-mdw* at the tops of columns (2017, 380–1). He also supports the distinction of two levels of reading of the texts in pyramids of queens;

these would relate to Egyptian conceptions of time: a human conception of time (*dt*) and a divine one (*nḥḥ*).

L'une des conséquences de cette superposition des deux univers, humain et divin, est l'existence de deux niveaux de lecture des textes: dans la *djet*, tous les textes fonctionnent en parallèle, de manière concomitante; dans le *néheh*, les textes obéissent à une parfaite logique linéaire et expriment par leur disposition le parcours cosmographique du défunt. (Mathieu 2017, 378)

He argues that if one takes human and divine time into consideration in relation to the arrangement of the texts in the liminal context of the tomb, this will account for instances where spells do not follow the supposed chronological order of the deceased's journey to the Afterworld.

The debate on reading or 'unreading' (Hays) pyramids continues. The cosmographic hypothesis has also been used as a model for further understanding structures such as non-royal tombs. Deborah Vischak has investigated the idea on the basis of the concept of 'agency' (2006) and hypothesises that such changes in royal mortuary architecture are very likely to have had an impact on non-royal designs. She attempts (2003) to draw a link between the textual organisation in the inscribed pyramids and the pictorial organisation in private tombs, on the basis that if the introduction of the Pyramid Texts was the result of a change in belief, it should also have influenced private tombs. She thus posits that the deceased would benefit from the same pathway to regeneration as the king in the pyramids. She identifies three rooms as the Duat and two as the Akhet on the basis of the sequences of spells inscribed in Wenis's burial chamber (Vischak 2003, 138). She also argues that offering or butchery scenes represent the Pyramid Text spells of the offering ritual in a pictorial instead of a textual form. Vischak concludes that the wall decoration of Old Kingdom private tombs shares a similar function to that of the Pyramid Texts in royal tombs as 'a material guide, even a guarantee, of the tomb owner's successful rebirth, following the model originated by their kings' (2006, 157). Her approach has been reviewed by John Burn (2010) and further analysed (2011) in a study of 6th Dynasty tombs. He argues that this system is not valid, since it is not applicable to some important tombs of the 6th Dynasty, such as those of Ptahhotep, Akhethotep, and Mereruka. Joachim Quack (2011, 45) argues that some approaches go too far in suggesting links between funerary architecture and the Pyramid Texts and he warns against attempting to define an exact relation between what is described in the Pyramid Texts and its architectural equivalent.

Since the texts were initially used outside of the context of the pyramid, it is expected that their inscription inside of the pyramid would need to be adapted and reframed to a large extent. The ambivalence in trying to determine their role and association within the space of the subterranean areas can be related to the factors of adaptation that changed from one pyramid to another and involved a negotiation between textual material and the architectural space that was different in each pyramid. Further research might shed light on these issues, while the forthcoming publications of the pyramids of Queens Ankhesenpepy II and Behenu may offer possibilities for testing assessments of these issues.

METHOD

Although opinions on architectural interpretations diverge, Hays (2012, 313), Allen (2015, 6), and Mathieu (2017) all agree on dividing the Pyramid Texts into two main categories. Hays defines (2012, 313) sacerdotal texts as ‘offering texts and priestly recitations’, a designation that refers to the spells recited by a priest in the collective context of a ritual, while the personal texts—‘apotropaic, transition and provisioning texts’—refer to the knowledge of spells recited by the beneficiary of the texts in an individual context. The latter group of personal texts is mainly identifiable by the use of the first-person pronoun in the archetype, which was modified to the third person when inscribed in pyramids. Allen identifies (2005, 5) three major groups of texts within the sacerdotal category: offering and insignia rituals, resurrection ritual, and morning ritual. Mathieu identifies (2017) two groups, the texts of the Duat and the texts of the Akhet, but he does not provide a clear definition of these distinctions except for a supposedly explicit content related to these areas.

Allen stresses (2005, 6) that it is important to translate the texts of each pyramid individually, since their arrangement and the absence or addition of texts characterises individual textual programmes. Thus, his work provides an individual translation of each corpus of texts—from Wenis to Pepy II and Neith—with headings and subheadings to indicate the cosmographic arrangement of texts in relation to the chronological journey of the deceased from the burial chamber to the exterior of the pyramid, based on his interpretation of the texts (2005 and the updated version 2015). The narrative starts with ‘spells for entering the womb of Nut’ (sarcophagus), proceeding to the offering ritual allowing to provision the spirit, through the resurrection ritual to allow the body of the

deceased to leave the sarcophagus, to the ascent to the sky (corridor); some additional groups are identified in particular pyramids.

Allen's publication (2015) is not a typology of Pyramid Texts in itself and it is then more difficult to use it as a framework. Nonetheless, his index of spells (2015, 375–81) makes it possible to refer to the translation of individual spells within their context and to use it to identify his categories in the case of the pyramid of Ibi. For instance, *PT* 248 in Wenis is labelled 'appearing as the morning star' and is grouped with *PT* 247–53 into the category 'spells for emerging from the Duat'. However, some spells can belong in several categories dependent of the context in which they are found. Thus, *PT* 592 is labelled 'concluding spells' in 'regeneration in the womb of Nut' in Pepy I, 'dressing the spirit' in 'spells for the sarcophagus' in Merenre, 'invocation of Geb' in 'resurrection ritual' in Pepy II, and 'address to Geb' in 'insignia and offering ritual' in Neith. The categorisation is both related to the content of the spell and interpreted to the broader textual context in relation to the cosmographic hypothesis.

I first base my identification of the texts and sequences of spells of Ibi on the typological analysis of Hays (2012). This diachronic approach gives the most objective comparison of the content of Pyramid Texts, their affiliations with other spells, and their location on the walls. This method was first developed by Hartwig Altenmüller (1972), who established sequences of the spells and demonstrated that some appear in the same location within more or less consistent groups. The flexibility of the sequences and their placement within the subterranean chambers was further investigated by Hays (2012), who updated Altenmüller's sequences with information provided by the work of the Mission archéologique franco-suisse de Saqqara (MafS). His approach of categorisation (Hays 2012, 14; 79–123) for sequences of spells that are 'recurring series' within larger groups (A–O) makes it possible to compare the corpora of the pyramids of kings from Wenis to Pepy II, as well as shedding light on their similarities and dissimilarities, by highlighting recurring series of spells and slight variations (addition, omission, or displacement of spells).

The sequences of spells and their location in each pyramid are indicated in tables (Hays 2012, 675–89). Fig. 2.2 is an example of Hays's classification with the first section of group A, 'the Offering ritual'. The section labelled A.1, 'preparation of the image', provides the sequence of spells and their location in the pyramids of Wenis, Teti, Pepy I and Pepy II.

Section A.1. Preparation of the Image

	OM	a. purifications	b. OM	c. food	d. purifications	e. food	
W/S/N I		23 25 32	34-36 37-38 39-42	32	43-57		
T/S/N I		23 25 32	34-36 37-38 39-42	32	43-57	x	
P/S/Ne I ¹		23 24 25 26[-30]	32 33 34-36 37-38 39-42	32 33[-36]	x 43-57		
N/S/Ne X-XI	12-22	23 24 25 26 - 30[-31]	32 33 34-36 37-38 39-42	32	43-57		A.5.b

Fig. 2.2: Example of Hays' group A, section 1 (Hays 2012, 676).

The table shows that the sequence of spells is similar in the pyramids of Wenis and Teti with the sequence *PT* 23; 25; 32; 34–42; 32; 43–57, but that the sequence is expanded in the pyramids of Pepy I and Pepy II with, for instance, *PT* 24 between *PT* 23 and 25 (for a detailed explanation of his system see Hays 2012, 81–3). This typological analysis demonstrates the tendency of each pyramid to extend inherited material as well as to include more texts (Hays 2009a, 59). The addition of texts across the pyramids is, indeed, significant: the textual programme inscribed in the pyramid of Wenis consists of 229 spells, whereas the one in Pepy II has at least 633 spells. Nonetheless, the modifications of sequences are not only about adding more texts. The presence of the so-called ‘Cannibal Hymn’ (Eyre 2002) only in the first two pyramids (Wenis and Teti) is noteworthy.

Altenmüller’s and Hays’s methods are based on pyramids of kings, because their similar layout makes it possible to compare the sequences of spells and their location within their tripartite subterranean layouts. The texts in the pyramids of queens and of Ibi, with their bipartite layout, are therefore omitted from consideration. However, Morales (forthcoming, 6–21) uses Hays’s groups to analyse the arrangement of the spells in the pyramids of queens Ankhesenpepy II, Neith, Iput II, and Wedjebteni. Despite their different subterranean structure, he is able to identify most sections of the wall with groups found in pyramids of kings; unidentified or unparalleled texts are labelled ‘mixed’. He defines (forthcoming, 13) the latter category as the remodeling of a ‘recurring serie’ into a reduced sequence of spells. According to him, these would derive from a new method for adapting the texts to the smaller space of pyramids of queens (discussed in the next chapter). The application of this method for bicameral pyramids enables the identification of groups of texts occurring in pyramids of kings and to highlight texts or sequences of spells that do not have precedents in earlier pyramids (‘mixed’).

In the pyramid of Ibi, Jéquier (1935, 19–20) identified 201 spells among unidentified ones (1935, 15–19) and stated that:

Sauf la grande liste d'offrandes qui forme un ensemble presque stéréotypé et occupe dans toutes les tombes le même pan de mur, près de la tête du sarcophage, les divers chapitres ou formules semblent être placés n'importe où, suivant l'espace disponible et sans qu'il y ait nécessité rituelle à les graver en tel endroit précis d'une des parois ni à les faire se succéder suivant un ordre déterminé. (Jéquier 1935, 6)

In order to examine Jéquier's statement that most of the texts appear to be randomly ordered, I use Hays's method to identify the content of each wall and compare its arrangement to older pyramids (for the layout in pyramid of kings: Hays 2012, 648–74; for queens: Morales forthcoming, 14–21 figs 6–16). In this chapter, I first present an overview of the burial chamber followed by a detailed analysis of each wall. The analysis is supported by the reconstruction of the hieroglyphic text (Pls 1, 3, 5), which is based on Jéquier's plates (1935, pls 3–14).

OVERVIEW OF THE BURIAL CHAMBER

The distribution of the texts in the burial chamber is constrained by architectural features. First, since the subterranean structure follows the model of pyramids of queens, the lost ceiling is likely to have been flat (Jéquier 1935, 4), so that there would be no angled space on the east and west walls below a gabled ceiling. Second, the embedding of the sarcophagus in the western part of the room meant that the palace-façade false door pattern was set above the head and foot of the sarcophagus, instead of around it. Jéquier (1935, 12) suggested that the destroyed western part of the south wall had borne a palace-façade false door pattern by analogy with the north wall. This arrangement would have reduced the space available for texts on the westernmost parts of the longer walls. Finally, since the corridor had been destroyed completely by stone quarrying (Jéquier 1935, 4; 11), it cannot be known whether it was partly inscribed like those in Neith and Behenu. The orientation of the texts indicated in Fig. 2.3 shows that they run from the inside to the outside of the burial chamber, which is typical in all pyramids.

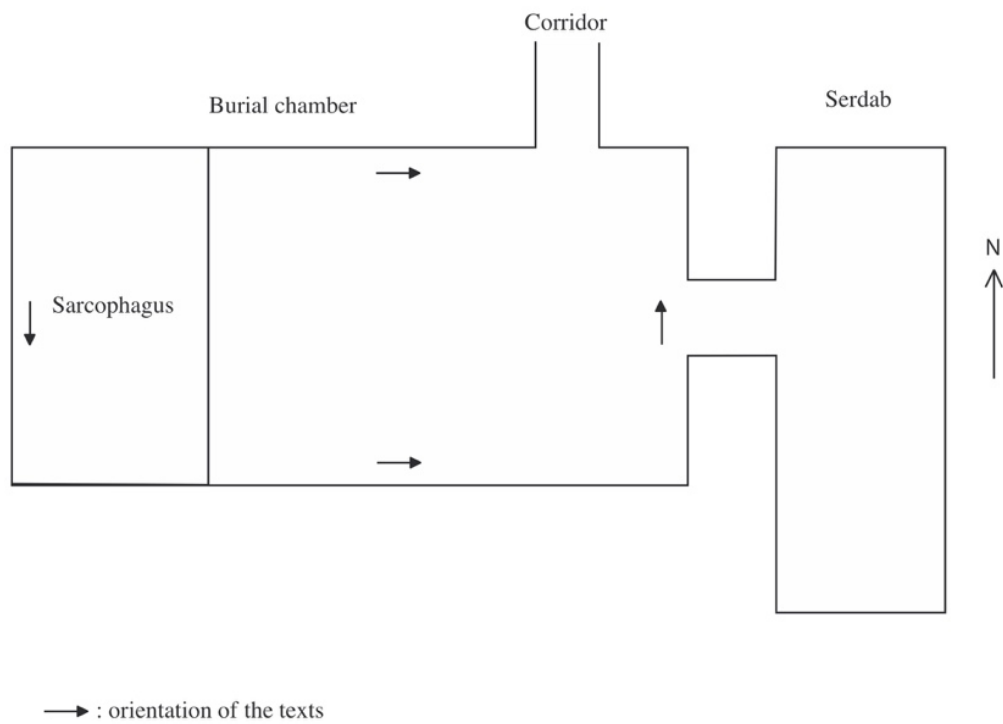


Fig. 2.3: Burial chamber of Ibi and orientation of the direction of reading.

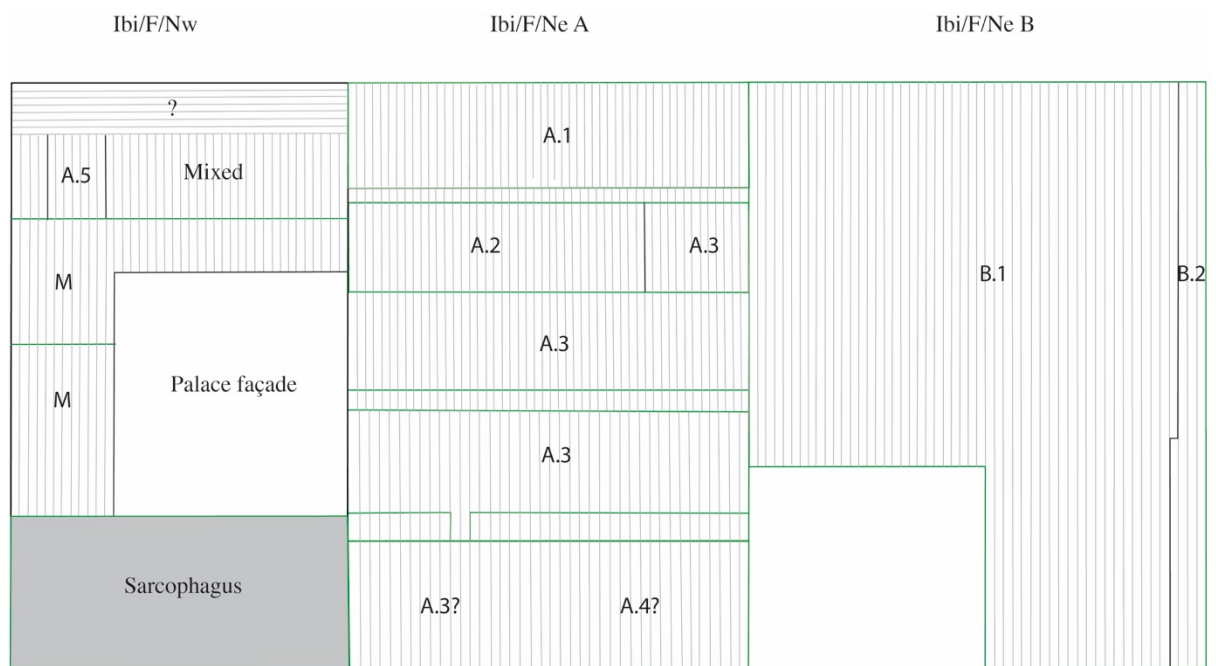


Fig. 2.4: Sequences of spells on the north wall.

In Ibi, the north wall (Pls 1–2) is divided in three main vertical sections—Ibi/F/Nw, Ibi/F/Ne A and B—and is inscribed throughout with signs facing west, that is, left (pl. ii, except for the seven horizontal lines at the top of the wall in Ibi/F/Nw I). These two features are also found in pyramids of queens: the division of the north wall in three parts in Wedjebteni (Morales forthcoming, 15, fig. 8) and the uniform orientation of the text in Iput (Allen 1986, 23, fig. 14). The central section of the north wall, Ibi/F/Ne A, is divided into five registers. The eastern and western sections of the north wall are divided differently: Ibi/F/Nw in four registers because of the space taken by the sarcophagus, and Ibi/F/Ne in columns that are the full height of the inscribed area, without registers. The arrangement and orientation of the texts on the north wall are unusual in comparison with other pyramids of kings, where the north wall is divided in two main vertical parts, the western part F/Nw and the eastern part F/Ne, that are distinguished by the orientation of hieroglyphs, with the space around the sarcophagus forming a unit separate from the rest of the room.

Section A.1. Preparation of the Image				
	a.	b.	c.	d.
	OM	purifications	OM	food
W/S/N I	23 25	32 34-36 37-38 39-42 32	32	43-57
T/S/N I	23 25	32 34-36 37-38 39-42 32	32	43-57
P/S/Ne I ¹	23 24 25 26/-30	32 33 34-36 37-38 39-42 32 33/-36	32	43-57
N/S/Ne X-XI	12-22	23 24 25 26 - 30 31 32 33 34-36 37-38 39-42 32	32	43-57
				A.5.b
Section A.2. Image Handling				
	a.	b.	c.	d.
	robing	robing summary	purifications	
W/S/N II	72-76 77 78 79 81	81	25 32	A.3
T/S/N II	72-76 77 78 79 81	81	25 32	A.3
P/S/Ne II ²	72-76 77 78 79 81 622	414 634 s635A 449 s715B	25 32	A.3
N/S/Ne XII	72-76 77 78 79 80 81	s715A-B	25 31 26-30 32 33	A.3
N/S/Ne XIII ³	A.3	636 637 638 639 x 640-641		
M/S/SwC ⁴		CT530 x CT862		
		414 634 s635A-B		
		634 s635A		

OM means "rites concerning the opening of the mouth."

Chart A, Part I

¹ PT 27, 28, 35-40, and 45 are assumed to have been present by Leclant *et al.* 2001, pp. 67 and 70-71. In the place rendered here as "32 33-[36] x 43-57," *ibid.*, p. 209 have instead PT 32-40 43-57, but a second iteration of PT 37-40 would be unprecedented. Probably purification rites occupied the four lines rendered here as damage.

² PT 80 is assumed to have been present by *ibid.*, p. 76, but PT 81 is to be expected rather than PT 80.

³ sPT 715A is found again in Section A.6.

⁴ Pierre-Croisau 2004, pp. 267 and 277 fig. 1, and Leclant *et al.* 2001, p. 76. CT 530 beginning only, corresponding to CT VI 121 b-g, 122a-c, e; CT 862 beginning only, corresponding to CT VI 64a-c.

Fig. 2.5a: Group A (Hays 2012, 676).

Section A.3. Food Presentations									
	a.	b.				c.	d.	e.	
	cnscr	food				cnscr	food	cnscr	
W/S/N II-III + En	A.2	82-86 87-96	108-116	117-141	142-150	151-171		B.1	223 224
T/S/N II + Emed + Eimf + N III	A.2	82-86 87-96	108-116	117-141	142-150	151-171		C.1	223
P/S/Ne II-III ⁵	A.2	82-86 87-96	108-116	117-141	142-150	151-171			223
P/S/Ne V ⁶	x		[108-116 117-141 142-150 151-171]						
N/S/Ne XII-XIV	A.2	82-86 87-96	A.5	108-116 117-141 142-150 151-171				x	
							172 173 174 - 198	223 224 225	A.4
Section A.4. Conclusion									
	a.	b.				c.	d.		
	closing shrine	rvrsn	purifications			cnscr	closing shrine		
W/P/N + Sw ⁷		199	32 23 25 200	244					B.2
P/S/Ne III	A.3	199	244 32 23 25			224 225			
M/S/Eimf ⁸		199	244		436 24 598 x	224	s1012 658 s1013 646 s645A s645B	s1014	C.2
N/S/Ne XIV ⁹	A.3	642-644 s645A 646-648 649-650	199	32					
						33			
cnscr stands for "consecration rites." rvrsn stands for "reversion of offerings."									

Chart A, Part 2

⁵ PT 151, 153-154, 157-159 are assumed to have been present by *ibid.*, pp. 91-92 and 212.
⁶ PT 108-124 are assumed to have been present by *ibid.*, pp. 105-106 and 214.
⁷ PT 199 on W/P/N is directly opposite PT 244 on W/P/Sw; thus the latter may instead immediately follow the former.
⁸ PT 24 is found again in Section A.1, and PT 598 in Section A.5.
⁹ PT 33 is found again in Sections A.1. and A.2.

Fig. 2.5b: Group A (Hays 2012, 677).

Fig. 2.4 shows the correspondence between sequences of spells in Ibi's north wall and Hays's categorisation of recurring series (Figs 5–6). The texts inscribed on the central section and above the corridor on the north wall correspond to sequences found in older pyramids: A.1 to A.3, possibly A.4 (see below), and B.1–2. The central section consists of the offering ritual, which begins with the preparation of the image of the deceased A.1, and is followed by the handling of the image A.2, the presentation of food A.3 and the conclusion of the rite (purifications and closing of the shrine) A.4. Sequences B.1–2 correspond to the transfiguration ritual, which Hays divided into three main sections, 'assimilation with the sun god' B.1, 'preeminence over the gods' B.2, and 'departure from the tomb' B.3 (Fig. 2.6). The latter sequence usually occurs on the south wall, except in Wedjebteni (Morales forthcoming, 15, fig. 8) and Ibi.

The first register of Ibi/N/F Ne A corresponds to Hays's section A.1 of the offering ritual (Fig. 2.5a). The spells can be identified and restored (spells between square brackets) as *PT* 23, 24, 25, 32, 34–42, 32, 43, 44, [45], 46–7, [48], 49–54, [55], 56, [57]. This sequence has more spells than those of Wenis and Teti, adding *PT* 24 between 23 and 25, but fewer than Pepy I and Pepy II. However, it matches with the sequence in the first register of Neith's north wall (Jéquier 1930, pls ix–xi, cols 65–128).

Ibi's sequence A.2 can be restored in the lacuna of the second register as *PT* 72–7, [78–9], 80–1, [25, 31, 26–30], 32, 33. This selection of more spells than Wenis and Teti's sequences—which consist of *PT* 80, 31, 26–30, 33—is found only in Pepy II; Pepy I's sequence has a larger number of spells. Thus, Ibi's sequence corresponds to that of Pepy II. The occurrence of *PT* 80 is identifiable through parts of *Pyr.* 55a–b at the top of cols 13–14, while the presence of the closing spells *PT* 32–3 is supported by the rubrics above cols 33–6 (= *PT* 32, 23b) and the ¶ in col. 37 (= *PT* 33, 25c). The length of the gap between cols 22 and 37 is sufficient for Pepy II's additional spells 25, 31, 26–30.

Ibi's sequence A.3 begins with *PT* 82–96, [108], 109, and [110], in the second register; *PT* [111–115], 116–161 in the third register; and *PT* 162–191, [192–198] in the fourth register. Although the text is very damaged in this area of the wall, the inscription at the end of the second register seems to condense some spells by including only the rubrics of some of them in the horizontal band above the columns (e.g. *PT* 94 and 95 in cols 47–51). It is possible that Ibi's sequence A.3 finishes on the fourth register with *PT* 198, as is the case with Neith (Morales forthcoming, Fig. 2.7), or that it extends to the fifth register with the consecration rites *PT* 223–5, as in Pepy II.

Since sequence A.5 is relocated in the second register of the western section of the north wall (Ibi/F/Nw II: *PT* 62–71) in contrast with other pyramids, sequence A.4 could be expected to be in the fifth register of the central section. Fragment E (Jéquier 1935, pl. xv), which bears parts of *PT* 23 and 25, could belong to sequence A.4. Jéquier (1935, 10, n. 2; 18) argued that fragment had been relocated to the first two registers despite the difference in style and the lack of space, but the fifth register with its neater style could be a more suitable position. The central section would therefore consist of sequences A.1 to A.4, which correspond to common sequences on the north walls of pyramid burial chambers (Hays 2012, 656; 668).

Sequence A.5, ‘presentation of sacra’, occurs in different forms in Pepy I, Pepy II, and Neith (Hays 2012, 678). The sequences of Pepy I and Pepy II diverge significantly, with only three spells in common, but Neith’s sequence, which is not included in Hays’s table, shares more spells with Pepy II’s sequence: *PT* 58–70. Although those spells are found in Ibi/F/Nw II 3–10, they are in a different order and share more features with the garbled version on the 12th Dynasty coffin of Neferi bearing the name of king Wahkare Kheti III (Allen 1976, 1–29). The next section, which includes parts of *PT* 592, 22, 20, 21, is unparalleled, but it can be identified as a comparable version to Pepy II’s ‘initial opening of the mouth ritual’, which precedes the insignia ritual and is also found above the sarcophagus (for Pepy II’s layout, see Hays 2012, 668, section X). The upper part of the westernmost section of Ibi’s wall (Ibi/F/Nw I) presents an unidentified material written in horizontal lines—perhaps apotropaic spells—while the third and fourth registers contain spells linked to Hays’s group M, the ‘ascent to the sky’ (*PT* 302 and 627B). This group is found in the same location in Pepy I, Merenre, Pepy II (Hays 2012, 687), and Neith (Morales forthcoming, 15).

The eastern section of the north wall, Ibi/F/Ne, which is in 52 columns that are not divided into registers, comprises Hays’s group B.1–2, ‘transfiguration’. The sequence of spells *PT* 213–22 and 245–6 is found in all pyramids, but Pepy I, Merenre and Pepy II add spells after *PT* 246 as well as a section labelled B.3 by Hays. The version of sequence B inscribed in Ibi therefore corresponds to the ‘recurring series’ found in all pyramids, and it is inscribed without additional texts as in Wenis and Teti. The position of this sequence on the north wall is unexpected according to Bène and Guilhou (2004, 58), who state that the location of this sequence on the south wall, directly in front of the south side of the sarcophagus, is ‘canonical’. That location is attested in all the kings’ pyramids (Fig. 2.6: Hays 2012, 679) as well as in the pyramids of Ankhesenpepy II, Behenu, and Neith

(Morales forthcoming, 15, fig. 6). However, the sequence also occurs on the north wall next to the opening of the corridor in the pyramids of Iput II and Wedjebteni (Gundacker 2010, 130; Morales forthcoming, 15, fig. 8). Thus, the arrangement of Ibi's north wall is not unparalleled in other pyramids.

Group B. Transfiguration

Section B.1. Assimilation with the Sun God									
W/S/S + S/Es ¹³		213-219	220-222					A.3	
T/S/S 1 ¹⁴		213-219	220-222					B.2	
P/S/Se 1		213-219	220-222					B.2	
M/S/Se 1 ¹⁵		213-219	220-222					B.2	
N/S/Se 1		213-219	220-222					B.2	
Section B.2. Preeminence over the Gods									
W/P/Se	A.4	245-246							
T/S/S 2	B.1	245-246							
P/S/Se 2 ¹⁶	B.1	245-246	693 s1001 593 f723 374 s1002 703 s701A s1003-1004	f665 f665A f665B-C f666 f759 f666A-B f667 f667A-D 537					B.3
M/S/Se 2	B.1	245-246					f665B-C f666 f759 f666A-B f667 f667A-D 537		B.3
N/S/Se 2	B.1	245-246					f665 f665A f665B-C f666 f759 f666A-B f667 f667A-D 537		B.3
Section B.3. Departure from the Tomb									
P/S/Se 3	B.2					690 s1005 s1006 s1007 s1008 s1009	671 672		
M/S/Se 3	B.2		302	374 s1002 369					x
M/S/SwA-B		267 309			f665A	670			x
N/S/Se 3	B.2	267 309 668 302 669				670	671 672 358		

Chart B

Fig. 2.6: Group B (Hays 2012, 679).

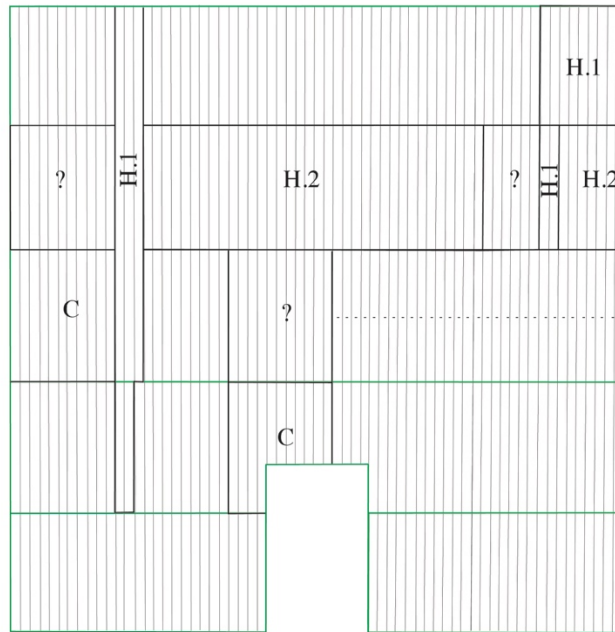


Fig. 2.7: Sequences of spells on the east wall.

The east wall (Pls 5–6), which includes the opening leading into the serdab, has no precedent in being divided in five registers: no registers of texts are found in pyramids of king (Hays 2012, 649–69), in queen Behenu (Berger el-Naggar and Fraisse 2015, 52, fig.4), or in Iput II (Morales forthcoming, 19, fig. 15), and only two registers in Neith (Jéquier 1933, 16, fig. 7) and Ankhessenpepy II (Morales forthcoming, p. 18, fig. 14). Sequences C and H.1–2 (Hays 2012, 680; 682) can be identified despite the unusual arrangement of the columns, in which some run through more than one register, such as *PT* 339 (cols 12–14) and *PT* 210 (col. 14). Although most of the spells belong to sequences C and H, a significant amount of textual material is lost. Other passages either have not been identified or do not have any sequences in common with the known repertory. Two spells in the second register—*PT* 473 and *PT* 625—and one in the third register—*PT* 587—do not belong to either sequence C or H.

The first register bears *PT* 400, 208, and 408, which belong to sequence H, ‘provisioning’. This sequence might be extended on the first register with *PT* 210–11 on Frags Q and R (Jéquier 1935, pl. xv) and on the second register with *PT* 338, 210, 347–8 (perhaps 349 in the lacuna), 206 (identified as 205 by Jéquier [1935, 17], but in a different

version numbered 206 by Sethe [1908, I, 70]), 404, 350–1, 405, 353, 401–3, 207, and 662. Two spells, *PT* 473 and 625B, do not belong to the sequence H found in older pyramids.

The third and fourth registers display *PT* 591, 660, 600 and 602, which belong to sequence C, ‘perpetuation of cult’. Jéquier suggested (1935, 18) that fragments A, I, B, and M should be located in the lower registers, since they also belong to sequence C (*PT* 601 and 587), but he did not suggest a precise placement. Thus, most of the texts on the east wall consists of sequences C and H, which are attested on the east walls of Teti, Pepi I, Merenre, and Pepi II.

The south wall (Pls 3–4) differs considerably in its texts from the other pyramids. Usually, spells related to the transfiguration of the deceased (sequences B.1–2) are found on this wall, but these occur instead in Ibi’s north wall. Most of the texts on the south wall are either too damaged to be identified or are unparalleled. *PT* 1002, 374, 665–6 on the fourth register of the wall occur in Pepy I’s sequence B.2–3, which corresponds to the end of the section B.2 ‘preeminence of the gods’ and part of section B.3 ‘departure from the tomb’. Although the spells *PT* 1002 and 374 occur in Hays’s sequence B only in Pepy I and Merenre, they have been identified on the south wall of Teti, Ankhesenpepy II, Iput, and Behenu (Mathieu 2015, 78). Finally, two spells—*PT* 268 and 627B—on the fifth register can be linked to sequence M.1, but this arrangement is unparalleled (further analysed in Chapter 3). Thus, this wall diverges from other pyramids, both by being divided into five registers and by its unusual selection of spells, instead of the sequences B.1–2 running in columns from top to bottom.

The west wall is completely destroyed. Jéquier did not propose any reconstruction of this wall, but he deduced that it was laid out in columns from the possible placing there of fragments W (*PT* 450–1, 590, 426–7, 429–30, 367–8) and E (*PT* 356; 1935, 18: comment to fragment W). The spells on both fragments belong to sequence E (Hays 2012, 681), ‘mother protects and body joined together’, which is common in this location in the pyramids of kings (Merenre and Pepy II) and in Neith (Morales forthcoming, 16, fig. 10). The new material found during fieldwork of the French archaeological mission of Saqqara (MafS) in October 2015, which has not yet been studied in detail and cannot be included in this thesis, may make it possible to attempt a reconstruction of this wall.

The comparison between the arrangement of the texts in the pyramid of Ibi and older pyramids of kings and queens has shown that the choice and distribution of material relates to the tradition of inscribing pyramids to a considerable extent. Fig. 2.8 shows the identification of spells on the west, north, and east walls with Hays's groups. Two thirds of the north wall—Ibi/F/Ne A–B—follows exactly the sequences found in the pyramids of Wenis, Pepy II, and Neith, while the arrangement on this wall is close to that of Wedjebteni and the orientation of the texts to Iput II. The fragments of texts attributed to the west wall is found across many pyramids and suggest that the arrangement and content is common there. Parts of the east wall and the whole of the south wall (which is therefore not included in Fig. 2.8) are completely divergent in terms of the layout, arrangement, and content of the texts from earlier pyramids, with a significant number of unidentified spells. The displacement of sequence B—which usually occurs on the south wall—onto the north wall freed up space on the south wall and made it possible to include other texts. That wall shows hardly any relation with sequences found in older pyramids. This heterogeneity raises questions about the transmission and production of mortuary literature that are investigated in the next chapters.



Fig. 2.8: Categorisation of the west and north walls of Ibi according to the groups of Hays (2012).

The application of Hays's method to the textual programme of Ibi makes it possible to identify groups of texts there that are also found in older pyramids and to highlight similarities and divergences. Although Hays did not consider the pyramids of queens, I have included them in the comparison to show that Ibi's layout was not isolated from that of older pyramids, but mainly derives from features found in the latest pyramids, that is, those of Pepy II and his queens, especially Iput and Wedjebteni. Texts previously unidentified by Jéquier were determined on the basis of the comparable tables of Hays, which shows that some sequences of spells in Ibi are closely linked to transmitted material.

Overall, the content and organisation of Ibi's textual programme fit with the Memphite tradition of inscribing pyramids, particularly from the reign of Pepy II and his queens.

READING THE PYRAMID OF IBI

In this section, I investigate the textual programme of the pyramid of Ibi in light of Allen's and Mathieu's cosmographic interpretations. First, I apply Allen's categorisation to the groups of texts on each wall. I then discuss Mathieu's criteria for identifying cosmographic correspondences between spells and their location. Fig. 2.9 shows the identification of groups of texts on the west and north wall following Allen's categorisation; the south and east walls are too different from the patterns he treats to be included here and are discussed further below.

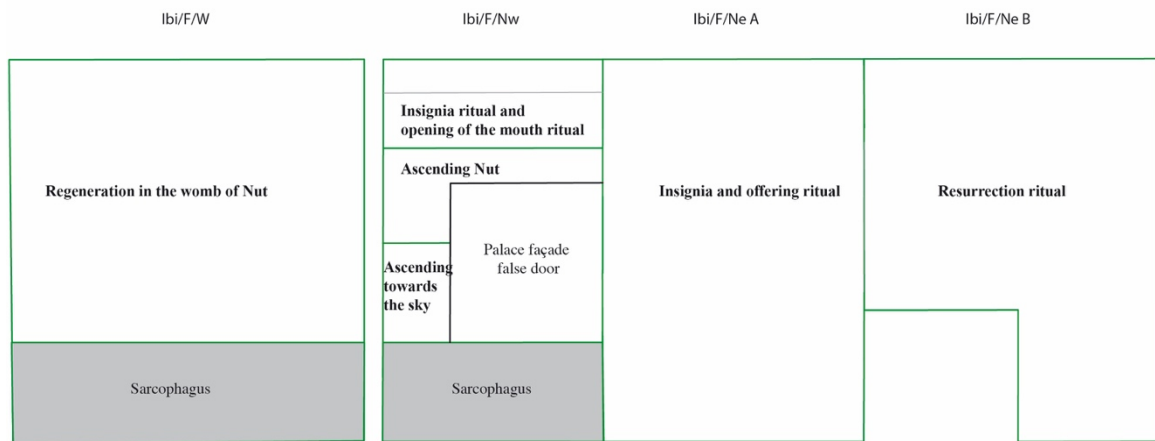


Fig. 2.9: Identification of the groups of text based on Allen's classification (2015).

The spells on Ibi's north wall Ibi/F/Ne A and B correspond to the offering ritual and the resurrection ritual. The offering ritual is close to Wenis's version with additional spells corresponding to Pepy II's version as has been shown in the previous section. The offering ritual contains the following headings according to Allen's labelling: libation (*PT* 23–4), censuring (*PT* 25), cleansing the mouth with salt water (*PT* 32, 34–6), mouth-opening ritual (*PT* 37–42, 32, 43), mouth-opening meal (*PT* 44–57), anointing (*PT* 72–8), presentation of eyepaint (*PT* 79), presentation of linen (*PT* 81), libation and cleansing (*PT* 25, 32), preparation of the offering table (*PT* 82–96), cleansing the mouth (*PT* 108–10), bread and onions (*PT* 111–25), beef and poultry (*PT* 126–40), bread (*PT* 141–44), drinks (*PT* 145–57), fruits (*PT* 158–68), vegetables (*PT* 169–70), dedication of offerings (*PT* 171), king's offering (*PT* 172–98, in Pepy II). As argued in the previous section, the fifth register of

Ibi/F/Ne A may conclude with the same invocation of the offering ritual (*PT* 223), and insignia ritual (*PT* 224) as found in Pepy II.

The resurrection ritual on Ibi/F/Ne B corresponds to Allen's 'basic ritual' *PT* 213–22 and 245–6, which is present in all pyramids (cf. Fig. 2.6). The different groups are labelled as follows: invocation to new life (*PT* 213–4), release from the Duat and the earth (*PT* 215), commendation to the nightboat at dusk (*PT* 216), commendation to Atum at dawn (*PT* 217), commendation to Osiris (*PT* 218), litany of identification with Osiris (*PT* 219), commendation to the Red Crown (*PT* 220–1), commendation to the Sun (*PT* 222), to the sky (*PT* 245), and to the gods (*PT* 246).

The texts on Ibi/F/Nw II correspond to the 'insignia ritual', with presentation of the maces, sceptres and statues (*PT* 62–71), and an unparalleled mouth-opening ritual (*PT* 20–2 and part of *PT* 592). The third register contains *PT* 627B, which is labelled 'ascending Nut' as part of the section 'spells for the sarcophagus'. The fourth register's *PT* 302, which is labelled 'ascending towards the sky', occurs in four different categories—'spells for leaving the Akhet', 'spells for proceeding to the end of the Akhet', 'the burial chamber ritual' and 'the resurrection burial'—depending of the context in which it is found. In Wenis and Teti, it occurs above the corridor entrance in the antechamber, corresponding to the end of the journey of the deceased, but in Merenre and Pepy II, it is in the burial chamber and is therefore interpreted as part of the burial chamber ritual.

The west wall has not been reconstructed by Jéquier, but the fragments that have been identified are linked to the category 'regeneration in the womb of Nut', and the individual spells are labelled as follows: cleansing and clothing the newborn spirit (*PT* 450–1, 590), invoking the spirit and Nut (*PT* 426–7), Geb commends the spirit and Nut (*PT* 429–30), encouraging the spirit to enter the Akhet (*PT* 367–8), and establishing the spirit as Osiris (*PT* 356).

The identification of thematically related groups of texts on the east and south walls is more problematic because sequences there do not correspond to single groups. On the east wall, most of the spells belong to the 'response to offering ritual', but they are mixed with spells belonging to other groups. Fig. 2.10 indicates the groups to which a spell belongs to according to Allen's classification. Some spells appear in more than one category; this is indicated by the superposition of two patterns. For instance, *PT* 347–8 belong to the group 'at the gate of the Akhet' and 'response to the offering ritual', as is visible from the superposition of horizontal and vertical patterns. The diagonal pattern indicates texts referring to 'spells for the spirit's rebirth'.



Fig. 2.10: East wall: Shading patterns:  'at the gate of the Akhet';  'spells for the spirit's rebirth';  'response to the offering ritual'; categorisation of Allen (2015).

Fig. 2.10 shows that the majority of the spells on the east wall belong to the different categories 'at the gate of the Akhet', 'response to the offering ritual', and 'spells for the spirit's rebirth'. Three spells belong to other groups: *PT* 473 corresponds to 'spells for entering the Akhet', *PT* 625B to 'spells for the sarcophagus', and *PT* 587 to 'spells for emerging into the sky' (in Pepy I) or 'spells for opening the door to the Akhet' (in Merenre). While a common theme could be defined here, the aim is rather to show the identification of groups in comparison to the classification Allen has applied to older pyramids.

Ibi's south wall displays a similar thematic heterogeneity. The first register includes spells for entering the womb of Nut (*PT* 592), entering the Akhet (*PT* 368), and for passing from the Akhet to the sky (*PT* 536). No spells in the second register have been identified with a group. The third register consists of spells for passing through the Akhet, for entering and leaving the tomb (*PT* 563), and for entering the Akhet (*PT* 325). The fourth register has a spell for entering the Akhet (*PT* 374), a spell from the resurrection ritual (*PT* 665–6), another from the insignia ritual (*PT* 357), and spells for entering the Akhet (*PT* 475). Finally, the fifth register includes a spell from the morning ritual (*PT* 407), spells for

passing from the Akhet to the sky (*PT* 268), and finally a spell for entering the womb of Nut (*PT* 625). *PT* 1002, which occurs between *PT* 374 and 665–6, is not included in Allen (2015).

Applications of Hays's and Allen's classifications give a clear picture of the content of the texts and their affiliation to groups on the west and north walls. However, the east and south walls are more complex. Mathieu argues (2017, 382) that the east wall does not have its own cosmographic meaning in bicameral pyramids and that it represents parts of the antechamber. According to him (2015, 75 and fig. 5), Ankhesenpepy II's east wall incorporates texts found in the east, west, and south walls of antechambers in other pyramids. The left parts of the east wall AII/F/E sup 1–27 and AII/F/E inf 1–2 correspond to hypothetical west and south walls of an antechamber (*AII/A/W and *AII/A/S), and the right parts AII/F/E sup 28–61 and AII/F/E inf 32–61 correspond to hypothetical upper and lower register of the east wall of an antechamber (*AII/A/E sup and *AII/A/E inf). Such a clear division is not visible in Ibi because of the wall's thematic heterogeneity and the unusual layout of the two spells which run through the registers.

However, Mathieu's proposal (2017, 390, 393, 398) that there is a tendency to free up space by moving texts towards the burial chamber can be paralleled in Ibi. This phenomenon can account for the displacement in Ibi of texts usually on the south wall (spells of transfiguration, sequence B.1–2) to the north wall. Mathieu argues that the designers aimed to add more 'texts of the Akhet' in order to increase the transfiguration potential of the subterranean areas. He does not offer a clear definition of this group of texts, except that they are expected to be found in certain areas of the subterranean rooms and that they are thematically related to the Akhet; identifications are, however, often subjective. According to my understanding, the texts on the south wall of Ibi are not necessarily related to the Akhet. For instance, *PT* 665–6 are related to the resurrection ritual, whereas *PT* 357 is connected with the insignia ritual, which corresponds to texts of the Duat since they usually occur on the north wall of burial chambers.

Another argument for a cosmographic arrangement of the texts is the use of different markers to indicate the different spaces. Mathieu argues (2017, 381) that the use of spell-dividers at the top of columns is indicative of cosmographic spaces. According to him, they are used in Merenre to differentiate spells of the Duat from spells of the Akhet. In Ibi, however, the use of spell-dividers is not systematic. They occur at the beginning of spells on the westernmost part of the north wall and on identified fragments of the west wall. They are also found at the top of columns on the east wall and on the central and

easternmost parts of the north wall, but not on the south wall. A differentiation of the texts according to this differentiation of space does not seem to apply here. Mathieu also argues (2017, 384) that a different section can be marked by starting a spell at the top of a column. In Ibi's north wall, the fourth column before the juncture of the north and east wall is left blank. This division occurs between *PT* 222 and 245–6, which consists of the basic spells of the resurrection ritual occurring as a sequence in all pyramids. The meaning here cannot be cosmographic, because these spells all belong to the texts of the Duat, according to Mathieu's categorisation.

APPROACHING DIVERGENCES

In this chapter, I first presented various interpretations pertaining to the possible relationship between the spells and their architectural context. I then described the content of each wall of the pyramid of Ibi, using Hays's typology (2012) to compare its arrangement with older pyramids. This approach provides a basis for discussing similarities and differences in the arrangement of the texts, including different architectural layout of the inscribed parts of the subterranean chambers: the tripartite subterranean arrangement of kings' pyramids versus the bipartite one of those of queens. This comparison showed that approximately half of the burial chamber of Ibi follows closely the textual tradition of older inscribed pyramids and their arrangement on the walls in pyramids of both kings and queens, but that the other half—especially the south and east walls—includes more texts in a fashion that diverges from older pyramids.

I have also explored a possible cosmographic reading of the arrangement of the texts in Ibi, following Allen's categorisation and Mathieu's assumptions that spells are placed in strategic locations (2017, 415–59). This framework does not make it possible to account for the relationship between the arrangement of the texts and the architectural context in the pyramid of Ibi, or at least any cosmographic organisation is not evident at this level of analysis. However, Allen's and Mathieu's arguments that there is a tendency to add texts from the antechamber within the burial chamber is noticeable in Ibi, where texts inscribed in the antechambers and the descending corridor of earlier kings' pyramids are often incorporated in the burial chamber. Whether the aim was to include more 'texts of the Akhet', following Mathieu's argument, or whether the process is related to other factors is not clear.

The unusual arrangement of the texts in Ibi is particularly clear in the second register of the east wall (Fig. 2.7 and 10). Fig. 2.7 shows the classification of the spells according to Hays's (2012, 680; 682): spells belonging to three or more different categories—H.1, H.2, and two undefined categories—alternate in the second register. Fig. 2.10 shows the arrangement of spells on the east wall of Ibi following Allen's categorisation. This approach produces a heterogeneous result: different categories alternate for which no simple explanation is apparent. This register exemplifies the reason why Jéquier (1935, 6) and Theis (2010, 328), for example, have claimed that the spells are arranged randomly. In addition, some spells are not inscribed in full. In this section, I investigate the content of the second register and the distribution of the spells in order to discuss its arrangement.

The sequence of spells in Ibi—*PT* 473, 338, 210, 347–8 (perhaps 349 in the lacuna), 206, 404, 350–1, 405, 353, 401–3, 625B, 207, and 662A—is not attested in the same form in other pyramids. Nonetheless, it is close to Merenre's and Pepy II's sequence of spells, which are also inscribed on the east wall (Fig. 2.11). Fig. 2.7 shows the sequence of spells belonging to Hays's group H and the spells paralleled in Ibi (framed in red). The first part of sequence H in Merenre and Pepy II (section H.1) shares three spells with Ibi: *PT* 338, 339, and 210. The other spells, *PT* 212 to 208, are omitted in Ibi. The sequence in Ibi continues with most of section H.2. Thus, a substantial number of spells belonging to group H is found in Ibi, but half of section H.1 is omitted and *PT* 473 and 625B are added. Both the latter spells are paralleled in other pyramid, but occur in different locations. *PT* 473 occurs in the antechamber of Pepy I, Merenre, and Pepy II (Hays 2012, 684: group J) and *PT* 625 in the westernmost part of the north wall only in Pepy II (Hays 2012, 687: group M). Their occurrence in the sequence of spells of Ibi is discussed below. Another unusual aspect of the arrangement in this area is that some of the spells run through more than one register. Most of them begin or end at the top and bottom of columns, but some simply follow one another without any clear demarcation; only one *dd-mdw* is present, in col. 26.

In this section, I provide the translation of the second register based on that of Allen (2015). The first column indicates the spell number and whether a section of the spell is omitted. I then present and describe the content of each spell, discussing the way spells are shortened and their possible thematic relationships.

Section	Item	Value	Unit	Material	Quantity	Unit Price	Total Price	Remarks
Section H.1	W/S/Esup	204 205 207 209 210-212	—	—	—	—	—	—
	T/S/Esup 1	338 339	210-212 340 341 342	343 344-346	208	—	—	H.2
	P/A/En	489	212	—	—	—	—	H.2
	M/S/Emf s1	338 339	210 212 340 341 342	343 344-346	208	—	—	H.2
Section H.2	N/S/Emf-sup ²⁰	338 339	210 212 340 341 342	343 344-346	400 208	—	—	H.2
		338 339	210 212 340 341 342	343 344-346	400 208	—	—	H.2
Section H.2	T/S/Esup 2	347 348 349	350 351	353	400	—	—	—
	T/A/Es	—	—	—	—	—	—	—
	P/A/Em1	—	—	—	—	—	—	—
	P/Dpost/E	348 349 206 404	350 351 405	353	401-403	—	—	K.2
Section H.2	M/S/Emf s2	348 349	350 351	353	400 206	—	—	—
	N/S/Esup-inf ²¹	347 348 349	206 404	405 353	401-403	—	—	—
		347 348 349	206 404	405 353	401-403	—	—	—
		347 348 349	206 404	405 353	401-403	—	—	—
Section H.2	T/S/Esup 2	347 348 349	350 351	353	400	—	—	—
	T/A/Es	—	—	—	—	—	—	—
	P/A/Em1	—	—	—	—	—	—	—
	P/Dpost/E	348 349 206 404	350 351 405	353	401-403	—	—	K.2
Section H.2	M/S/Emf s2	348 349	350 351	353	400 206	—	—	—
	N/S/Esup-inf ²¹	347 348 349	206 404	405 353	401-403	—	—	—
		347 348 349	206 404	405 353	401-403	—	—	—
		347 348 349	206 404	405 353	401-403	—	—	—
Section H.2	T/S/Esup 2	347 348 349	350 351	353	400	—	—	—
	T/A/Es	—	—	—	—	—	—	—
	P/A/Em1	—	—	—	—	—	—	—
	P/Dpost/E	348 349 206 404	350 351 405	353	401-403	—	—	K.2
Section H.2	M/S/Emf s2	348 349	350 351	353	400 206	—	—	—
	N/S/Esup-inf ²¹	347 348 349	206 404	405 353	401-403	—	—	—
		347 348 349	206 404	405 353	401-403	—	—	—
		347 348 349	206 404	405 353	401-403	—	—	—
Section H.2	T/S/Esup 2	347 348 349	350 351	353	400	—	—	—
	T/A/Es	—	—	—	—	—	—	—
	P/A/Em1	—	—	—	—	—	—	—
	P/Dpost/E	348 349 206 404	350 351 405	353	401-403	—	—	K.2
Section H.2	M/S/Emf s2	348 349	350 351	353	400 206	—	—	—
	N/S/Esup-inf ²¹	347 348 349	206 404	405 353	401-403	—	—	—
		347 348 349	206 404	405 353	401-403	—	—	—
		347 348 349	206 404	405 353	401-403	—	—	—
Section H.2	T/S/Esup 2	347 348 349	350 351	353	400	—	—	—
	T/A/Es	—	—	—	—	—	—	—
	P/A/Em1	—	—	—	—	—	—	—
	P/Dpost/E	348 349 206 404	350 351 405	353	401-403	—	—	K.2
Section H.2	M/S/Emf s2	348 349	350 351	353	400 206	—	—	—
	N/S/Esup-inf ²¹	347 348 349	206 404	405 353	401-403	—	—	—
		347 348 34						

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Translation of Ibi/F/E II based on Allen (2015); the translation is not adapted to the grammatical person nor to the name of Ibi.

- PT 473, 926a–930c*
(930d–938d omitted) As the sky’s two reedfloats are set by the Dayboat for the Sun, that the Sun might cross on them to where Horus of the Akhet is, to the Akhet; as the sky’s two reedfloats are set by the Nightboat for Horus of the Akhet, that Horus of the Akhet might cross on them to where the Sun is, to the Akhet;
the sky’s two reedfloats are laid down for me by the Dayboat, that I might go forth on them to where the Sun is, to the Akhet;
the sky’s two reedfloats are laid down for me by the Nightboat, that I might go forth on them to where the Horus of the Akhet is.
I emerge on the eastern side of the sky, where the gods are born, and I am born as Horus, as He of the Akhet, for I am justified and my ka is justified. Sothis is my sister, the morning god is my sibling.
I have found the akhs with their mouth equipped (with spells), who sit on the lips of Stork Lake, the drinking place of every akh with his mouth equipped. (Allen 2015, 132)
- PT 338, 551a–552d* Hunger, don’t come for me! Go to Nu, travel off to the flood, for I am sated. I do not hunger, through this wheat bread of Horus that I have eaten, which my chief woman has made for me so that I might become sated through it and acquire this land through it. I do not thirst because of Shu, I do not hunger because of Tefnut. Hapi, Duamutef, Qebhsenuf, and Imseti remove this hunger that is in my belly and this thirst that is on my lips. (Allen 2015, 78)
- PT 339* My hunger is with Shu, my thirst is with Tefnut. I live on morning bread that comes in its proper time: I live on what Shu lives on, I eat of what Tefnut eats of. (Allen 2015, 78–9)
- PT 210, 126a–c*
(127a–132c omitted) Awake, Parter! Go on high, Thoth! Awake, sleepers! Rouse, you in Kenzet!—before the Great Heron that comes from the garden, Paths-Parter who comes from the tamarisk. [My mouth is clean, the Dual Ennead cleans me with natron, and this tongue in my mouth is clean.] (Allen 2015, 33)
- PT 347* My mouth is (full) of natron, my lips are (full) of myrrh. I descend from the field of your ka, (O god), toward the Field of Offering. My [...] is from the *n^{rt}*-tree, my repast is like (that of) the god’s boat; my life is more than the year’s, the food extended to me is more than the inundation, Oh, my ka, fetch, that I may eat with you! (Allen 2015, 79)
- PT 348* Greeting, Great Flood, cupbearer of the gods and leader of humanity! May you content the gods for me, so that they freshen me, desire me, and make me sound. (Allen 2015, 79)
- PT 349* Oh, you of great ka, Horus’s cupbearer, pavilion-director of the Sun, chamber-senior of Ptah! Give greatly to me, for I eat according as you give greatly of my meat. (Allen 2015, 79)
- PT 206* O you in charge of bread production, who belong to the flood, commend me to Fetekte, cupbearer of the Sun, that he may commend

- me to the Sun himself and the Sun may commend me to those in charge of provisioning. When he takes a bite he gives (some) to me, when he takes a sip he gives (some) to me, and I go to sleep sound every day. (Allen 2015, 96)
- PT 404* I travel with you, Traveler—4 times without pause—who is on Wadjet's standards. I am bigger than Horus of the Gory One, the Red Crown that is on the Sun. I am fresh as the papyrus-head of your eye in which heat is, and I become fresh with you. (Allen 2015, 96)
- PT 350* Oh, great striding goddess, who strews the green, malachite, and the turquoise of the stars! As you are fresh, I am fresh, and the live foxtail-rush is fresh. (Allen 2015, 79)
- PT 351* The vulture becomes pregnant [with] me in the nighttime at your horn, circling cow. As you are fresh, I am fresh, and the live foxtail-rush is fresh. (Allen 2015, 79)
- PT 405* Oh, Sun! Oh, you of repletion! Oh, you of repletion! Oh, you of fertility! Oh, you of fertility! You are I, I am you. Ululate for me, ululate for my ka. You shine as me, I shine as you. Make me sound and I will make you sound, freshen me and I will freshen you. I am that eye of yours that is on Hathor's brow, which turns fully back the years from me. I spend the night conceived and am born every day. (Allen 2015, 96)
- PT 353* I have come from Pe: the fire is red, the beetle lives. (Allen 2015, 79)
- PT 401* I have now seen the Great Uraeus, I have now received the Great Uraeus, and my face now falls on the Great Uraeus. Nourishment has laid down the side of his head to me, and I cross my canal with my cobra in my wake. (Allen 2015, 95)
- PT 402* My place is widened with Geb, my star is elevated with the Sun, and I move about in the Fields of Rest. I am the eye of the Sun that spends the night conceived and is born every day. (Allen 2015, 95)
- PT 403* Oh, you whose feast is fresh, upon his field; oh, flower-opener, upon his sycamore; oh, glistening of shores, upon his atil-tree; oh, lord of green fields—now, hey! I will exist henceforth among you, emerging in your coterie and living on what you live on. Oh, you bulls of Atum, freshen me and strengthen me more than the Red Crown upon me, more than the flood upon my lap, more than the sweets in my fist. (Allen 2015, 96)
- PT 625B* My [kilt] is that of a sky-official, and my compound is thereby among those who have identities. [... the Sun in the Cool Waters, and] humanity as well as my two boats [speak to me], for my identity is there as the one of the Akhet, [at whose voice] the idols grow afraid. I return inside] the great circuit beside Him Who is in His Terrorizing. Any god who will give to me will become powerful enough to acquire [his body against his opponents.] I [...] Maat and enliven peace out of fighting, beside Him Who Demands. That is I. (Allen 2015, 241)
- PT 207* A meal for me, knife-sharpener! A meal for me, knife-sharpener! A meal for me, you in the Sun's eye! A meal for me, you with access to the (sun's) boat, you in the God's-Eye (boat)! Cupbearer, present

water! Light the fire! A joint among the roast meat! 4 handfuls of water.
(Allen 2015, 33)

PT 662, 1874a–1877a
(1877b–81b omitted) Riser, Riser! Beetle, Beetle! You are related to me, I am related to you;
your life is related to me, my life is related to you. O you of the papyrus
plant, you have emerged in me, I have emerged in you. I am powerful
in your esteem, for Sustenance is for my morning meal, Abundance is
for my evening meal, famine does not have control of my life, and
conflagration is far from me. I live on your abundance. (Allen 2015,
268–9)

DESCRIPTION AND ANALYSIS

The first spell (*PT* 473, 926a–930c) of the second register mentions the deceased’s travel to the Akhet and his arrival in the place where akh-spirits can quench their thirst. The spell is not inscribed in full, and it omits more than half of the version found in Pepy I, Ankhesenpepy II, Merenre, and Pepy II. The following part is omitted in Ibi:

(“Who are you?” they say about me, the akhs with their mouth equipped.) I am an akh with his mouth equipped. (“So, how has this happened to you,” they say about me, the akhs with their mouth equipped, “that you have come to this place more special than any place?”) I have come to this place more special than any place because: as the sky’s two reedfloats are set by the Dayboat for the Sun, that the Sun might cross on them to where Horus of the Akhet is, to the Akhet; as the sky’s two reedfloats are set by the Nightboat for Horus of the Akhet, that Horus of the Akhet might cross on them to where the Sun is, to the Akhet; Nut’s two reedfloats are laid down for me by the Dayboat, that I might go forth on them to where the Sun is, to the Akhet; (the sky’s two reedfloats are laid down by the Nightboat, that I might go forth on them to where Horus of the Akhet is, to the Akhet.) I emerge on the eastern side of the sky, where the gods are born, for I have been born as Horus, as He of the Akhet. I am justified and my ka is justified: let there be ululation for me and ululation for my ka. Sothis, my sister, and Morning God, my sibling, I come with you, I sail around with you in the Field of Reeds and moor like you moor in the Field of Turquoise. I eat of what you eat of, I live on what you live on, I am clothed in what you are clothed in, I am anointed with what you are anointed with, and I receive water with you in my Nurse Canal, the drinking place of every akh with his mouth equipped. I sit at the fore of the great shrine and govern every akh with his mouth equipped. I sit on the lips of Stork Lake and govern every akh with his mouth equipped. (Allen 2015, 132–3)

The concluding clause to the spell in the latter versions ‘this N will sit on the lips of Stork Lake and this N will govern every akh with his mouth equipped’ is essentially the same as that in Ibi. The longer version brings more information about the context and purpose of the spell, with a dialogue between the akh-spirits and the deceased. This dialogue occurs only in the versions of Merenre and Pepy II; the questions are omitted in the text of Pepy I, leaving only the reply by the deceased (Allen 2015, 132, n. 37). The first question is “‘Who are you?’ they say about me, the akhs with their mouth equipped’ (*Pyr.* 930e), to

which the answer is ‘I am an akh with his mouth equipped (with spells)’. The second one is “‘So, how has this happened to you”, they say about me, the akhs with their mouth equipped, “that you have come to this place more special than any place?”’. A longer answer follows, with the mention that the deceased and his ka are justified (*Pyr.* 935a). Thus, these omitted clauses suggest that the main role of the spell is to legitimise the deceased as a newly transformed akh-spirit and to allow him access to resources in the Akhet.

The following spell, *PT* 338, is likely to have been fully inscribed across several registers, or at least from the first to the third register and perhaps even on the whole height of the wall. *Pyr.* 551b occurs at the top of the column in the second register and *Pyr.* 552d finishes at the end of spell on the third register. The main theme of this spell is about avoiding hunger and thirst. It starts with ‘Hunger, don’t come for me!’ and ends with ‘...remove this hunger that is in my belly and this thirst that is on my lips’. *PT* 339 is similar in content as it mentions hunger and thirst and associates the deceased with Shu and Tefnut to assure his provisioning: ‘I live on what Shu lives on, I eat of what Tefnut eats of.’

PT 210 follows and it also runs throughout the registers. Only *Pyr.* 126b and c are preserved, but *Pyr.* 126d can be expected in the gap ‘My mouth is clean, the Dual Ennead cleans me with natron, and this tongue in my mouth is clean’ (Allen 2015, 33). The beginning of *PT* 347 is likely to have started in another register after *PT* 210, since there is not enough space for the beginning of the spell (*ḡd-mdw*) *r n* and the cartouche. However, the rest of that spell and the successive ones are inscribed within the second register only and do not run across more than one register.

Only one part of *PT* 210 is inscribed in Ibi; the spell is three times as long in the versions of Teti, Merenre, and Pepy II. The following part is omitted in Ibi:

My abomination is excrement, I reject urine. I abominate my abomination. My abomination is these two: I do not eat the abomination of these two, like Seth rejects the two *mtrh* that cross the sky. Sun and Thoth, take me with you, that I may eat of what you eat of, that I may drink of what you drink of, that I may live on what you live on, that I may sit where you sit, that I may grow powerful from what you grow powerful from, that I may sail in what you sail in. My booth is plaited of reeds; my flood is in the Field of Offerings; my feast is among you, gods; my water is wine, like the Sun. I circumnavigate the sky like the Sun, I course the sky like Thoth. (Allen 2015, 33)

It is difficult to assess the reason for the omission of this part from the texts of Ibi. Moreover, about ten spells further follow in the sequences of Teti, Merenre, and Pepy II, but they do not occur in Ibi, which continues with *PT* 347 (Hays’s section H.2). These spells that are absent in Ibi are closely related thematically; they also refer to provisioning

and to elements mentioned in the previous spells. Nonetheless, the transition from *PT* 210 to 347 in Ibi is particularly coherent, since it shares a similar wording referring to the cleansing of the mouth: ‘My mouth is (full) of natron, my lips are (full) of myrrh’. The designer of the texts might thus have deliberately omitted the second half of *PT* 210, together with the sequence found in Teti, Merenre, and Pepy II, in order to continue with the same topic. Perhaps he exploited the similar content of spells *PT* 210 and 347, both of which mention the cleansing of the mouth, to shorten the overall composition and fuse them together in a coherent and meaningful redaction.

The mention that the mouth of the deceased is clean (*PT* 210 and 347) is usually part of the ritual preceding the food-offering and following the libation and censuring (see *PT* 32, 34–6 = ‘cleansing the mouth with salt water’, cf. Allen 2015, 21). It indicates that the deceased is ready to eat: ‘the food extended to me is more than the inundation, Oh, my ka, fetch, that I may eat with you!’. All the following spells, from *PT* 348 to 403, belong to sequence H.2. The sequence of spells in Ibi corresponds to the one inscribed in the descending corridor of Pepy I. These spells refer to provisioning, refreshing the deceased, and making him strong and sound. They use the same rhetorical device of comparison in order to compel reciprocity: ‘May you content the gods for me, so that they freshen me, desire me, and make me sound’ (*PT* 348), or ‘Are you fresh, I am fresh’ (*PT* 350), and ‘Make me sound and I will make you sound, freshen me and I will freshen you’ (*PT* 405).

PT 625B, one of the last spells of the second register, would not be expected in this sequence and is only found elsewhere in the pyramid of Pepy II. Nonetheless, its content relates to that of the first spell of the register, *PT* 473, which is also unexpected in sequence H. The themes of the two boats—the Dayboat and Nightboat—as well as the statement that the deceased is identified with ‘the one of the Akhet’ are present in both. The relation to provisioning occurs in both spells in the finding of the place where akh-spirits quench their thirst (*PT* 473) and in the statement that the deceased becomes the most prominent spirit and should be provided for by all the other gods: ‘Any god who will give to me will become powerful enough to acquire his body against his opponents’ (*PT* 625B).

PT 207 is found elsewhere only in sequence H.1 in Wenis. Its occurrence here can be related to *PT* 348, 349, and 205, with their mentions of the cupbearer of gods. Finally, *PT* 662 also relates to another spell, *PT* 353, with its reference to the beetle, despite the fact that this spell does not belong to sequence H. 2. Spell *PT* 662 concludes on the same theme as the rest of the register and works in symmetry with the second spell, *PT* 338, where there is mention of removing hunger and thirst from the deceased. The final columns of the

register read ‘Abundance is for my evening meal, famine does not have control of my life, and conflagration is far from me. I live on your abundance.’ This spell is only paralleled in Pepy II, where it is twice as long.

... and my surfeit is your meal’s surfeit, Sun, every day.

Father Pepi Neferkare, stand up and receive these your first cool waters that come from Akhbit! Stand up, (all) you in your tombs; loosen your wrappings! Clear away the sand from your face, (Pepi Neferkare)! Raise yourself from off your left side, elevate yourself on your right side! Lift your face and see this which I have done for you! I am your son, I am your heir. I have hoed emmer for you, I have plowed barley for you: barley for your supply, emmer for your yearly supply. You have been endowed with Horus’s eye: it endures with you as it goes far with you. Lord of the house, (put) your arm on your things! (Allen 2015, 268–9)

This spell can be divided in two parts: 662A and B (starting with ‘Father Pepi Neferkare’), because of a change in the grammatical person. Hays (2012, 430) classified 662A as a ‘personal text’ with reference to the deceased in the third person and 662B as a ‘sacerdotal text’ with reference to the deceased in the second person. The occurrence of the first part only in Ibi is therefore coherent with the theme of the register.

Thus, despite the unusual arrangement of the spells on the second register of the East wall of Ibi, most of them can be linked to sequences found in older pyramids, as is shown on Fig. 2.11. The spells that occur only in the sequence of Ibi are also relevant to the context. Most of them relate to the provisioning of the deceased, and his acquired status of an equipped akh-spirit, who can live to the full in the Afterlife by having an effective ka and access to the source of provisioning for akh-spirits.

The shortening of some of the spells shows evidence of being undertaken deliberately. The themes of this sequence of spells relate to provisioning, with references to hunger, thirst, meals, repast, nourishment, freshening, strengthening, and making the new born spirit sound. Some other themes occur several times including the mention of the travel to the Akhet, the flood, the sun, the cupbearer, and the beetle. There seems to be an overarching theme related to provisioning, while some common themes form transitions from one spell to another. For instance, there are thematic clusters throughout the composition: the cleaning of the mouth in *PT* 210 and 347; the mention of the flood and the cupbearer in *PT* 347, 348, and 205, and further in 403 and 207; mentions of the act of freshening in *PT* 404, 350, 351, 405, and further in 403; mention of the beetle in *PT* 353 and 662; mention of pregnancy and being born in *PT* 351, 405, and 402.

Although the spells can seem at first to be randomly arranged because they do not fit the categorisations of Hays (2012) and Allen (2015), they give evidence of a deliberate compilation based on their content. Other aspects of the editing are, however, less thorough. For example, the alteration of the grammatical pronouns from the first to the third pronouns is not consistent throughout the register. The underlying reason why some spells run through more than one register might become clearer once more of the wall is restored with material from the recently found fragments.

CONCLUSION

This chapter has shown that a significant proportion of the texts in Ibi continues the development found in older pyramids. The unusual arrangement of the spells on the walls of the burial chamber—the sequence that was usually on the south wall is now on the north—follows the displacement of sequences found in Wedjebteni and the orientation of the wall found in Iput II. In content too, the spells in Ibi are usually closer to the later versions.

The analysis of the second register of the East wall has shown that the sequence of spells derives from those found in older pyramids. However, parts are omitted and two other spells that are not found in these sequences nor locations are added. The omissions and additions seem to be deliberate and undertaken according to different strategies. The first shortened spell, *PT 473*, seems to omit a redundant passage that has a similar closing statement to the one retained. The second shortened spell, *PT 210*, which also omits more than ten spells of the sequences of Teti, Merenre, and Pepy II, seems to have been chosen to end the spell in order to fuse it with the one that follows: both spells (*PT 210* and *347*) share a similarly worded clause referring to the cleansing of the mouth. Finally, the last spell of the register is also shortened, but it ends with a strong statement ‘I live on your abundance’. It also links with the first spell of the register, which mentions that the deceased has found the place where an equipped spirit drinks, as well as the second spell, which is about repelling hunger and thirst.

Although the spells on this register are thematically related, a cosmographic reading of the wall might be possible when more spells have been restored or when a broader range of material is investigated. At the level of the arrangement of spells, however, the underlying rationale for combining them seems to be strongly thematic. As elsewhere, the processes of omission and addition display engagement with the textual material. The

omission of spells does not necessarily result from concerns of the lack of space, since other spells are also added. It could relate to a desire to include more texts while fitting the result within the available space, by selecting carefully the spells and abbreviating them in different ways in order to produce a coherent body of texts on the wall.

Abridged sequences, random combination, or new composition?

As discussed in Chapter 2, the arrangement of the texts in Ibi diverges significantly from those in older pyramids, especially on the south wall. Hays's typology of the Pyramid Texts shows that the main mechanisms of textual transmission in pyramids of kings rely on modifying sequences of spells by the addition, omission, or displacement of elements. Because there is barely any relationship between earlier fixed sequences of spells and many of Ibi's texts, an alternative approach to that of Hays is required. Morales's argument that the texts inscribed in pyramids of queens is influenced by the lack of space is relevant to this chapter, because the architectural structure of the burial chamber of Ibi is similar to that found in pyramids of queens; I therefore review his approach further in this chapter. According to Morales (forthcoming), the limited space in tombs of queens, which contain only one inscribed room instead of the two of kings (the entire descending corridor is inscribed only in Pepy I), would have led them to develop 'various mechanisms to compose more reduced versions – but equally effective – of Pyramid Texts for the royal women, going from the physical modification of the size of texts and columns to the critical editing and reduction of the sequences of texts and their contents'.

In this chapter, I investigate two sections of texts on the south wall. The first of these consists of eight columns, Ibi/F/S IV 88–93, that are only paralleled in the pyramid of Neith. The second, Ibi/F/S V 1–25, presents an unusual arrangement of three known spells of Pyramid Texts that are incompletely inscribed and are followed by some columns of unidentified text that lack forerunners (Ibi/F/S V 18–25). The first case study focuses on assessing the possibility of a deliberately reduced sequence of spells, while the second analyses in more detail how spells are combined together. The aim is to examine the character of the texts inscribed in the pyramid of Ibi and its relationship to the transmission of mortuary literature. I examine whether there is an rationale behind the arrangement of

spells and whether it is related to the architectural layout in a way that would presuppose similar mechanisms to those that have been proposed for pyramids of queens (Morales forthcoming).

METHOD

In order to address those questions, I rely on methods of textual criticism. Each section of text is transliterated and translated with notes on the reading. The second part of the first case studies is followed by a commentary since there is no published translation yet. I then discuss the possible underlying mechanisms of the re/production of the texts, by exploring devices and by discussing the possible relationship between spells. The latter relies on the assessment of the coherence of the spells as a textual composition, by considering themes and chronology. According to Ramadan B. Hussein:

... the hallmark of Egyptological scholarship on text transmission is a noticeable methodological divide between two groups of text scholars. One group strictly applies the stemmatic apparatus, one that is well-structured and entails well-defined analytical tactics. Conversely, the other group of scholars adopts a less clear methodological approach, relying on wider philological analytical procedures. They not only bring explanation and conjecture of word variation, omissions and glosses into the centre of the critical activities, but also engage in discussion of the evolution of certain text groups and genres. As a result, they do not draw a clear line between textual critical activities and literary critical ones nor do they provide an explanation as to how these two types of critical activities relate to each other. (2017, 299–300)

My approach falls in the second category, because of the impracticality of applying the stemmatic method to a significant proportion of the texts of Ibi, because so few and disparate attestations (also Bickel 2004, 112). From the broader perspective of the transmission of mortuary literature in the Old and Middle Kingdom, Morales (2017) has produced a stemma according to which the texts of Ibi are placed at the end of one branch deriving from an early First Intermediate Period source (Fig. 3.1). Because of this isolation, and hence the lack of parallels, the stemmatic method cannot be used directly on single spells in Ibi or on sections of his texts.

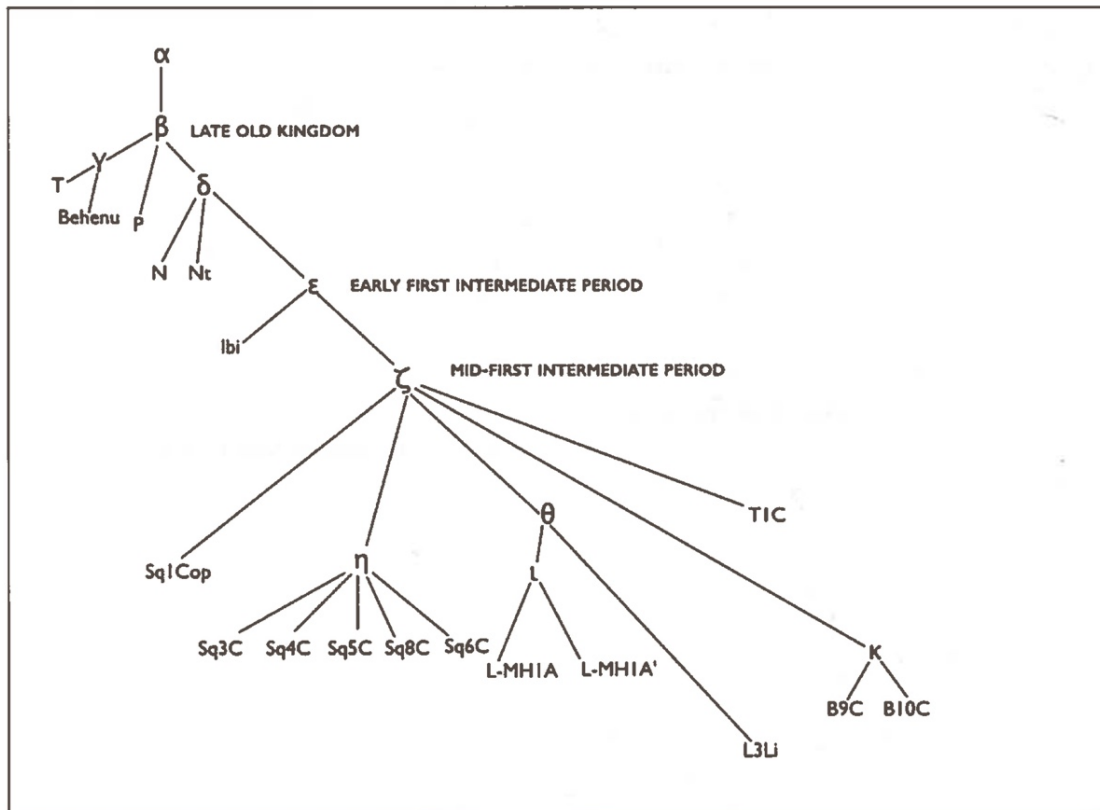


Fig. 3.1: Stemma of *PT 367* as part of the series of Pyramid Texts of Nut
(Morales 2017, 125 fig. 8).

Thus, my approach is more holistic and interpretative. It is comparable to that of Harco Willems (2017), according to whom ‘Egyptology still misses a method (or: methods) of textual interpretation’. Willems proposes a method that relies on sequencing a composition. He breaks down the texts in order to identify themes, protagonists, actions, and places in order to assess whether there is an underlying common theme and chronology of events and if so interpreting the meaning of the composition. Although part of my analysis discusses sequences and thematic coherence, I do not focus on the meaning of the spells and their ritual use. Instead, I address textual transmission and aim to analyse mechanisms of ancient textual criticism and editing, such as possible implications of the absence of spell dividers, shortening of spells, and other devices used to adapt spells into new compositions. For an exercise in comparison, I approach the second case study as a textual patchwork: I discuss the selection of patterns as much as the weavings together. The next section ‘abridged sequences, random combination, or new composition’ is intended to re-assess various assumptions that have been made about Ibi’s corpus through an analysis and discussion of two case studies.

CASE STUDY 1: ‘UNIDENTIFIED’ IBI/F/S IV 88–93

This case study is about eight columns (Fig. 3.2) located on the fourth register of the south wall of the burial chamber. The text preceding this section is lost, whereas the following one consists of miscopied spells that I discussed in Chapter 4 ‘Copying processes’.

Fig. 3.2 is a reproduction of Jéquier’s cols 515–23 (1935, pl. xi), restored on the basis of the parallel plates of Neith (Jéquier 1930, pl. xiii, 368–75) and corrected with unpublished photographs of the MafS. Jéquier did not assign a spell number to this text, but indicated that it is paralleled in Neith cols 368–75. In his publication of Neith, he indicated (1930, 21) that this section consisted of clauses borrowed from different chapters (*PT* 642, 646, 645, 649, 454, and 592) with additional new texts; he also referred to this section of Ibi’s texts.

The first four columns of this section can be identified as elements belonging to different spells: *PT* 426, 454, 589, 590, 592, and 649. J. P. Allen (2005, 321, 226) divides Neith’s section in two spells: *PT* *718 (Jéquier 1930, pl. xiii, cols 358–69) corresponding to Ibi cols 1–2, and *PT* *805 (Jéquier, pl. xiii, cols 370–5) corresponding to Ibi cols 2–8. This identification of two distinct units derives from the vocative *h3 wsjr* ‘O Osiris’ at the top of col. 370. Since *PT* *718 finishes at the bottom of a column, no spell divider is present, whereas the end of *PT* *805—which is in the middle of a column—is indicated by a *hwt* sign. However, the absence of spell dividers on the south wall of the burial chamber of Ibi makes it challenging to identify separate units. I therefore divide the text into three parts on the basis of their content. Part 1 (cols 1–3) corresponds to the end of *PT* 454, but it is likely that the previous columns contained the same text as in Neith (Jéquier 1930, pl. xiii, cols 358–69). There follow clauses paralleled in Pepy II (*PT* 649, 1831b–32b), but elements are also paralleled in other spells (*PT* 454, 589, 590, 592). Part 2 (cols 3–6) can be considered to be clauses of *PT* 592 alternating with otherwise unattested clauses. Part 3 (cols 6–8) consists entirely of new texts also attested in Neith.

In Fig. 3.2, I indicate the sections paralleled in spells in earlier pyramids with three different colours. Because clauses are paralleled in more than one spell, I only indicate the section with parallels, so that the new texts are visible. The passage highlighted in purple is paralleled in *PT* 454, that in green in *PT* 649 (but also in *PT* 589, 590, 592) and that in yellow in *PT* 592 (also partly in *PT* 426). The detailed identification of paralleled clauses is indicated in the transliteration and translation below.

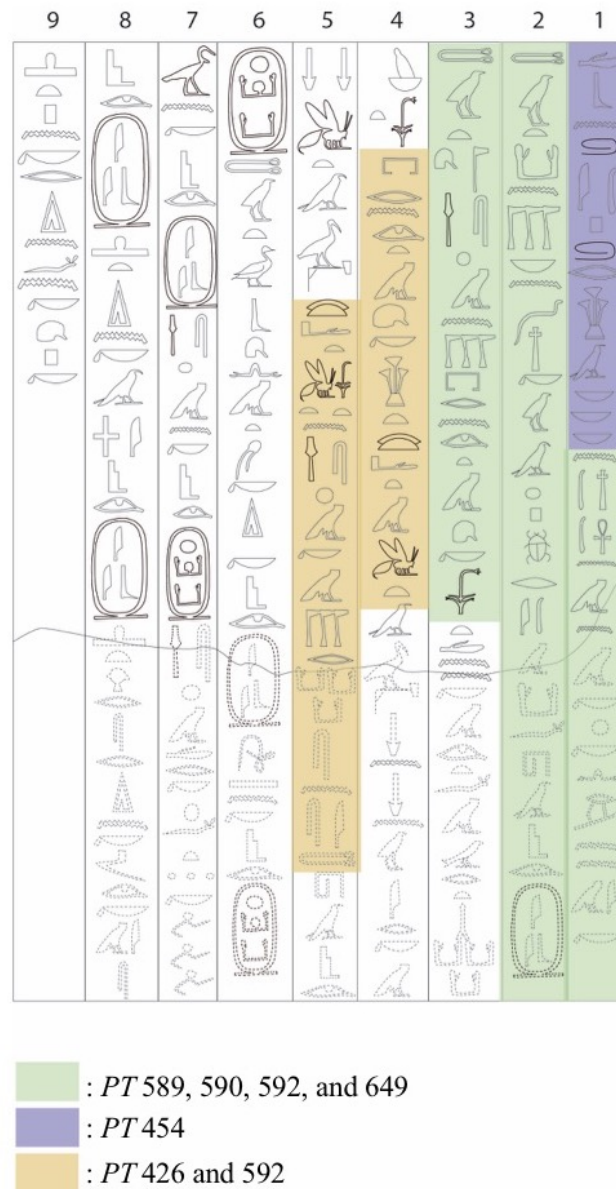


Fig. 3.2: Ibi/F/S IV 88–93. The highlighted sections indicate texts paralleled in other spells. Line-drawing based on MafS unpublished photograph (= Jéquier 1935, pl. xi, cols 515–23).

Transliteration, translation, and notes on readings

The first column indicates my subdivision into three parts as well as Allen's numbering of this section into two spells *PT* *718 and *805 (Allen 2005, 321, 226). The second column indicates whether the transliterated clauses are paralleled in other pyramids or whether they consist of 'new texts'. The transliteration and translation are based on Allen (2013; 2015) with slight alterations to remain as close to the text here as possible.

Part 1	<i>PT</i> 454, 847c	[<i>twt ntr cʒ³ wr.tj⁴ dbn.tj m</i>]	You are the great god, being older and circling as
<i>PT</i> *718	<i>PT</i> 454, 847c	¹ <i>dbn.<tj> phr⁵ ḥ³ nbw</i>	the one who surrounds and circulates around the External Isles
	<i>PT</i> 590, 1610a	<i>nd.tj ḥnh.tj</i>	You are tended and alive
	<i>PT</i> 649, 1831b–32b	<i>nmn[m.k rᶜ nb⁶ n hn.n⁷ jm.k]</i>	and move about every day there is (nothing of you) that is disturbed
	<i>PT</i> 589, 1609a–b	² <i>twt k³ n ntrw nb</i>	you are the ka of all the gods
	<i>PT</i> 649, 1831b–32b	<i>nd.<n> kw ḥr hpr.tj m [k³.f⁸</i>	Horus has tended you you having become his ka.
Part 2	<i>PT</i> 592, 1624a–b	<i>ḥ³ wsjr (jbʃ)] ³ twt ntr shm n ntrw</i>	O Osiris Ibi, you are a god more
<i>PT</i> *805	<i>PT</i> 649, 1831b–32b	<i><nb> pr.n jrt m dp⁹.k¹⁰ šmᶜt</i>	powerful than <all> the other gods, The Eye has come forth in your head as the one of Upper-Egyptian

³ In Neith (Jéquier, 1933, pl. XIII, col. 368).

⁴ *ḥ³ wsjr N wr.tj* in Pepi I, Merenre and Pepi II. Neith has the same version as Ibi.

⁵ *phr* is an addition that only occurs in Neith (𓂏𓂛𓂏𓂛𓂏𓂛) and Ibi. It might derive from the transcription process: the addition of phonetic complements to 𓂏, the determinative of *dbn* 𓂏𓂛𓂏𓂛 in Pepy I, Merenre, and Pepy II (*Pyr.* 847c). The close meaning of *dbn* and *phr* could also suggest that it consists of a graphic tautology.

⁶ 𓂏 instead of 𓂏 in Neith col. 368; this is a mistake of the painter. All parallels (*PT* 649, 1831 b and *PT* 590, 1610b) show a 𓂏.

⁷ *n hn.n.tj* in Merenre, Pepi II (*PT* 590, 1610b, *PT* 649, 1831c), but without *t* in Neith (Jéquier, 1933, pl. XIII, col. 368–369).

⁸ These clauses also occur in *PT* 649, 1831d–32a once in Merenre, twice in Pepi II.

⁹ The painter in Neith made a retrograde 𓂏 instead of 𓂏 (Jéquier 1933, col. 370).

¹⁰ *m wr.t-ḥk³w* occurs before *šmᶜt* in Merenre, Pepy II (*PT* 592, 1624 b), and Neith (Jéquier, 1933, col. 371).

	New texts	$d^{11}.n$ [$n.k$ hr^{12} $jrt.f$ m $h^3t.k$ m wrt hk^3w] $^4 sm^c t$	Horus has placed for you his Eye on your forehead as the Great-of-Magic crown of Upper Egypt
	PT 592, 1624c	$pr.n$ jrt m $dp.k^{13}$ $mhw t$	The Eye has come forth from your head as the one of Lower Egypt
	PT 592, 1626	$h^c.t$ m bjt	You have appeared as the Dual King
	New texts	hr $dhwtj$ [$snsnw$ $jr.k$ m] $^5 sn.wy$ bjt^{14}	Horus and Thoth have joined you as the two companions of the Dual King.
	PT 592, 1626 PT 426, 776a–b	$h^c.t$ m $nswt$ bjt n $shm.k$ m $ntrw$ [$k^3.w.sn$ is	You have appeared as Dual King, for you have power over the gods and their ka
Part 3 PT *805	New texts	h^3 $wsjr$] $^6 (k^3-k^3-r^c)$ twt $\langle s^3 \rangle^{15}$ Gb nj $mt.k$ spd^{16} $n.k$ $wsjr$ [(jbj)] w^3s $n.k$ $wsjr$ ($k^3-k^3-r^c$)] $^7 b^3$ $n.k$ $wsjr$ (jbj) shm^{17} $n.k$ $wsjr$ ($k^3-k^3-r^c$) $sh[m.k$ $dr.k$ $hftjw.k$] 8 $wsir$ (jbj) htp dj $n.k$ hr jm $wsir$ (jbj) $ht[p$ $hr.s$ rdj $n.k$ $m^3.k$ $jm.s$] $^9 htp.n.k$ $rdjt.f$ $n.k$ $dp.k^{19, 20}$	O Osiris Qakarê, you are Geb⟨'s son⟩ You will not die Effectiveness is yours, Osiris Ibi Esteem is yours, Osiris Qakare b^3 -power is yours, Osiris Ibi shm -authority ¹⁸ is yours, Osiris Qakare You will have power to drive out your enemies Osiris Ibj is satisfied Horus has placed (it) for you Osiris Ibi is satisfied about it It has been caused to you that you see with it You have been satisfied with what he put for you atop of you.

¹¹ Often in the sense of ‘place’ in the Pyramid Texts according to Faulkner (1969, 103).

¹² $\mathfrak{h}$ is a mistake in Jéquier’s text (1933, pl. XIII); a $\mathfrak{h}$ is visible in the unpublished photographs (MafS).

¹³ m $wr.t$ hk^3w in PT 592, 1624b, but omitted in Neith (Jéquier, 1933, pl. XIII, cols 370–1) and Ibi.

¹⁴ Allen (2013, PT *805, 6) considers hr $dhwtj$ to be the determinative of $sn.wy-bjt$.

¹⁵ In Neith (Jéquier, 1933, pl. XIII, col. 373).

¹⁶ $\mathfrak{h}$ instead of $\mathfrak{h}$; the sequence of words is paralleled in PT 364, 621c, PT 412, 723, PT 467, 886, PT 599, 1650b–c, PT 640, 1811b–c, where the phonetic complements indicate the reading spd . The original might have been confusing since $\mathfrak{h}$ occurs in Neith (Jéquier, 1933, pl. XIII, col. 373).

¹⁷ $s^c nh$ $n.k$ in Neith (Jéquier, 1933, pl. XIII, col. 373).

¹⁸ Following to Goebs, 2008, 14. For an analysis of shm , w^3s and spd see Goebs 2008, 17–18; Eyre 2002, 133.

¹⁹ For the preposition dp see Allen 2017, 68, §8.10.

²⁰ A hwt chapter divider shows the end of the spell in Neith (Jéquier, 1933, pl. XIII, col. 375).

Content

Part 1 is about the identification of the deceased with the sun and his assimilation to its perpetual daily cycle: ‘you are the great god, being older and circling’. It ends with the mention that the deceased is ‘the ka of all the gods’, which expresses the leading status that he acquired. Each clause of this part is paralleled in other spells: *PT* 454 (Pepy I, Merenre, Pepy II, and Neith), *PT* 589 (Merenre, Pepy II, and Neith), *PT* 590 and *PT* 649 (Merenre and Pepy II). Part 2 mentions the crowning of the king and his appearance as dual king, with the mention of the deceased being ‘more powerful than all the other gods’ and with a similar spell ending: ‘you have power over the gods and their ka’. It consists mainly of clauses paralleled in *PT* 592 interspersed with clauses from *PT* 649 and 426 and several clauses that have no known parallel. Finally, Part 3 consists of otherwise unattested clauses identifying the divine qualities of the deceased and his status of legitimate ruler as son of Geb.

Editing mechanisms

The texts inscribed in Ibi is close to Neith’s text, but diverges with the omission of the prepositions *m* in *m ḥʒt.k* ‘on your forehead’ (col. 3), and in orthography with the broader use of phonetic complements (e.g. *nd*, *hpr*, or in the stative *.tj*, with the additional *ḳ*) and the use of truncated anthropomorphic signs. These could derive from the process of copying (see Chapter 4); other divergences of signs—for instance *ḳ* instead of *ḳ* (cf. n. 16)—are mainly mistakes on the part of the carvers and painters in the pyramid of Neith (visible on the unpublished photographs of the MafS).

The fact that the text is paralleled in Neith and not in any pyramids of kings could suggest that the text was created for the specific context of a queen’s pyramid. The paralleling of many clauses in different spells is compelling: does it derive from a careful reworking of longer sequences as a way to merge texts into a shorter composition, or is it a different text with many similarities? Morales (forthcoming, 15, fig. 7) classifies the text that is analysed in this section as a ‘mixed’ text. He defines such groups as resulting from a scribal procedure that combines ‘several texts of different natures and categories, probably as an attempt to represent in abridged form the most critical rites and recitations for the benefit of the deceased queen’. Such a process of producing shrunken sequences as

supposed by Morales might be expected to impede the reading, but the texts found in Neith and Ibi functions well as legible and coherent compositions.

Only the first few columns could be considered as resulting from such a procedure (columns highlighted in Fig. 3.2); because the second half consists of otherwise unattested texts, its relation to possible sources cannot be established. Whether the few first columns derive in fact from a combination of selected clauses from various spells is doubtful for three main reasons. First, the text reads as a composition and not as juxtaposed excerpts. Second, the paralleled clauses are formulaic, which could account for their occurrence in more than one spell. For instance, clauses such as ‘you are the ka of all the gods’ (PT 589), or ‘O Osiris (N) you are a god more powerful than all the other gods’ (PT 592) are widespread in mortuary literature. Similarly, *spd*, *wšš*, *bš*, and *shm* (Part 3) commonly express the qualities of the new divine being. They also occur in this order in three other spells (PT 364, 621c, PT 640, 1811b–c, PT 599, 1651b–c). Third, the addition of several columns of otherwise unattested texts goes against Morales’ idea of a reduced sequence (forthcoming, 15).

The paralleled clauses, which are formulaic, could derive from the oral development of ritual texts and their entextualisation at different points in time. Thus, these recognisable parts of clauses in Neith’s text do not necessarily imply that they are excerpts from different spells and were juxtaposed one to another, but that they derive from a different composition, while their similarities can be linked to the transmission of comparable utterances through time. As stated by Eyre (2002, 20) ‘from the 5th Dynasty on, sets of phrases and specific themes are recycled in different hymns and spells, for different performative connects, from what appears to be a common formulaic canon of ritual phraseology’. This development linked to performances could perhaps account for the addition of the verb *phr* after *dbn*: ‘the one who surrounds and circulates around the External Isles’, or it could derive from a written variation as mentioned in note 5.

My second case study focuses on a section of the south wall that not only has no link to sequences of texts in pyramids of kings or queens, but is also followed by a new text (cols 18–25). The section Ibi/F/S V 1–25 (Fig. 3.3) consists of 25 columns of text containing three spells—*PT* 407 (cols 1–2), *PT* 268 (cols 2–13), and *PT* ^N627B (cols 13–17)—followed by eight more columns of an otherwise unattested text (cols 18–25). Two of the three spells are shortened (*PT* 268 and ^N627B), but in other respects all three follow the versions of the Old Kingdom Pyramid Texts quite closely strictly. By contrast, the eight additional columns do not correspond to any known version in mortuary literature (see further below) and so have not been allocated spell numbers; I therefore refer to them as ‘Unnumbered text’ in this chapter. In Fig. 3.3, hieroglyphs indicated in outline are added in the lacunas on the basis of Kurt Sethe’s edition (1908–1922); the spell division between *PT* 268 and *PT* ^N627B is discussed further below.

I divide the transliteration and translation of Ibi/F/S V 1–25 into two parts: cols 1–18 and then cols 18–25, because the latter, which is new, requires a commentary. I then discuss the whole section together, in order to assess possible mechanisms of assembling sections of spells.

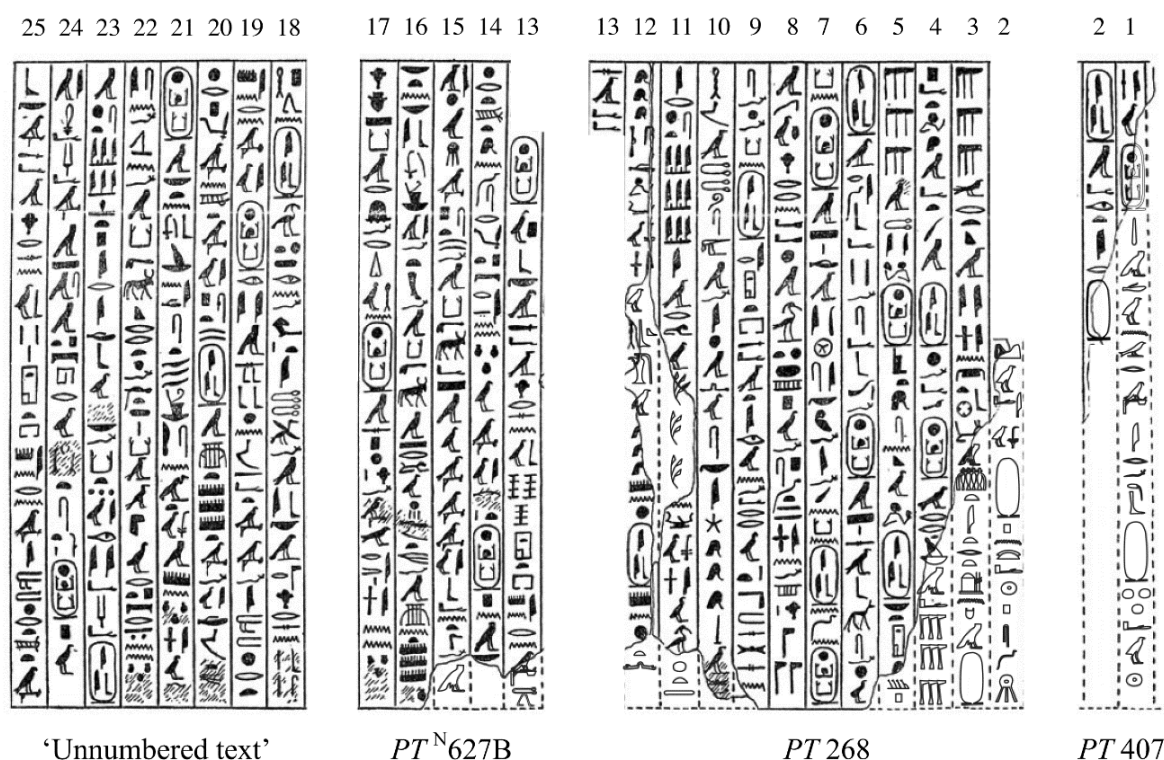


Fig. 3.3: Ibi/F/S V 1–25, adapted from Jéquier 1935, pl. 12, cols 613–37.

Part 1: PT 407, 268, N627B–Translation and notes on the reading

PT 407 §713 a–b	¹ <i>jwḏ</i> (<i>k3-k3-r</i>) [<i>mdw n wr j-r.f</i> <i>w^cb r^c (jbj) ḥw r^c</i>] ² (<i>jbj</i>) <i>m-^c jryt jr</i> (<i>jbj</i>) <i>ḏ/w</i>	Qakare will govern [for the one who is older than he. Re will purify Ibi, Re will protect] Ibi from that which might be done wrongly against him.
PT 268 §370 a–b	<i>j^c sw (jbj) pn ḥ^cj r^c psḏ</i>] ³ <i>psḏt wrt</i> <i>k3jj jmj nbtj m ḥ[nt jtrt</i>	[This Ibi will wash himself as Re appears and the Great Ennead shines.] If the Ombite becomes elevated to the fore [of the shrine,
§371a–c	<i>nḥm (jbj)]</i> ⁴ <i>p^ct²¹ m ^ct m (jbj)</i> ²² <i>ḥf^c (k3-k3-r) wrwt [m-^c ps]</i> ⁵ <i>ḏtj²³</i> <i>3tjj (k3-k3-r) jst snqw (jbj) nbt-ḥwt</i>	Ibi will take over the elite as a limb in Ibi. Qakare will seize the <i>wrrt</i> -crown [from the Two] Enneads Isis will nurture Qakare and Nephthys will suckle Ibi
§372 a–e	[<i>šsp</i>] ⁶ (<i>jbj</i>) <i>ḥr jr ḏb^cwy.fj</i> <i>s(w)^cb.f (k3-k3-r) m š z3b</i> <i>sḥwi(.f)</i> ⁷ <i>k3 n (k3-k3-r) m š ḏ3tj</i> <i>jsk.f jwf n k3 n (jbj) n ḏ(t) (k3-k3-r)</i> ⁸ <i>m nw ḥr rmnwj r^c m 3ḥt šspw.f</i>	Horus will take Ibi at his two fingers, he will purify Qakare in the Jackal Lake and release the ka of Qakare from the Lake of the Duat. He will purge the flesh of the ka of Ibi and of the body of Qakare ²⁴ with what is on the shoulders ²⁵ of Re in the Akhet, which he receives when the Two Lands shine so that he opens the faces of the gods.
§373 a–b	<i>psḏ<t> t3wy jwn.f ḥr ntrw</i> ⁹	

²¹ Goebis 2008, 39: ‘take over the *p^ct* as a limb in himself’.

²² *jm.f* in Wenis, Pepy II, Senwosretankh and Imhotep. *jm.s* in Neith.

²³ *psḏtj* with dual ending in Unis and Senwosretankh; two *psḏt*-groups in Neith. As no dual occurs after *psḏt* in col. 5, three groups of *ntrw*-signs can be restored at the bottom of col. 4.

²⁴ The usual parallelism might suggest a translation ‘and’, but ‘of’ could also be plausible.

²⁵ This also means ‘at the side of, next to’ (*Wb.* II, 418).

	<i>sfh²⁶.f k3 n (jbj) jr hwt-^{c3}t</i>	He will release the ka of Ibi at the Great Enclosure ²⁷
§374a–c	<i>sšm.f jhmw-skj</i> <i>d3.f ¹¹ jr shwt-j3rw</i> <i>[h]n sw jmjw 3ht ¹² sqd sw jmjw</i> <i>qbhw</i>	and he will lead the Imperishable Stars. He will cross to the Marshes of Reeds while those in the Akhet row him and those in the Cool Waters sail him.
§375a	<i>mnh(w) (jbj) mnht[t n] ¹³ z3 cwy</i>	Ibi will become truly effective, and the arms of Qakare ²⁸ will not resist ⟨him⟩. ²⁹
PT N627B	<i>(k3-k3-r^c) pw bjk c3 hry znbw</i>	This Qakare is a great hawk on the battlements of the Enclosure of Imenren ³⁰
§1778 a–c	<i>hwt jmn-rn</i> <i>[jtt] ¹⁴ hryt tm n dsr pt jr t3 nw</i> <i>jw jrt (k3-k3-r^c) pn m nb[t] ¹⁵ j3hw</i>	who takes the attributes of Atum of separating the sky and the Earth from Nu. ³¹ The eye of this Qakare is that of the Lord of sunlight,
§1779a–c	<i>spty.fj m k3 c^hmw</i> <i>jw b^cnt.f[m] ¹⁶ nbt nbj</i> <i>j3ft.f m k3 mšr.w</i>	his lips are those of the bull of sacred images, his neck is that of the mistress of flames, his claws are those of the bull of the evening,

²⁶ The versions of Unis and Pepi II have *shp* instead, which means: ‘conduct someone to’ (Faulkner 1962, 241), whereas the version of Ibi and Neith have *shf*, which means ‘release, loose, purify, lay aside...’ (Faulkner 1962, 225).

²⁷ Allen (2015, 351) suggests that this refers to the solar temple in Heliopolis.

²⁸ Since the third person suffix is absent, I suggest that the cartouche replaces the suffix of the previous word as well as acting as the subject of the next spell.

²⁹ PT 268, 375b is omitted.

³⁰ Imenren/Imenrenef see Gilula 1982, 263, n. 15.

³¹ Translation based on personal communication of Bernard Mathieu, who refers to Pourille’s discussion about Nu (2000, 658–664). According to Allen (2005, 304, n. 9), it refers to ‘Shu, the atmosphere’.

§1780a–b	<i>dmʔt.f m hnt(y)-mnw[t.f]</i> ³² ¹⁷ <i>hr(y)-jb</i> ³³ <i>kʔr.f</i>	his wings are those of Thigh-Forward ³⁴ in the midst of his shrine.
	<i>rdj(w) hw n (kʔ-kʔ-rʕ) m zp</i> ³⁵ <i>hr.f wr jr-gs jmjw nw</i> ³⁶	A royal ordinance has been given to Qakare as He Whose Face Remains, ³⁷ the great one beside Him Who is in Nu.

³² The full writing of the deity occurs in col. 20, paralleled in Teti *PT* 254, 285a, in Pepy I, *PT* 483, 1015a, and without determinative in Pepy I, *PT* 581, 1552b.

³³ This epithet does not occur in the other version. It is unlikely to be š ‘pool’ since the stroke is not written as in col. 6–7. A link could be suggested with *hr(y)-jb tʔ* ‘in the midst of the land’ (*Wb.* III, 138), with the meaning ‘in the midst of the area of his shrine’.

³⁴ According to Allen (2005, 442), it is a designation of Horus as a standing hawk; Jacq (1986, 286, n. 1149); also an epithet of Osiris in *PT* 580, 1549b. See also *Wb.* II, 60, 5 and 68, 11–12.

³⁵ Instead of *sn.w* in Pepy II and B1Bo.

³⁶ *PT* 627, 1780c–1785c are omitted.

³⁷ *sn* in the other versions, which is rendered ‘He Whose Face Suffered’ (Allen 2005, 432: *zwzw-hr.f* ‘an epithet of Horus, referring to the loss of his eye’.) See also Faulkner, 1969, 261, n. 16.

Part 2: ‘Unnumbered’–unpublished

In the presentation of the text, numbered footnotes provide information on the transliteration and reading, while note letters refer to the longer discussions on the text follow the translation of Part 2.

|¹⁸ *ph.n (jbj) 3ht jr.n.f h3t*

Ibi has reached the Akhet and he has acted at the prow (of the solar bark),^a

jtt.f m bjk ntry hr znbw [hwt] |¹⁹ *jmn-rn*

after having passed³⁸ as a divine hawk over the battlements of the [Enclosure] of Imenren,

jw (k3-k3-r) jry³⁹ m sbb r^c n m3^ctj.fj

Qakare has been appointed as guide of Re of his two Maat-barks^b

jtt hryt |²⁰ *hrp n tm*

who seizes the attributes of divine control⁴⁰ from Atum.

jw spt.wy (jbj) m hnty-mnwt.f

Now the lips of Ibi are those of Khentymenutef

jw dm3tj |²¹ *(k3-k3-r) m nt nbj*

Now the wings of Qakare are those of the mistress of flame.^c

*jn dswt snmwt sw m mnw jmjw dš[rt]*⁴¹

It is the Slaughterers who will feed him with the *mnw* that are in the Red Cro[wn].^d

|²² *sjn.f n.f m k3 qrrt.f*

he rushes to him⁴² as the bull out of his stall⁴³

mhyt jw k3w

north of the Island of Kaau^e

³⁸ Temporal relation argued by Gilula 1982, 261, n. 11.

³⁹ For *jry* cf, Allen 2017, 122–3, §15.3.

⁴⁰ I propose to read the  as a determinative of *hrp*. This writing occurs with  in Coffin Texts (van der Molen, 406). In the Pyramid Texts (*Pyr.* 1778a) *jtt hryt tm* ‘who takes Atum’s property’ (Allen 2005, 244).

⁴¹  is visible on unpulished MafS photographs.

⁴² Perhaps meaning the sun.

⁴³ Usually *qrr* is rendered ‘cavern’ (*Wb.* V, 62). However, as pointed out by Faulkner (2004, II, 99, n. 6), the translation ‘cavern’ or ‘hole’ does not suit the context of *CT* spell 990 (VII, 200g), where the *qrrt* is on a boat. He suggested a more generic term: ‘stall’.

r pt r t3 n nw |²³ m shjt⁴⁴ htp

to the sky, from the earth and from Nu⁴⁵ in the
two Fields of Offerings

jr jdbw-nbw⁴⁶ mfk3t

to the isles of turquoise,

jw jry h^c (bjj) |²⁴ jm

Ibi has been made to stand there

mj h^c m sšm m pt hrw [hts] rnpt

like He Who Stands as guide in the sky on the
day of [completing] the year.^c

(k3-k3-r^c) pw |²⁵ bjk 3 hry znbw hwt jmn-rn

This Qakare is a great hawk upon the
battlements of the Enclosure of Imenren

jtt hryt tm

who seizes the attributes of Atum.

Extended comments on the translation

a *h3t* is understood as the prow of the solar bark in the first clause, *ph n (bjj) 3ht jr.n.f h3t* ‘Ibi has reached the Akhet and he has acted in the prow’, on the basis of parallel versions. The word *h3t* occurs in *CT* spell 148 ‘in the suite of Re of the horizon in the prow of the primeval bark (𓂏𓂐𓂑) for ever and ever’ (*CT* II, 222a). The phraseology *jr.n.f h3t* can also be compared with ‘the bark of Re travels in the Nu, and it is I who take her prow-rope (𓂏𓂐𓂑)’ in *CT* spell 684 (VI, 313p–q).

b The clause *jw (k3-k3-r^c) jry m sbb r^c n m3^ctj.fj* ‘Qakare has been made as guide of Re of his two Maat-barks’ should precede *h^c m sšm m pt hrw [hts] rnpt* ‘the one who stands as guide in the sky on the day of [completing] the year’ according to the other versions (*PT* N627B, 1785b; *CT* spell 682: VI, 312p–q; *CT* spell 990: VII, 201c–d). Christian Jacq (1986, 315, n. 1692) also proposes a translation of the sentence in Ibi: ‘le roi est quelqu’un qui agit comme celui qui fait passer (?) Rê vers ses deux barques maâty (?)’. This rendering is correlated with the text in the version of Ankhesenpepy II: *jw nh.s-n-Ppy [jry] m sšmw*

⁴⁴ Dual form as in *CT* spell 682 (*CT* VI, 312h).

⁴⁵ This clause usually follows *jtt hryt tm*. The issue of order is discussed below.

⁴⁶ A $\cup$ is clearly visible below the lacuna, where two other $\cup$ can be restored. This passage is comparable to: *m jdbw mfk3t* ‘lakes of turquoise’ (*Pyr.* 1784e and *CT* spell 990: VII 200d) and *m išwt mfk3t* (*CT* spell 682: VI 312i: ‘She of Turquoise’ (Faulkner 2004, II, 248) as a name of Hathor (see also *Wb.* II, 57). *mfk3t* can also be written without the *m*.

sšm.f sw r m³c tj.f, ‘Ankhesenpepy [has been made] as guide so that she may guide him (Re) to/in his two Maat-barks’.⁴⁷

The mention of the two Maats refers to barks according to the determinative  in Pepy I and Pepy II ( in Ankhesenpepy II). However, in both Papyrus Gardiner II and III it is in the singular form and determined by the seated god ; in the coffin of Djehutynakht the determinative is a statue like standing figure of Maat with a feather on the head followed by two strokes (*CT* VI, 310o). Although it is very likely that each of these versions has the same meaning, Faulkner (1969, 260) gave a different interpretation. For the version in the Pyramid Texts he translated ‘the king guides Re in his Two Barks of Truths on that day of bringing the year to an end’, whereas for Djehutynakht’s version he translated (1973, 248) ‘as Him who causes Re to go up to his two Truth-goddesses, who sends the Eternal to Him who brings the year to an end’. However, in light of the parallels in the Pyramid Texts and P Gardiner II-III, this passage in Djehutynakht could be emended to ‘N is firm in the sky and established in the sky as the one who leads the Great One, as the one who brings *s^cr ( is written for ) Re to/in his two Maats.’

c Instead of the identification of four limbs with deities as found in *PT* N627B (cols 14–16), only two occur in ‘Unnumbered’: the lips and the wings. However, the lips and not the wings are identified with Khentymenutef and the wings instead of the neck (col. 15) are identified with the ‘mistress of flames’ (col. 21). There is no systematic comparison between one limb and a god, except in the versions in Teti, Pepy I, Merenre, Pepy II, and Ankhesenpepy II. P Gardiner II–III mentions five body parts and the version on the coffin of Djehutynakht six. All the versions, except the one in Djehutynakht’s coffin, describe the parts of the body of a bird with the mention of the wings, claws ( in Pepy II), and neck (*b^cnt* determined with ). The limbs mentioned in Djehutynakht describe a bull with the horns, the seed, and the hoofs ().

This interchangeability among body parts suggests that the exact identification between limbs and deities may not have been important, with the comparison being enough to activate the transformation of the deceased. As stated by Hermann Ranke (1924), the comparison aims to deify the deceased’s body through assimilation of its body part to

⁴⁷ I am grateful to Bernard Mathieu for providing me with a copy of his unpublished transliteration and translation of the spell in Ankhesenpepy II.

deities—‘Göttervergliederung’ or ‘Gliedervergottung’; the deceased ultimately becomes the sun god, which is himself composed of various entities (Nyord 2009, 510–12).

d I translate *jn dswt snmwt sw m mnw jmjw dšr[t]* ‘it is the Slaughterers who will feed him with the *mnw*-extracts that are in the Red C[rown]’. This sentence can be compared with *jn dšjwtt snmw.sn wj* ‘it is the *dšjwtt* who will feed me’ in *CT* spell 991 (*CT* VII, 201e) and *jn dšjwtt snmw N m sbšw jmjw dšrt* ‘it is the *dšjwtt* who will feed N with the *sbšw*-extracts that are in the Red Crown’ in *CT* spell 684 (*CT* VI, 312k–l). The latter sentence was divided into two by Faulkner (2004, II, 249, 23), who read  *ndm wnm* with a note that the sentence is incomplete. However, this writing probably result from confusion between the signs *ndm*  and *nm*  in the transcription of *snmw* ‘to feed’. In Ibi, the ending *mwt* in *snmwt* may be a wrong determinative as the verb can be determined by different birds  or  *snmw* ‘food-supply’ or could be a phoneticism (see Edel 1955, 14, §28).

The meaning of *mnw* is not clear. Carrier (2010, 2231) translates ‘pigeon’ (*Wb.* I, 72  *mnw.t*), but this is unlikely here, because of the orthography, the determinative, and the context. The same writing of *mnw* occurs in *PT* 512, 1165b and *CT* spell 753 (VI, 383g), where it is something to be consumed: ‘I will eat the *mnw* of these gifts to me’ (Faulkner 2004, II, 288, n. 8). *sbšw* occurs in the the Pyramid Texts and its meaning is also unclear (Faulkner 2004, II, 249, n. 24) and is associated with the Red Crown in both corpora. In the Cannibal Spell (*PT* 273, 411): ‘the king revolts against licking the *sbšw*’. Faulkner noted (1969, 84, n. 24) that Sethe (1935–1936, 169, 411a) had connected the *sbšw* with the curl in front of the Red Crown, but that the plural suggested that it might refer to another part of the crown (see also Eyre 2002, 133). In *PT* 273, 411, Faulkner stated (1969, 249, n. 24) that ‘it is clearly a part of the crown which is objectionable to him who would devour it’ and that the knife determinative might indicate something sharp with an acid taste. Goebis (2008, 255) suggests that the *sbšw* could ‘refer to a group of celestial beings whom the deceased wishes to incorporate in himself’. In the Coffin Text versions of the Cannibal Spell (*CT* VI, 181g), the *sbšw* that are in the Red Crown enable the deceased to become an akh: *jw.j 3h.kwj m sbšw m dšrt* ‘I have become a spirit by means of the *šbw* in the Red Crown’.

The word *dswt*  seems to be linked to the root *ds* ‘knife’ and so could refer to a group of slaughterers. This group is also mentioned in other spells, where they are beings that the deceased should fear: ‘a spell for passing by the abodes of the *dsw*

𓆎𓆏𓆑𓆒𓆓𓆔𓆕𓆖𓆗𓆘𓆙𓆚𓆛𓆜𓆝𓆞𓆟𓆠𓆡𓆢𓆣𓆤𓆥𓆦𓆧𓆨𓆩𓆪𓆫𓆬𓆭𓆮𓆯𓆰𓆱𓆲𓆳𓆴𓆵𓆶𓆷𓆸𓆹𓆺𓆻𓆼𓆽𓆾𓆿𓇀𓇁𓇂𓇃𓇄𓇅𓇆𓇇𓇈𓇉𓇊𓇋𓇌𓇍𓇎𓇏𓇐𓇑𓇒𓇓𓇔𓇕𓇖𓇗𓇘𓇙𓇚𓇛𓇜𓇝𓇞𓇟𓇠𓇡𓇢𓇣𓇤𓇥𓇦𓇧𓇨𓇩𓇪𓇫𓇬𓇭𓇮𓇯𓇰𓇱𓇲𓇳𓇴𓇵𓇶𓇷𓇸𓇹𓇺𓇻𓇼𓇽𓇾𓇿𓈀𓈁𓈂𓈃𓈄𓈅𓈆𓈇𓈈𓈉𓈊𓈋𓈌𓈍𓈎𓈏𓈐𓈑𓈒𓈓𓈔𓈕𓈖𓈗𓈘𓈙𓈚𓈛𓈜𓈝𓈞𓈟𓈠𓈡𓈢𓈣𓈤𓈥𓈦𓈧𓈨𓈩𓈪𓈫𓈬𓈭𓈮𓈯𓈰𓈱𓈲𓈳𓈴𓈵𓈶𓈷𓈸𓈹𓈺𓈻𓈼𓈽𓈾𓈿𓉀𓉁𓉂𓉃𓉄𓉅𓉆𓉇𓉈𓉉𓉊𓉋𓉌𓉍𓉎𓉏𓉐𓉑𓉒𓉓𓉔𓉕𓉖𓉗𓉘𓉙𓉚𓉛𓉜𓉝𓉞𓉟𓉠𓉡𓉢𓉣𓉤𓉥𓉦𓉧𓉨𓉩𓉪𓉫𓉬𓉭𓉮𓉯𓉰𓉱𓉲𓉳𓉴𓉵𓉶𓉷𓉸𓉹𓉺𓉻𓉼𓉽𓉾𓉿𓊀𓊁𓊂𓊃𓊄𓊅𓊆𓊇𓊈𓊉𓊊𓊋𓊌𓊍𓊎𓊏𓊐𓊑𓊒𓊓𓊔𓊕𓊖𓊗𓊘𓊙𓊚𓊛𓊜𓊝𓊞𓊟𓊠𓊡𓊢𓊣𓊤𓊥𓊦𓊧𓊨𓊩𓊪𓊫𓊬𓊭𓊮𓊯𓊰𓊱𓊲𓊳𓊴𓊵𓊶𓊷𓊸𓊹𓊺𓊻𓊼𓊽𓊾𓊿𓋀𓋁𓋂𓋃𓋄𓋅𓋆𓋇𓋈𓋉𓋊𓋋𓋌𓋍𓋎𓋏𓋐𓋑𓋒𓋓𓋔𓋕𓋖𓋗𓋘𓋙𓋚𓋛𓋜𓋝𓋞𓋟𓋠𓋡𓋢𓋣𓋤𓋥𓋦𓋧𓋨𓋩𓋪𓋫𓋬𓋭𓋮𓋯𓋰𓋱𓋲𓋳𓋴𓋵𓋶𓋷𓋸𓋹𓋺𓋻𓋼𓋽𓋾𓋿𓌀𓌁𓌂𓌃𓌄𓌅𓌆𓌇𓌈𓌉𓌊𓌋𓌌𓌍𓌎𓌏𓌐𓌑𓌒𓌓𓌔𓌕𓌖𓌗𓌘𓌙𓌚𓌛𓌜𓌝𓌞𓌟𓌠𓌡𓌢𓌣𓌤𓌥𓌦𓌧𓌨𓌩𓌪𓌫𓌬𓌭𓌮𓌯𓌰𓌱𓌲𓌳𓌴𓌵𓌶𓌷𓌸𓌹𓌺𓌻𓌼𓌽𓌾𓌿𓍀𓍁𓍂𓍃𓍄𓍅𓍆𓍇𓍈𓍉𓍊𓍋𓍌𓍍𓍎𓍏𓍐𓍑𓍒𓍓𓍔𓍕𓍖𓍗𓍘𓍙𓍚𓍛𓍜𓍝𓍞𓍟𓍠𓍡𓍢𓍣𓍤𓍥𓍦𓍧𓍨𓍩𓍪𓍫𓍬𓍭𓍮𓍯𓍰𓍱𓍲𓍳𓍴𓍵𓍶𓍷𓍸𓍹𓍺𓍻𓍼𓍽𓍾𓍿𓎀𓎁𓎂𓎃𓎄𓎅𓎆𓎇𓎈𓎉𓎊𓎋𓎌𓎍𓎎𓎏𓎐𓎑𓎒𓎓𓎔𓎕𓎖𓎗𓎘𓎙𓎚𓎛𓎜𓎝𓎞𓎟𓎠𓎡𓎢𓎣𓎤𓎥𓎦𓎧𓎨𓎩𓎪𓎫𓎬𓎭𓎮𓎯𓎰𓎱𓎲𓎳𓎴𓎵𓎶𓎷𓎸𓎹𓎺𓎻𓎼𓎽𓎾𓎿𓏀𓏁𓏂𓏃𓏄𓏅𓏆𓏇𓏈𓏉𓏊𓏋𓏌𓏍𓏎𓏏𓏐𓏑𓏒𓏓𓏔𓏕𓏖𓏗𓏘𓏙𓏚𓏛𓏜𓏝𓏞𓏟𓏠𓏡𓏢𓏣𓏤𓏥𓏦𓏧𓏨𓏩𓏪𓏫𓏬𓏭𓏮𓏯𓏰𓏱𓏲𓏳𓏴𓏵𓏶𓏷𓏸𓏹𓏺𓏻𓏼𓏽𓏾𓏿𓐀𓐁𓐂𓐃𓐄𓐅𓐆𓐇𓐈𓐉𓐊𓐋𓐌𓐍𓐎𓐏𓐐𓐑𓐒𓐓𓐔𓐕𓐖𓐗𓐘𓐙𓐚𓐛𓐜𓐝𓐞𓐟𓐠𓐡𓐢𓐣𓐤𓐥𓐦𓐧𓐨𓐩𓐪𓐫𓐬𓐭𓐮𓐯𓐰𓐱𓐲𓐳𓐴𓐵𓐶𓐷𓐸𓐹𓐺𓐻𓐼𓐽𓐾𓐿𓑀𓑁𓑂𓑃𓑄𓑅𓑆𓑇𓑈𓑉𓑊𓑋𓑌𓑍𓑎𓑏𓑐𓑑𓑒𓑓𓑔𓑕𓑖𓑗𓑘𓑙𓑚𓑛𓑜𓑝𓑞𓑟𓑠𓑡𓑢𓑣𓑤𓑥𓑦𓑧𓑨𓑩𓑪𓑫𓑬𓑭𓑮𓑯𓑰𓑱𓑲𓑳𓑴𓑵𓑶𓑷𓑸𓑹𓑺𓑻𓑼𓑽𓑾𓑿𓒀𓒁𓒂𓒃𓒄𓒅𓒆𓒇𓒈𓒉𓒊𓒋𓒌𓒍𓒎𓒏𓒐𓒑𓒒𓒓𓒔𓒕𓒖𓒗𓒘𓒙𓒚𓒛𓒜𓒝𓒞𓒟𓒠𓒡𓒢𓒣𓒤𓒥𓒦𓒧𓒨𓒩𓒪𓒫𓒬𓒭𓒮𓒯𓒰𓒱𓒲𓒳𓒴𓒵𓒶𓒷𓒸𓒹𓒺𓒻𓒼𓒽𓒾𓒿𓓀𓓁𓓂𓓃𓓄𓓅𓓆𓓇𓓈𓓉𓓊𓓋𓓌𓓍𓓎𓓏𓓐𓓑𓓒𓓓𓓔𓓕𓓖𓓗𓓘𓓙𓓚𓓛𓓜𓓝𓓞𓓟𓓠𓓡𓓢𓓣𓓤𓓥𓓦𓓧𓓨𓓩𓓪𓓫𓓬𓓭𓓮𓓯𓓰𓓱𓓲𓓳𓓴𓓵𓓶𓓷𓓸𓓹𓓺𓓻𓓼𓓽𓓾𓓿𓔀𓔁𓔂𓔃𓔄𓔅𓔆𓔇𓔈𓔉𓔊𓔋𓔌𓔍𓔎𓔏𓔐𓔑𓔒𓔓𓔔𓔕𓔖𓔗𓔘𓔙𓔚𓔛𓔜𓔝𓔞𓔟𓔠𓔡𓔢𓔣𓔤𓔥𓔦𓔧𓔨𓔩𓔪𓔫𓔬𓔭𓔮𓔯𓔰𓔱𓔲𓔳𓔴𓔵𓔶𓔷𓔸𓔹𓔺𓔻𓔼𓔽𓔾𓔿𓕀𓕁𓕂𓕃𓕄𓕅𓕆𓕇𓕈𓕉𓕊𓕋𓕌𓕍𓕎𓕏𓕐𓕑𓕒𓕓𓕔𓕕𓕖𓕗𓕘𓕙𓕚𓕛𓕜𓕝𓕞𓕟𓕠𓕡𓕢𓕣𓕤𓕥𓕦𓕧𓕨𓕩𓕪𓕫𓕬𓕭𓕮𓕯𓕰𓕱𓕲𓕳𓕴𓕵𓕶𓕷𓕸𓕹𓕺𓕻𓕼𓕽𓕾𓕿𓖀𓖁𓖂𓖃𓖄𓖅𓖆𓖇𓖈𓖉𓖊𓖋𓖌𓖍𓖎𓖏𓖐𓖑𓖒𓖓𓖔𓖕𓖖𓖗𓖘𓖙𓖚𓖛𓖜𓖝𓖞𓖟𓖠𓖡𓖢𓖣𓖤𓖥𓖦𓖧𓖨𓖩𓖪𓖫𓖬𓖭𓖮𓖯𓖰𓖱𓖲𓖳𓖴𓖵𓖶𓖷𓖸𓖹𓖺𓖻𓖼𓖽𓖾𓖿𓗀𓗁𓗂𓗃𓗄𓗅𓗆𓗇𓗈𓗉𓗊𓗋𓗌𓗍𓗎𓗏𓗐𓗑𓗒𓗓𓗔𓗕𓗖𓗗𓗘𓗙𓗚𓗛𓗜𓗝𓗞𓗟𓗠𓗡𓗢𓗣𓗤𓗥𓗦𓗧𓗨𓗩𓗪𓗫𓗬𓗭𓗮𓗯𓗰𓗱𓗲𓗳𓗴𓗵𓗶𓗷𓗸𓗹𓗺𓗻𓗼𓗽𓗾𓗿𓘀𓘁𓘂𓘃𓘄𓘅𓘆𓘇𓘈𓘉𓘊𓘋𓘌𓘍𓘎𓘏𓘐𓘑𓘒𓘓𓘔𓘕𓘖𓘗𓘘𓘙𓘚𓘛𓘜𓘝𓘞𓘟𓘠𓘡𓘢𓘣𓘤𓘥𓘦𓘧𓘨𓘩𓘪𓘫𓘬𓘭𓘮𓘯𓘰𓘱𓘲𓘳𓘴𓘵𓘶𓘷𓘸𓘹𓘺𓘻𓘼𓘽𓘾𓘿𓙀𓙁𓙂𓙃𓙄𓙅𓙆𓙇𓙈𓙉𓙊𓙋𓙌𓙍𓙎𓙏𓙐𓙑𓙒𓙓𓙔𓙕𓙖𓙗𓙘𓙙𓙚𓙛𓙜𓙝𓙞𓙟𓙠𓙡𓙢𓙣𓙤𓙥𓙦𓙧𓙨𓙩𓙪𓙫𓙬𓙭𓙮𓙯𓙰𓙱𓙲𓙳𓙴𓙵𓙶𓙷𓙸𓙹𓙺𓙻𓙼𓙽𓙾𓙿𓚀𓚁𓚂𓚃𓚄𓚅𓚆𓚇𓚈𓚉𓚊𓚋𓚌𓚍𓚎𓚏𓚐𓚑𓚒𓚓𓚔𓚕𓚖𓚗𓚘𓚙𓚚𓚛𓚜𓚝𓚞𓚟𓚠𓚡𓚢𓚣𓚤𓚥𓚦𓚧𓚨𓚩𓚪𓚫𓚬𓚭𓚮𓚯𓚰𓚱𓚲𓚳𓚴𓚵𓚶𓚷𓚸𓚹𓚺𓚻𓚼𓚽𓚾𓚿𓛀𓛁𓛂𓛃𓛄𓛅𓛆𓛇𓛈𓛉𓛊𓛋𓛌𓛍𓛎𓛏𓛐𓛑𓛒𓛓𓛔𓛕𓛖𓛗𓛘𓛙𓛚𓛛𓛜𓛝𓛞𓛟𓛠𓛡𓛢𓛣𓛤𓛥𓛦𓛧𓛨𓛩𓛪𓛫𓛬𓛭𓛮𓛯𓛰𓛱𓛲𓛳𓛴𓛵𓛶𓛷𓛸𓛹𓛺𓛻𓛼𓛽𓛾𓛿𓜀𓜁𓜂𓜃𓜄𓜅𓜆𓜇𓜈𓜉𓜊𓜋𓜌𓜍𓜎𓜏𓜐𓜑𓜒𓜓𓜔𓜕𓜖𓜗𓜘𓜙𓜚𓜛𓜜𓜝𓜞𓜟𓜠𓜡𓜢𓜣𓜤𓜥𓜦𓜧𓜨𓜩𓜪𓜫𓜬𓜭𓜮𓜯𓜰𓜱𓜲𓜳𓜴𓜵𓜶𓜷𓜸𓜹𓜺𓜻𓜼𓜽𓜾𓜿𓝀𓝁𓝂𓝃𓝄𓝅𓝆𓝇𓝈𓝉𓝊𓝋𓝌𓝍𓝎𓝏𓝐𓝑𓝒𓝓𓝔𓝕𓝖𓝗𓝘𓝙𓝚𓝛𓝜𓝝𓝞𓝟𓝠𓝡𓝢𓝣𓝤𓝥𓝦𓝧𓝨𓝩𓝪𓝫𓝬𓝭𓝮𓝯𓝰𓝱𓝲𓝳𓝴𓝵𓝶𓝷𓝸𓝹𓝺𓝻𓝼𓝽𓝾𓝿𓞀𓞁𓞂𓞃𓞄𓞅𓞆𓞇𓞈𓞉𓞊𓞋𓞌𓞍𓞎𓞏𓞐𓞑𓞒𓞓𓞔𓞕𓞖𓞗𓞘𓞙𓞚𓞛𓞜𓞝𓞞𓞟𓞠𓞡𓞢𓞣𓞤𓞥𓞦𓞧𓞨𓞩𓞪𓞫𓞬𓞭𓞮𓞯𓞰𓞱𓞲𓞳𓞴𓞵𓞶𓞷𓞸𓞹𓞺𓞻𓞼𓞽𓞾𓞿𓟀𓟁𓟂𓟃𓟄𓟅𓟆𓟇𓟈𓟉𓟊𓟋𓟌𓟍𓟎𓟏𓟐𓟑𓟒𓟓𓟔𓟕𓟖𓟗𓟘𓟙𓟚𓟛𓟜𓟝𓟞𓟟𓟠𓟡𓟢𓟣𓟤𓟥𓟦𓟧𓟨𓟩𓟪𓟫𓟬𓟭𓟮𓟯𓟰𓟱𓟲𓟳𓟴𓟵𓟶𓟷𓟸𓟹𓟺𓟻𓟼𓟽𓟾𓟿𓠀𓠁𓠂𓠃𓠄𓠅𓠆𓠇𓠈𓠉𓠊𓠋𓠌𓠍𓠎𓠏𓠐𓠑𓠒𓠓𓠔𓠕𓠖𓠗𓠘𓠙𓠚𓠛𓠜𓠝𓠞𓠟𓠠𓠡𓠢𓠣𓠤𓠥𓠦𓠧𓠨𓠩𓠪𓠫𓠬𓠭𓠮𓠯𓠰𓠱𓠲𓠳𓠴𓠵𓠶𓠷𓠸𓠹𓠺𓠻𓠼𓠽𓠾𓠿𓡀𓡁𓡂𓡃𓡄𓡅𓡆𓡇𓡈𓡉𓡊𓡋𓡌𓡍𓡎𓡏𓡐𓡑𓡒𓡓𓡔𓡕𓡖𓡗𓡘𓡙𓡚𓡛𓡜𓡝𓡞𓡟𓡠𓡡𓡢𓡣𓡤𓡥𓡦𓡧𓡨𓡩𓡪𓡫𓡬𓡭𓡮𓡯𓡰𓡱𓡲𓡳𓡴𓡵𓡶𓡷𓡸𓡹𓡺𓡻𓡼𓡽𓡾𓡿𓢀𓢁𓢂𓢃𓢄𓢅𓢆𓢇𓢈𓢉𓢊𓢋𓢌𓢍𓢎𓢏𓢐𓢑𓢒𓢓𓢔𓢕𓢖𓢗𓢘𓢙𓢚𓢛𓢜𓢝𓢞𓢟𓢠𓢡𓢢𓢣𓢤𓢥𓢦𓢧𓢨𓢩𓢪𓢫𓢬𓢭𓢮𓢯𓢰𓢱𓢲𓢳𓢴𓢵𓢶𓢷𓢸𓢹𓢺𓢻𓢼𓢽𓢾𓢿𓣀𓣁𓣂𓣃𓣄𓣅𓣆𓣇𓣈𓣉𓣊𓣋𓣌𓣍𓣎𓣏𓣐𓣑𓣒𓣓𓣔𓣕𓣖𓣗𓣘𓣙𓣚𓣛𓣜𓣝𓣞𓣟𓣠𓣡𓣢𓣣𓣤𓣥𓣦𓣧𓣨𓣩𓣪𓣫𓣬𓣭𓣮𓣯𓣰𓣱𓣲𓣳𓣴𓣵𓣶𓣷𓣸𓣹𓣺𓣻𓣼𓣽𓣾𓣿𓤀𓤁𓤂𓤃𓤄𓤅𓤆𓤇𓤈𓤉𓤊𓤋𓤌𓤍𓤎𓤏𓤐𓤑𓤒𓤓𓤔𓤕𓤖𓤗𓤘𓤙𓤚𓤛𓤜𓤝𓤞𓤟𓤠𓤡𓤢𓤣𓤤𓤥𓤦𓤧𓤨𓤩𓤪𓤫𓤬𓤭𓤮𓤯𓤰𓤱𓤲𓤳𓤴𓤵𓤶𓤷𓤸𓤹𓤺𓤻𓤼𓤽𓤾𓤿𓥀𓥁𓥂𓥃𓥄𓥅𓥆𓥇𓥈𓥉𓥊𓥋𓥌𓥍𓥎𓥏𓥐𓥑𓥒𓥓𓥔𓥕𓥖𓥗𓥘𓥙𓥚𓥛𓥜𓥝𓥞𓥟𓥠𓥡𓥢𓥣𓥤𓥥𓥦𓥧𓥨𓥩𓥪𓥫𓥬𓥭𓥮𓥯𓥰𓥱𓥲𓥳𓥴𓥵𓥶𓥷𓥸𓥹𓥺𓥻𓥼𓥽𓥾𓥿𓦀𓦁𓦂𓦃𓦄𓦅𓦆𓦇𓦈𓦉𓦊𓦋𓦌𓦍𓦎𓦏𓦐𓦑𓦒𓦓𓦔𓦕𓦖𓦗𓦘𓦙𓦚𓦛𓦜𓦝𓦞𓦟𓦠𓦡𓦢𓦣𓦤𓦥𓦦𓦧𓦨𓦩𓦪𓦫𓦬𓦭𓦮𓦯𓦰𓦱𓦲𓦳𓦴𓦵𓦶𓦷𓦸𓦹𓦺𓦻𓦼𓦽𓦾𓦿𓧀𓧁𓧂𓧃𓧄𓧅𓧆𓧇𓧈𓧉𓧊𓧋𓧌𓧍𓧎𓧏𓧐𓧑𓧒𓧓𓧔𓧕𓧖𓧗𓧘𓧙𓧚𓧛𓧜𓧝𓧞𓧟𓧠𓧡𓧢𓧣𓧤𓧥𓧦𓧧𓧨𓧩𓧪𓧫𓧬𓧭𓧮𓧯𓧰𓧱𓧲𓧳𓧴𓧵𓧶𓧷𓧸𓧹𓧺𓧻𓧼𓧽𓧾𓧿𓨀𓨁𓨂𓨃𓨄𓨅𓨆𓨇𓨈𓨉𓨊𓨋𓨌𓨍𓨎𓨏𓨐𓨑𓨒𓨓𓨔𓨕𓨖𓨗𓨘𓨙𓨚𓨛𓨜𓨝𓨞𓨟𓨠𓨡𓨢𓨣𓨤𓨥𓨦𓨧𓨨𓨩𓨪𓨫𓨬𓨭𓨮𓨯𓨰𓨱𓨲𓨳𓨴𓨵𓨶𓨷𓨸𓨹𓨺𓨻𓨼𓨽𓨾𓨿𓩀𓩁𓩂𓩃𓩄𓩅𓩆𓩇𓩈𓩉𓩊𓩋𓩌𓩍𓩎𓩏𓩐𓩑𓩒𓩓𓩔𓩕𓩖𓩗𓩘𓩙𓩚𓩛𓩜𓩝𓩞𓩟𓩠𓩡𓩢𓩣𓩤𓩥𓩦𓩧𓩨𓩩𓩪𓩫𓩬𓩭𓩮𓩯𓩰𓩱𓩲𓩳𓩴𓩵𓩶𓩷𓩸𓩹𓩺𓩻𓩼𓩽𓩾𓩿𓪀𓪁𓪂𓪃𓪄𓪅𓪆𓪇𓪈𓪉𓪊𓪋𓪌𓪍𓪎𓪏𓪐𓪑𓪒𓪓𓪔𓪕𓪖𓪗𓪘𓪙𓪚𓪛𓪜𓪝𓪞𓪟𓪠𓪡𓪢𓪣𓪤𓪥𓪦𓪧𓪨𓪩𓪪𓪫𓪬𓪭𓪮𓪯𓪰𓪱𓪲𓪳𓪴𓪵𓪶𓪷𓪸𓪹𓪺𓪻𓪼𓪽𓪾𓪿𓫀𓫁𓫂𓫃𓫄𓫅𓫆𓫇𓫈𓫉𓫊𓫋𓫌𓫍𓫎𓫏𓫐𓫑𓫒𓫓𓫔𓫕𓫖𓫗𓫘𓫙𓫚𓫛𓫜𓫝𓫞𓫟𓫠𓫡𓫢𓫣𓫤𓫥𓫦𓫧𓫨𓫩𓫪𓫫𓫬𓫭𓫮𓫯𓫰𓫱𓫲𓫳𓫴𓫵𓫶𓫷𓫸𓫹𓫺𓫻𓫼𓫽𓫾𓫿𓬀𓬁𓬂𓬃𓬄𓬅𓬆𓬇𓬈𓬉𓬊𓬋𓬌𓬍𓬎𓬏𓬐𓬑𓬒𓬓𓬔𓬕𓬖𓬗𓬘𓬙𓬚𓬛𓬜𓬝𓬞𓬟𓬠𓬡𓬢𓬣𓬤𓬥𓬦𓬧𓬨𓬩𓬪𓬫𓬬𓬭𓬮𓬯𓬰𓬱𓬲𓬳𓬴𓬵𓬶𓬷𓬸𓬹𓬺𓬻𓬼𓬽𓬾𓬿𓭀𓭁𓭂𓭃𓭄𓭅𓭆𓭇𓭈𓭉𓭊𓭋𓭌𓭍𓭎𓭏𓭐𓭑𓭒𓭓𓭔𓭕𓭖𓭗𓭘𓭙𓭚𓭛𓭜𓭝𓭞𓭟𓭠𓭡𓭢𓭣𓭤𓭥𓭦𓭧𓭨𓭩𓭪𓭫𓭬𓭭𓭮𓭯𓭰𓭱𓭲𓭳𓭴𓭵𓭶𓭷𓭸𓭹𓭺𓭻𓭼𓭽𓭾𓭿𓮀𓮁𓮂𓮃𓮄𓮅𓮆𓮇𓮈𓮉𓮊𓮋𓮌𓮍𓮎𓮏𓮐𓮑𓮒𓮓𓮔𓮕𓮖𓮗𓮘𓮙𓮚𓮛𓮜𓮝𓮞𓮟𓮠𓮡𓮢𓮣𓮤𓮥𓮦𓮧𓮨𓮩𓮪𓮫𓮬𓮭𓮮𓮯𓮰𓮱𓮲𓮳𓮴𓮵𓮶𓮷𓮸𓮹𓮺𓮻𓮼𓮽𓮾𓮿𓯀𓯁𓯂𓯃𓯄𓯅𓯆𓯇𓯈𓯉𓯊𓯋𓯌𓯍𓯎𓯏𓯐𓯑𓯒𓯓𓯔𓯕𓯖𓯗𓯘𓯙𓯚𓯛𓯜𓯝𓯞𓯟𓯠𓯡𓯢𓯣𓯤𓯥𓯦𓯧𓯨𓯩𓯪𓯫𓯬𓯭𓯮𓯯𓯰𓯱𓯲𓯳𓯴𓯵𓯶𓯷𓯸𓯹𓯺𓯻𓯼𓯽𓯾𓯿𓰀𓰁𓰂𓰃𓰄𓰅𓰆𓰇𓰈𓰉𓰊𓰋𓰌𓰍𓰎𓰏𓰐𓰑𓰒𓰓𓰔𓰕𓰖𓰗𓰘𓰙𓰚𓰛𓰜𓰝𓰞𓰟𓰠𓰡𓰢𓰣𓰤𓰥𓰦𓰧𓰨𓰩𓰪𓰫𓰬𓰭𓰮𓰯𓰰𓰱𓰲𓰳𓰴𓰵𓰶𓰷𓰸𓰹𓰺𓰻𓰼𓰽𓰾𓰿𓱀𓱁𓱂𓱃𓱄𓱅𓱆𓱇𓱈𓱉𓱊𓱋𓱌𓱍𓱎𓱏𓱐𓱑𓱒𓱓𓱔𓱕𓱖𓱗𓱘𓱙𓱚𓱛𓱜𓱝𓱞𓱟𓱠𓱡𓱢𓱣𓱤𓱥𓱦𓱧𓱨𓱩𓱪𓱫𓱬𓱭𓱮𓱯𓱰𓱱𓱲𓱳𓱴𓱵𓱶𓱷𓱸𓱹𓱺𓱻𓱼𓱽𓱾𓱿𓲀𓲁𓲂𓲃𓲄𓲅𓲆𓲇𓲈𓲉𓲊𓲋𓲌𓲍𓲎𓲏𓲐𓲑𓲒𓲓𓲔𓲕𓲖𓲗𓲘𓲙𓲚𓲛𓲜𓲝𓲞𓲟𓲠𓲡𓲢𓲣𓲤𓲥𓲦𓲧𓲨𓲩𓲪𓲫𓲬𓲭𓲮𓲯𓲰𓲱𓲲𓲳𓲴𓲵𓲶𓲷𓲸𓲹𓲺𓲻𓲼𓲽𓲾𓲿𓳀𓳁𓳂𓳃𓳄𓳅𓳆𓳇𓳈𓳉𓳊𓳋𓳌𓳍𓳎𓳏𓳐𓳑𓳒𓳓𓳔𓳕𓳖𓳗𓳘𓳙𓳚𓳛𓳜𓳝𓳞𓳟𓳠𓳡𓳢𓳣𓳤𓳥𓳦𓳧𓳨𓳩𓳪𓳫𓳬𓳭𓳮𓳯𓳰𓳱𓳲𓳳𓳴𓳵𓳶𓳷𓳸𓳹𓳺𓳻𓳼𓳽𓳾𓳿𓴀𓴁𓴂𓴃𓴄𓴅𓴆𓴇𓴈𓴉𓴊𓴋𓴌𓴍𓴎𓴏𓴐𓴑𓴒𓴓𓴔𓴕𓴖𓴗𓴘𓴙𓴚𓴛𓴜𓴝𓴞𓴟𓴠𓴡𓴢𓴣𓴤𓴥𓴦𓴧𓴨𓴩𓴪𓴫𓴬𓴭𓴮𓴯𓴰𓴱𓴲𓴳𓴴𓴵𓴶𓴷𓴸𓴹𓴺𓴻𓴼𓴽𓴾𓴿𓵀𓵁𓵂𓵃𓵄𓵅𓵆𓵇𓵈𓵉𓵊𓵋𓵌𓵍𓵎𓵏𓵐𓵑𓵒𓵓𓵔𓵕𓵖𓵗𓵘𓵙𓵚𓵛𓵜𓵝𓵞𓵟𓵠𓵡𓵢𓵣𓵤𓵥𓵦𓵧𓵨𓵩𓵪𓵫𓵬𓵭𓵮𓵯𓵰𓵱𓵲𓵳𓵴𓵵𓵶𓵷𓵸𓵹𓵺𓵻𓵼𓵽𓵾𓵿𓶀𓶁𓶂𓶃𓶄𓶅𓶆𓶇𓶈𓶉𓶊𓶋𓶌𓶍𓶎𓶏𓶐𓶑𓶒𓶓𓶔𓶕𓶖𓶗𓶘𓶙𓶚𓶛𓶜𓶝𓶞𓶟

passage (especially VII 311a–l), where a play on the ending *w* is recurrent, so that homeoteleuton may be used as literary device. It might also suggest that the passage or the toponymes itself was not familiar to the ancient audiences.

Content

The section begins with *PT* 407, 713a–b in the first column and a half (Fig. 3.3, cols 1–2). Nothing survives from the preceding columns, but they are likely to have contained the earlier parts of *PT* 407. The text mentions the purification of the king, his being given a place in the sky, his identification with Re in his solar bark, and his being rowed across the Akhet. There follows the completion of the opening of the mouth, nose, and ears, enabling the king to live in the afterlife. This section of *PT* 407 is lost from Ibi's version; only the end of the spell is preserved in cols 1–2, a passage mentioning the purification and protection of the king by Re: 'Qakare governs [for the one who is older than he. The Sun cleans Ibi, the Sun defends] Ibi from that which might be done badly against him'.⁴⁹ The last clause in the spell is, however, omitted.

PT 268 (Fig. 3.3, cols 2–13), which follows, presents various stages preceding the crowning of the king at the Great Enclosure (*hwt ʿ3t*) as well as his accession to the next world. The spell begins with the cleansing of the king: '[This Ibi washes himself as the Sun appears] and the Great Ennead [shines]'. Then, after he has purified himself, the spell mentions the king seizing the *wrrt*-crown and being nurtured by Isis and Nephthys: 'Should the Ombite become elevated to the fore [of the shrine, Ibi will take away] the elite (*pʿt*) as a limb of Ibi. Qakare will seize the crown [from the Dual] Ennead. Isis nurtures Qakare and Nephthys suckles Ibi'. His *ka* is then purged by Horus in the Jackal Lake and the Duat Lake before being brought to his body, which is at the Great Enclosure. There he will be crowned with the *wrrt*-crown, navigate across to the Field of Rushes, and reach the next world as an *akh*: 'The portals act for him. The (Red Crown's) coil is tied on for him, and he leads the Imperishable Stars. He crosses to the Fields of Reeds with those in the Akhet rowing him and those in the Cool Waters sailing him'. The last sentence of *PT* 268, 'I become truly foremost, and my *ka* reaches me', is omitted. The text in Ibi ends with the clause: 'Ibi is

⁴⁹ The translation is based on Allen 2015.

truly effective, and the arms of Qakare [do not] resist (him)’ (on the spell division, see below).

PT^{N627B} begins in col. 13 with the identification of the king as a great hawk that is on the battlements of the enclosure *Jmn-rn* ‘Hidden-of-Name’. The spell then compares parts of his body to deities. It stops a few clauses before the end of the text attested in other sources, after the mention that authoritative utterance has been given to the king.

The new ‘Unnumbered text’ in cols 18–25 is closely related, but is not identical, to the previous spell *PT*^{N627B}. It is paralleled in five pyramids: in Teti, Pepy I, Merenre, Pepy II, and Ankhesenpepy II (*PT*^{N627B}, 1178a–85c).⁵⁰ It is also similar to texts found on the outer part of the coffin of the 11th Dynasty nomarch Djehutynakht found at Deir el-Bersha (MFA 20.1822;⁵¹ *CT* spell 682:VI 310k–12g), and on the late Old Kingdom or early Middle Kingdom (Parkinson forthcoming) P Gardiner II 51–61 (London BM EA 10676)⁵² and P Gardiner III, 436–42 (Chicago P. OIM 14059) as *CT* spell 990: VII 199e–201d. Papyrus Gardiner II and III are fragmentary, but the words preserved suggest that their versions were similar or identical in content: the beginnings and the ends of the spells, as well as the same grouping of elements, can be identified (for P Gardiner II, see Gestermann 2003).

The two passages in each Gardiner papyrus (*CT* spell 990) and the one on the coffin of Djehutynakht (*CT* spell 682) seem to follow a similar pattern to the versions in the pyramids and Ibi: identifying the king with a great hawk and parts of his body with deities; giving authoritative utterance to the king; giving various indications of his access to the beyond; and establishing him in the sky in the bark of Re on the closing day of the year. The ‘Unnumbered text’ section in Ibi (cols 18–25) also identifies parts of the king’s body with deities and mentions that the king has reached the Akhet and is at the prow of the solar bark; he will ‘lead the Sun in his two Maat-boats on the day of closing out the year.’ It presents most of the themes found in Coffin Texts spells 682 and 990, but in a shorter formulation and in a very different order. All these texts—*PT*^{N627B}, 1178a–85c, *CT* spell

⁵⁰ Synoptic version kindly provided by I. Pierre-Croisiau.

⁵¹ <https://www.mfa.org/collections/object/front-side-panel-of-outer-coffin-of-djehutynakht-142815>.

Accessed June 12, 2018.

⁵² http://www.britishmuseum.org/research/collection_online/collection_object_details.aspx?objectId=111917&partId=1. Accessed June 12, 2018.

682: 199e–201d, *CT* spell 990: 310k–12g, and ‘Unnumbered text’ (Ibi, cols. 18–25)—could therefore be different versions of a ritual utterance with essentially the same content.

The content of the four spells of section Ibi/F/S V 1–25—*PT* 407, *PT* 268, *PT* ^N627B, and ‘Unnumbered text’—is thematically coherent, relating to the cleansing and purification of the king, his receiving the ruling function, and his ascent to the sky. It gives a sense of homogeneity, continuity, and semantic cohesion. The recurrence of the reference to estates/enclosures, *hwt ʿ3t* (col. 9) and *hwt Jmn-rn* (cols 13, 18–19, 25), strengthens the relationship between the spells. In spell *PT* 268, Horus washes the king in different lakes and brings him to the Great Enclosure, where the main part of the ritual will take place. Cols 10–13 state that once Ibi is in the Great Enclosure, the Red Crown’s coil(?) will be tied for him before he joins the next world. In *PT* ^N627B, the king is identified as a great hawk on the battlements of a hidden enclosure, where he is given authoritative utterance. Finally, ‘Unnumbered text’ indicates that the king has now flown above the enclosure and has reached the sky.

<i>PT</i> 407	<i>PT</i> 268	<i>PT</i> ^N 627B	‘Unnumbered’
• The king cleans himself • Receive his place at the prow of the Sun’s boat • Opening of the mouth, nose, and ears have been completed • ruling abilities	• The king cleans himself • Nurtured by Isis and Nephtys • Horus will clean him in the lake of the Jackal, the lake of the Duat • Horus will bring him at the Great Enclosure • Coronation • He will reach the sky and become functional	• The king as a divine falcon at the Enclosure of Hidden-Name • royal ordinance • the seizing of the ruling regalia	• First flight as falcon above the Enclosure of Hidden-Name • He has reached the Akhet • Seized the ruling regalia • He has been established in the sky in the bark of Re

Fig. 3.4: Principal themes of Ibi/F/S 1–25.

The four spells seem to develop a sequence of episodes starting with the purification of the king, then a ritual at the enclosure, and finally his flight to the sky (Fig. 3.4). The organisation of the spells in this section seems therefore to be deliberate, although not attested in the earlier pyramids of kings (Hays 2012, 680, 683–4, 686–7) and queens (Ankhesenpepy II; Behenu; Neith (Jéquier 1933, 20 [7])); Iput and Wedjebteni are fragmentary (Jéquier 1928; 1933; Allen 1986)).

Editing mechanisms

The thematic coherence of the sequence *PT* 407, 268, ^N627B, and ‘Unnumbered’ suggests that the composition was created deliberately, and this implies that there was a process of reflection in the selection of the spells and in the creation of a larger composition. The section seems to derive from copying different existing sources, since the clauses of *PT* 407, 268, ^N627B occurring in cols 1–17 are attested in older pyramids. However, ‘Unnumbered’ is unparalleled, and some incoherences in the structure of its clauses seem likely to be the result of the copying process. Moreover, although the text as a whole is unparalleled, it shares content with the previous spell *PT* ^N627B as well as with *CT* spell 682 and *CT* spell 990. A comparison between those versions identifies an underlying structure, which differs slightly in Ibi from that of the other sources.

For instance, the clause *jw (k3-k3-rC) jrjj m sbb rC n m3Ctj.fj* ‘Qakare is the one who acted as guide of Re of his two Maat-barks’ in col. 19 usually precedes *hrw [hts] rnpt* ‘on the day of [completing] the year’, which occur several columns later in Ibi (col. 24; cf. note c above). Except in Ibi, these two clauses are found together in all versions and at the end of the spells as a closing statement. Similarly, the clauses *r pt r t3 n nw* ‘to the sky, from the earth and from Nu’ at the end of col. 22 and *m sh tj htp* ‘in the two Fields of Offerings’ at the top of col. 23 seem odd when they occur together. The former is usually the epithet of ‘the one who separates the sky from the earth and Nu’ at the beginning of the spell (*Pyr.* 1778b; *CT* VI, 310l; *CT* VII, 199f), while the latter occurs towards the end (*Pyr.* 1784d; *CT* VI, 312h; *CT* VII, 200d). In addition to these incoherences, part of this text is found a second time in the burial chamber of Ibi in fragments F and G (Jéquier 1935, pl. xv), but again in a different order; the original locations of these fragments are still unclear, but they could have been near the western end of the north wall (Alvarez in preparation). The seemingly garbled order of clauses suggests that the text might be resulting from copying an original in the wrong order, but I have not yet succeeded in reconstructing a model from which it could have been copied (the copying process is further discussed in Chapter 4).

As is the case on the whole south wall, the junction between spells is not marked by the spell-divider group  as is usually found in older pyramids. *PT* 407, *PT* 268, *PT* ^N627B and ‘Unnumbered’ are inscribed one after another without any indication of where they begin or end. Two hypotheses can be proposed: either the texts were randomly shortened to fit the space left at the end of the bottom register of the south wall, or the texts were deliberately shortened to form a new text. It is thus a matter of interpretation whether

or not the transition from one spell to another is intentional, but the several elements just mentioned point toward that as the most plausible hypothesis.

The end of the version of *PT* 268, 375a in Wenis and Pepy II texts reads *n zʃ ʿwy=f* ‘his arms do not resist (him)’, while in Neith there is a cartouche after *ʿwy* instead of the suffix pronoun, reading ‘the arms of Neith do not resist (her)’ (Jéquier 1933, pl. 7, col. 36). In Ibi, however, *PT* 268 stops before the end of the spell, within paragraph 375a, omitting the suffix pronoun and continuing directly with *PT* ^N627B, 1778a, which begins with a cartouche. Given the version of *PT* 268 in Neith, where her cartouche is used in place of the suffix pronoun, one can suggest that the end of this spell in Ibi is not missing but was replaced with the cartouche in col. 13 which forms the start of *PT* ^N627B. The broken text in cols 12–13 would therefore have read: [*n*] *zʃ ʿwy (kʃ-kʃ-Rʿ)*, ‘the arms of Qakare [do not] resist (him)’. *PT* 268, 375a would then be inscribed in full, with the cartouche as a direct genitive in place of the pronoun suffix of the Wenis and Pepy II versions.

The issue will then be what point demarcates the beginning and the end of the two spells, that is, whether to consider the end of *PT* 268 as coming after the cartouche or before it, since *PT* ^N627B, 1778a also starts with a cartouche (*kʃ-kʃ-Rʿ*) *pw bjk ʿʃ* ‘Qakare is a great hawk’. In order to read *PT* 268, 375a and *PT* ^N627B, 1778a appropriately, the cartouche would need to act as both the direct genitive governed by the word preceding it and the subject or predicate of the following sentence. Two explanations can be offered for the possible omission of the end of *PT* 268. One option is that the copyist might have overlooked some words, having perhaps been confused by two cartouches in close proximity, and continued after the second instead of the first, thus omitting one sentence (375b). The other option is that the editor might have chosen to shorten the spell and to fuse it with the beginning of the next spell, writing the cartouche once instead of twice for aesthetic reasons. A comparable practice of writing one element that refers to several occur in the inscription of the tomb of Hezi (Silverman 2000, 4, fig. 3b, col. 4).

The transition between *PT* ^N627B and ‘Unnumbered text’ is similarly unclear. *PT* ^N627B, which is otherwise identical to the parallels in older versions, is interrupted by ‘Unnumbered text’ in col. 18. The latter shares a very similar content to *PT* ^N627B suggesting that the combination could be intentional. The shortening of *PT* ^N627B is not done randomly in the clause, as could be expected from a miscopy, but at the end of a clause: ‘A royal ordinance has been given to Qakare as He Whose Face Remains, the great one beside Him Who is in Nu’; this is followed by the new version ‘Ibi has reached the Akhet and he has acted at the prow (of the solar bark)’. Although ‘Unnumbered’ shares

content comparable to *PT*^N627B, its beginning, which mentions reaching the prow of the solar bark, does not occur in the other Pyramid Texts versions. The thematic relationship between the flight of the deceased as a hawk (found in *PT*^N627B) and his reaching the prow of the solar bark is found in other versions as well (*CT* spell 148, *CT* spell 682 and *CT* spell 989–90), but the content is formulated differently. Both themes appear in a same composition in the coffin variant of the Coffin Texts version (*CT* spell 148 and 682), whereas they appear in two consecutive spells in P Gardiner II–III (*CT* spells 989–90).

The title of *CT* spell 148 is ‘Taking shape as a hawk’. The spell’s content focuses on birth through Isis and the giving of a name to the new-born spirit. Isis’s utterance comprises the meaning of the spell: ‘I will make your name, for you have reached the horizon, having passed by the battlements of the enclosure of Imenren (...) I ask that you shall be always in the suite of Re of the horizon, perpetually in the prow of the primeval bark’ (based on Faulkner 2004, I, 126). The rebirth of the deceased is compared to that of the hawk god Horus, born of Isis, whose name is recorded at his birth and whose divine filiation from Osiris and Isis legitimises his place at the prow of the solar bark in its perpetual cyclical journey. Those elements are also found in *CT* spell 682: ‘they foretell the festival of the braziers at the birth of the god before you (...) You will find *N* here on the front of the (𓂏𓂐𓂑) record (...) his mother Nut bore him in the Field of Tamarisk’ (*CT* VI, 309). The formulation differs slightly with the mention of the birth in the ‘Field of Tamarisk’, but the latter too refers to the location of Horus’s birth (near or in Akhbit/Khemmis according to Allen 2005, 442) and to the recording of the name. The second half of the spell consists of a variant of *PT*^N627B with the mention of the flight of the hawk above the enclosure. In *CT* spell 989, 199c–d, the formulation is in the first person: ‘I will make ascents to the horizon, for I reached the horizon as a uraeus when I was born’. *CT* spell 990 follows and gives the identification of the hawk on the enclosure.

The themes of the birth of the newly born deceased, the recording of his name, and his flight as a hawk above the enclosure are found in the Coffin Texts in one composition (*CT* spell 148, *CT* spell 682) or into two successive spells (*CT* spells 989–90). The division is marked in P Gardiner II by the blank space left at the end of the column of *CT* spells 989 and by the paratextual notation 𓂏𓂐𓂑 *dr*-^c ‘end, limit’ between both columns, at the top (de Buck 1935–61, VII 199, note 1). In the Pyramid Texts, *PT* 627A, which precedes *PT*^N627B, also relates to the theme of divine birth: ‘*N* is an equipped *akh* who demands to come into being’. However, it is not clear whether *PT*^N627B is considered as one spell,

since its beginning, where the spell-divider would be, is lost in all in Pyramid Texts versions (Teti, Pepy I, Merenre, Pepy II, and Ankhesenpepy II). The division into spells derives from the modern numbering and not from any visible demarcation in the inscribed spells.

Despite the differing length, formulation, and physical demarcation of the versions in the Pyramid Texts and Coffin Texts, the same themes are found throughout both in a similar sequence, which shows that there is a strong underlying thematic relationship. This further suggests that the combination of *PT* ^N627B and ‘Unnumbered’ is neither isolated nor random in the pyramid of Ibi, but forms part of the textual development.

ABSENCE OF SPELL DIVIDERS

The spell divider  *dd-mdw* ‘words spoken’, indicates the beginning of ‘divine speeches on temple and tomb walls’ (Gardiner 1957, 230, §306.1). Their original context is in manuscripts, where they are found at the beginning of the first column of a spell. In the Pyramid Texts, the spells transcribed on the walls usually follow this convention, but  can also be added at the top of all the columns, irrespective of where the beginning or the end of a spell may come. This also occurs as early as the 3rd Dynasty, as shown by a fragment from the chapel of Djoser at Heliopolis (Smith 1946, 135, fig. 50), where the *dd-mdw* occur at the top of a column whether or not the syntax breaks from the previous column.

In the pyramids of Wenis and Teti, spells are separated by a line, usually followed by . This is not fully consistent: the first spell on a new wall can also omit  (eg. W/F–A/S), or a spell can follow the line directly without . From Merenre onwards, a more detailed version of the line is used. A spell is enclosed inside the sign  *hwt*, representing a rectangular enclosure seen in plan, which thus expands to become a whole column or spell. In this case, each spell is a clearly defined unit; this is the basis on which modern scholars have allocated numbers to the texts. This sign shows that a chapter was understood as a separate entity equivalent to the European term stanza, Italian ‘room’ for a distinct section of verse (Parkinson 2010, 114–5). From Pepy II onwards, including the queens in Pepy I’s complex,  occurs systematically at the top of each column. The same occurs in the tomb of Senwosretankh.

However, it is difficult to assess whether a  occurs at the beginning of a spell in Coffin Texts, since the division into spells in De Buck’s edition relies on parallels, which

are principally in the Pyramid Texts, and this is not always indicated straightforwardly in the publication. Nonetheless, Firth and Gunn indicated (1926, 227) that all the published coffins in their volume, which were found in the region of the Teti cemeteries in Saqqara and date from the late Old Kingdom/First Intermediate Period do not have any  between spells, only at the top of columns. The same is visible on the coffin of Djehutynakht (for photographs of the coffin see Terrace 1968, 157–8, figs 9–12 and cf. note 50). The texts on the coffin is too small on the published photographs, but I have verified the absence of spell dividers on enlargement of photographs stored at the Griffith Institute (MSS. 5. 54; thanks to Catherine Warsi). According to Edward Lee Bockman Terrace (1968, 34), the Coffin texts spells were first inscribed in black ink and then ‘incised somewhat carelessly’.

As has been argued above, *PT*^{N627B} seems to have been merged within a broader composition on Djehutynakht’s coffin. The formulaic beginning of *PT*^{N627B} in the Pyramid Texts and in P Gardiner II–III *jnk bjk pw ʿ3 hr snbw* ‘I/This *N* am/is the great hawk on the battlements...’, acquires verbal syntax in Djehutynakht *p3.n.f jtt.n.f m bjk pw ʿ3 hr znbw...* ‘he has flown and soared as the great hawk, which is on the battlements...’. This is a comparable presentation to the texts of Ibi, where  is completely absent on the south wall and on part of the east wall. The ‘Unnumbered’ text in Ibi shows the same mechanism, introducing the clause with *jtt.f* (col. 18) in relation to the previous sentence *ph.n (jbj) 3ht ir.n.f h3t jtt.f m bjk ntry hr znbw [hwt] jmn-rn*, ‘Ibi has reached the Akhet, he has acted at the front (of the solar bark prow), after having passed as a divine hawk over the battlements of the [Enclosure] of Imenren’. In Ibi’s and Djehutynakht’s texts, the content is rendered in a more narrative way with the alteration of the grammatical structure from a nominal sentence to a *sdm.f* form, and with the use of verbs describing the action, such as  *p3* ‘to fly’, and  *jtt* (Ibi) or  *jtt* (Djehutynakht) ‘to soar’.

The analysis of sections of texts in this chapter has shown that the spells which may seem to be randomly shortened and juxtaposed are coherent and deliberate compositions, using various devices to bind different textual material together. The absence of spell dividers may indicate that the texts should not be considered as distinct spell units but as part of a larger composition.

CONCLUSION

In this chapter, I have presented two case studies of passages in Ibi’s textual programme that exhibit unusual features in comparison to older inscribed pyramids. My aim is to

discuss the mechanism of creation of the programme, and each case study raises different questions about how the texts were produced.

The first case study—Ibi/F/S IV 88–93—focuses on a text that is only paralleled in the pyramid of a queen (Neith). I investigate Jéquier’s assumption that this section of texts consists of juxtaposed excerpts of spells. This assumption is further argued by Morales (forthcoming), who proposes to see a mechanism of shrinking textual sequences used for kings to fit the restricted space of bicameral pyramids. Following the translation of the text and the discussion of the content, the assumption of an abridged text is arguably unlikely in this case. The clauses, which are paralleled in earlier pyramids of kings, seem at first sight to be juxtaposed excerpts, but a consideration of the whole text suggests that it is in effect a new composition. I argue that the presence of sections of spells that have parallels derives from their formulaic character and is likely to have an ultimately performative origin, rather than deriving from extracting them from written sources. Nonetheless, this does not exclude that written sources would have been consulted when putting in writing a text for the first time.

The second case study—Ibi/F/S V 1–25—analyses a text consisting of shortened Pyramid Texts spells followed by an unparalleled text that is in places difficult to translate. Since the spells do not occur in any sequence in a king’s pyramid, I investigate their content and arrangement, and I argue that the evidence suggests that it was a deliberate composition. Unlike the previous case study, the shortening of selected spells and their binding together seems here to have been done on the basis of different written sources. This interpretation is supported by the exact copy of the first three spells paralleled in older pyramids, and by the possible consecutive miscopied text. Although I have not been able to disentangle the process of miscopying for the latter text in the way that I do in Chapter 4, the presence of the same text in Ibi in a different order, as well as the unusual order of clauses in comparison to parallel versions, support the assumption of miscopying. This evidence supports the consultation and use of written source to compose the texts in Ibi/F/S V 1–25.

The arrangement of texts in the pyramid of Ibi, which has hitherto been seen as essentially random (Jéquier 1935, 6; Theis 2010, 328), seems rather to derive from a different approach to existing sources from that used for earlier pyramids. On the one hand, sections of texts show a reproductive process of copying the texts as found in older pyramids, such as the offering list and sequence *PT* 213–5 and 217–21 on the north wall of Ibi (Ibi/F/Ne), which are clearly demarcated with spell dividers at the top of columns and

at the beginning of each spell. On the other hand, some sections show a more complex process of production of texts that derives partly from the combination of textual sources and partly from recent entextualisation. This change, from a formulaic text arranged into distinct units—indicated by paratextual markers such as  *dr*-^c ‘end, limit’ in P Gardiner II (de Buck 1935–61, VII 199, note 1) or spell dividers —to more flowing texts without any division, may provide an indication about the general process of editing and how practices developed in the late the Old Kingdom. If spells continued to be used in ritual performances (as seems likely), it should be assumed that they could be transferred into written form at different points in time (Hays 2012, 80; Morales forthcoming). The similarities in content result from the oral transmission of these utterances, which also evolved over time. The texts of Ibi thus exhibit a complex and varied textual programme, merging older and more recent compositions together on the walls of the burial chamber with a range of mechanisms.

The copying process in the pyramid of Ibi

The investigation of the combination of spells in the previous chapter sheds light on the scribal practices in the production of the textual programme for the pyramid. In this chapter the copying process is explored more in detail. Several texts in the pyramid of Ibi occur in an unusual order, where only parts of clauses are recognisable. Gustave Jéquier (1935, 6) and Thomas George Allen (1950) noted that several sections of texts had been copied in the wrong order. The unusual layout was first investigated by Isabelle Pierre-Croisiau (2004, 263–78), who reconstructed the order of reading for two texts on the south wall. She shows that the reading was reversed but does not account for the underlying reasons. Thus, the rationale behind the garbled texts inscribed on the walls has not been explored: how and why did the texts become inscribed in an order that was presumably different from their source, and to what extent does that difference provide insight into scribal practices?

In order to answer these questions, I explore sections of the texts of Ibi and compare them with parallels in other pyramids and on some coffins. I first investigate the general issue of garbled texts through some sections on the fourth register of the south wall: *PT* 1002 and *PT* 374 (Jéquier 1935, pl. 11, cols. 523–30; 530–4), which I consider together, and *PT* 357 (*Ibid.*, cols. 573–86). I have selected these spells as they have already been identified by Jéquier (1935, 16: *PT* 357) and Pierre-Croisiau (2004, 264: *PT* 1002 and *PT* 374), are relatively short, have parallels, and present different aspects of miscopying. Since the lower part of the register is lost, a necessary preliminary to analysis is to reconstruct the missing texts. However, because words occur in an unusual order, the way in which the texts were garbled needs to be understood in order to fill the gaps. A double approach is therefore needed.

A miscopy of the model that led to the garbling of the texts implies that the source text was written in vertical columns and would have been copied from the end backwards.

If the source text was read from the end without reproducing its exact division into columns, the version inscribed on the wall would become garbled, with parts of clauses appearing in a different order and words detached from their contexts. An investigation of the sections of garbled texts in Ibi can enable us to reconstruct an ungarbled model that would have been used and from which the texts would have been miscopied. The aim of the method presented below is to make it possible to reconstruct the arrangement on a hypothetical model, so that the missing texts from the inscription can be restored.

In the next section, I discuss possible reasons that led to the inscription of miscopied texts on the walls; I also consider other unusual aspects found on the walls of the burial chamber of Ibi as well as in the pyramid of Wedjebteni and on the Middle Kingdom coffin of Neferi (B16C). Finally, I discuss the possible different steps in the copying process from a supposed storage place to the walls of the pyramid. This discussion remains speculative, because of the lack of archaeological evidence: no design containing the arrangement of the texts to be copied on the wall has been found so far, nor have any contemporaneous archives where the texts might have been stored (further discussion in Smith 2017, 183). In addition, there is no information about the people in charge of the various phases of the process or the media used. As mentioned by Paule Posener-Kriéger, it is likely that the texts inscribed in pyramids were written first on papyrus (or other media), but this remains unproven (in Mathieu 2004, 251, n. 34; Goebs 2008, 2–3). Thus, this investigation attempts to shed lights on the way the texts were inscribed by looking at evidence of the interaction between the human agents and the final materiality of the texts.

METHOD

Several scholars have discussed garbled texts on different media and of different periods. Jan Assmann (1970) investigated a text that is part of a scene on the east wall of room xvii of Luxor temple. Florence Mauric-Barberio (2003, 179) investigates several texts inscribed in tombs in the Valley of the Kings and presents a diagram to explain the order of a garbled section of the Book of Caverns occurring in the tomb of Horemheb. Abdel-Aziz Fahmy Sadek investigated (1985, 306–8) garbled sections of the Amduat on manuscripts and indicated the order of the original with arrows. Barbara Lüscher (1998, 92–4) and Ogden Goelet, Jr. (2010) also investigate garbled sections in papyri of the Book of the Dead and discuss retrograde writing order and copying practices. Investigations of garbled texts in pyramids have been undertaken by Pierre-Croisau (2004) and Allen (1986), who studied

a section of texts in the pyramid of Ibi and Wedjebteni respectively. Similar investigations were done on coffins by Allen (1976) and Rainer Hannig (2007). In each case, these authors demonstrate that the mistakes resulted from a retrograde original copied in reversed order (for discussion on retrograde see Fischer 1977 and 1986; Collombert 2010, xi–ii).

In an analysis of a garbled sections of text on coffin B16C from el-Bersha, Allen (1976) shows that the columns of the hypothetical model were not necessarily full (Allen 1976, 6–7, figs 3–4), whereas the texts on the coffin fill the columns to the bottom. A backward copy of such a model into a continuous text resulted in sections being displaced. Thus, garbling occurred when the original layout had to be modified in order to be adapted to the depth of the columns in a new context. A similar process seems to have happened in pyramids, where the texts also fill the available space.

In the above-mentioned studies, the authors either reconstructed an original model in hieroglyphs or produced a diagram, to explain the way in which texts would be garbled. The reconstructions show a retrograde text in columns, with hieroglyphic signs facing right and the reading starting on the left. I have represented the hypothetical models consistently in retrograde, reading from left to right, following the layout known from surviving manuscripts. This convention is also followed in most of the studies mentioned above, except for Hannig’s 2007 investigation of a miscopied text on the third intermediate period coffin of Penju in Hildesheim.⁵³ He proposes a retrograde model facing left, even though no evidence for such a layout has been found so far. His proposed layout is not necessary: a retrograde original facing right would also account for a similar final inscription.

The lack of material evidence for model texts means that the layout and script of the manuscript and possible intermediate copy remain to some extent open to discussion. Middle Kingdom papyri exhibit both horizontal and vertical arrangements, with the latter prevailing for religious texts (Parkinson 2009, 149; 151–3). Extant examples have both layouts in normal orientation (right to left with signs facing right) as well as in retrograde (left to right with signs facing right). ‘Religious, liturgical and funerary texts connected with the temple sphere’ (Parkinson 2010, 73; 2009, 148) were recorded in linear hieroglyphic script until the end of the New Kingdom (Baines 2007, 140–1; 145; discussed in Parkinson forthcoming). Although there might also have been models inscribed in very detailed signs (see for instance Fig. 4.14), mistakes in pyramids often suggest that they

⁵³ <http://www.globalegyptianmuseum.org/detail.aspx?id=10905>. Accessed 13 January 2018.

derived from transcribing a relatively cursive original (e.g. Jéquier 1933, 18–19; Mathieu 1996, 290; further refs: Hays 2012, 114, 469). I use a hieroglyph font for all the figures in order to ease comparison between the hypothetical model and the texts *in situ*.

PT 1002, which is investigated in this chapter, has already been analysed by Pierre-Croisiau, who provides a diagram (Fig. 4.1) in which a horizontal line followed by a number indicating the order of reading of each column.

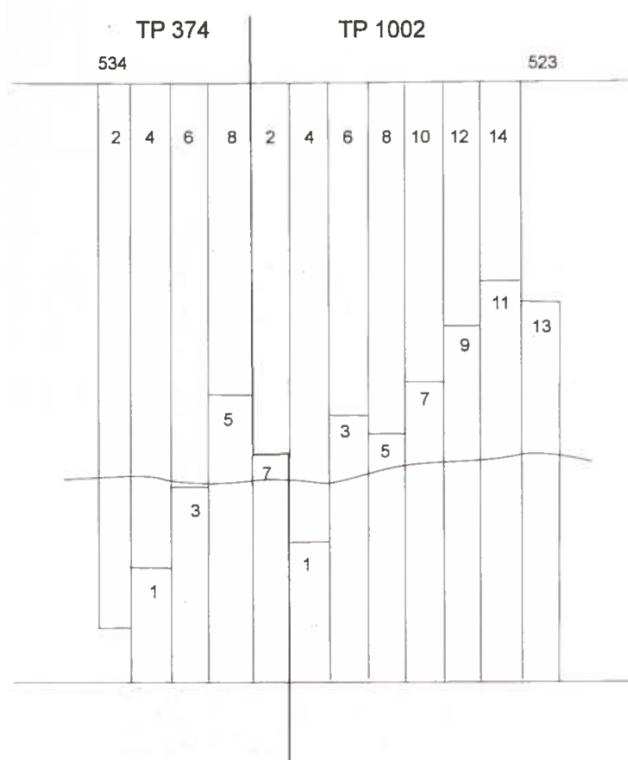


Fig. 4.1. Order of reading of *PT* 374–1002 according to Pierre-Croisiau (2004, 271, fig. 4).

The wavy horizontal line dividing the register in Fig. 4.1 indicates where the text below is lost. This diagram allows one to note the unusual order of *PT* 372 and *PT* 1002: the order of the texts that would be expected to run from cols 523 to 534 is opposed to the order of reading: the beginning of the text occurs towards the left and the end towards the right, instead of the other way around. However, the diagram does not specify the number of clauses in each column nor account for the order. Moreover, the sections as defined are inaccurate. For instance, the beginning of the section 1 occurs halfway through the gap in col. 529, whereas my reconstruction in this chapter puts it immediately after (Fig. 4.4). Similarly, section 5 in col. 527 starts above the wavy line, whereas the last visible signs on the wall clearly show that it belongs to the same part and that there is no reason to separate them. The lack of a full reconstruction of the original in Pierre-Croisiau’s article does not

make it possible to verify her diagram easily. Therefore, I present my method below in order to account for the analysis of garbled texts and my reconstructions of hypothetical models. My purpose is also to confirm that the unusual word order in a spell is related to the copying process and not, for instance, to its being a different version of the spell from other examples. Establishing patterns of miscopying could further suggest approaches to the remaining unidentified texts.

The system I use in this chapter is presented here with a general example in two steps and is illustrated with figures. The first step is to compare the garbled order of spells in Ibi with the order of parallel spells found in other sources, both Pyramid Texts and Coffin Texts. The second step is to determine the arrangement of the original texts in columns. I refer to an ‘expected order’ in each analysis because the content of the known parallel versions is usually exactly similar, making it possible to identify each clause according to the numbering of Kurt Sethe (1908) or Adriaan de Buck (1935–61). The fact that this identification is possible despite the unusual order suggests that the order was originally the same but that the text was copied in the wrong direction. A comparison between the parallel versions and Ibi’s texts allows them to be untangled, and an original model for the copy in the tomb to be reconstructed.

The first step involves listing the spell’s clauses as numbered in Sethe’s or de Buck’s editions. For the sake of clarity, a randomly chosen number, 100, is used in this hypothetical example. In Fig. 4.2, clauses are listed as found on the right, 100 a–i followed by 101 a–b. Clauses are then identified in Ibi and listed in their order of reading, using the same subdivisions. Since the text is garbled, the order displays: 100 i, 101 a–b, 100 f–h, 100 d–e, 100 a–c. In order to compare both versions, I assign groups of clauses a capital letter in alphabetical order from top to bottom (in Fig. 4.2: A to E). The letters are then attributed to the groups of spells in Ibi.

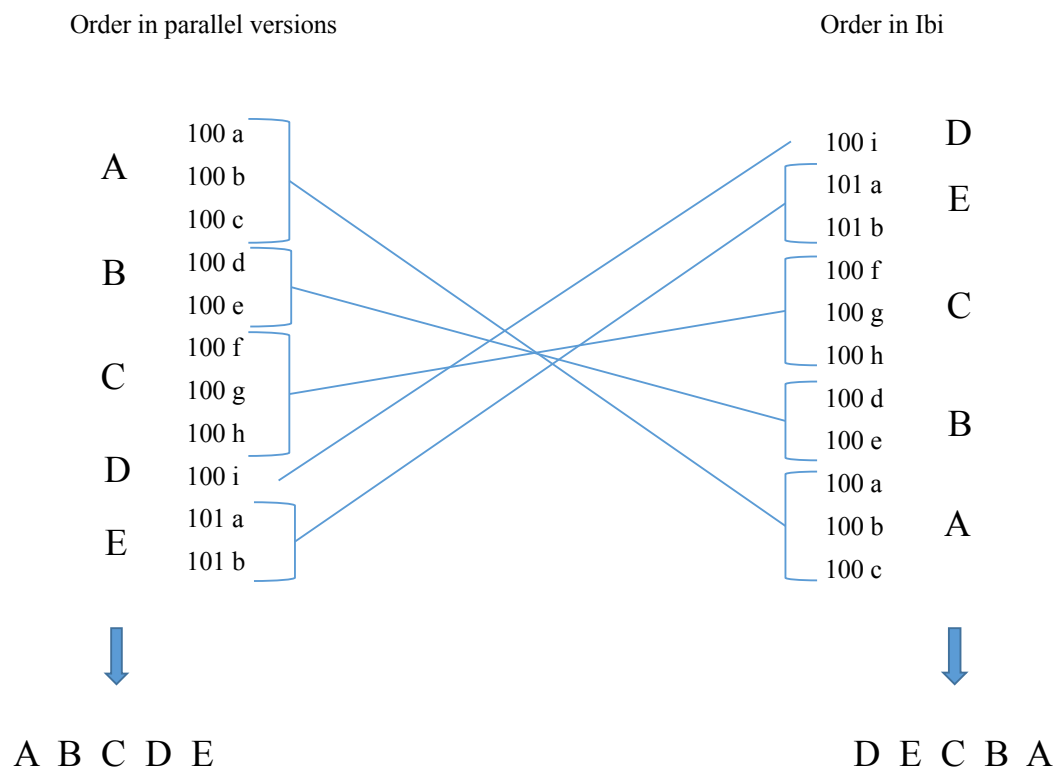


Fig. 4.2. Hypothetical comparison between the order of the text in Ibi and parallel versions.

Allocating letters to groups of ordered clauses facilitates comparison of units at the level of clauses or longer passages. According to Fig. 4.2, the expected order known from parallels A to E becomes D-E-C-B-A in Ibi; the order is reversed, starting from the end backwards (from D to A), but E and D are further inverted.

The second step thus consists in working out the order of the groups in columns. A first hypothesis would be to suggest that each group (D to A) would have been written in one column, but this would not by itself explain why group E comes before D. However, if D–E were written in the same column in the model, it can explain the ordering. If the columns were read from left to right, the groups would follow an alphabetical order but with D written above E. Because D–E are small units, this placement of two groups within a single column is plausible. A reading in the opposite direction would thus start with group D before E and display the group order exactly as it occurs in Ibi: D-E-C-B-A. The result of this step is seen in Fig. 4.3.

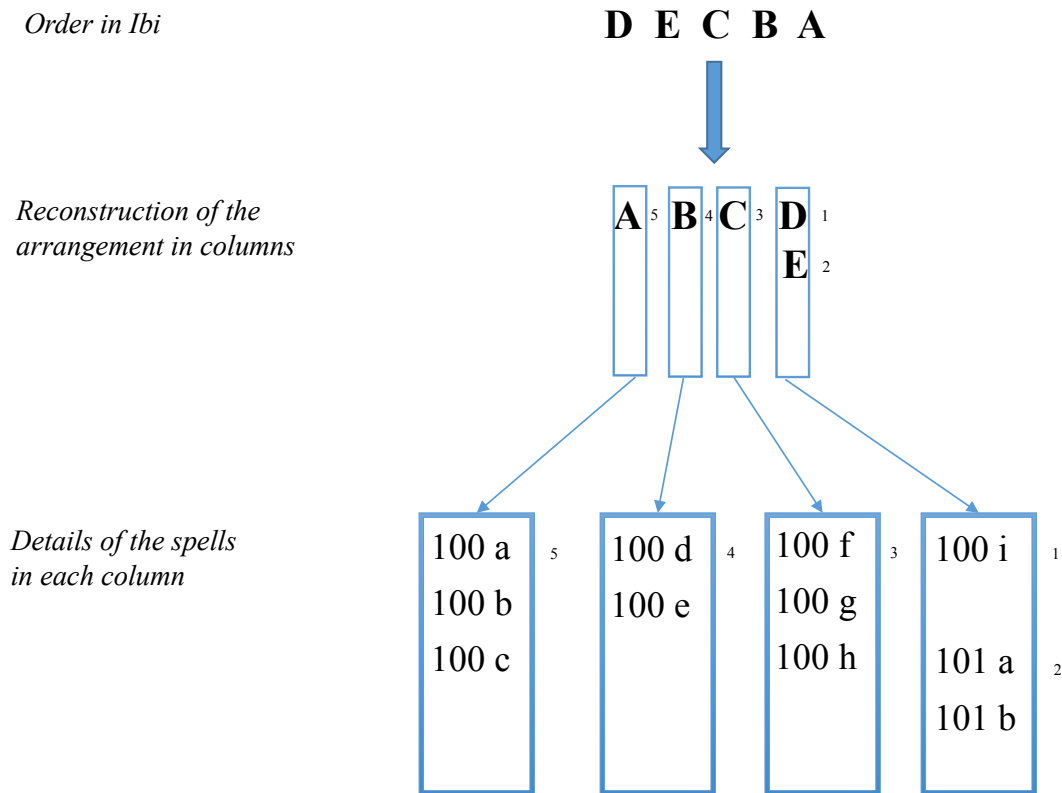


Fig. 4.3. Determining the arrangement in columns.

Finally, the numbers of the clauses in the spells can be written in the columns in order to show the possible distribution of the text in a hypothetical model. After dealing with larger units, clauses have to be checked more precisely, and adjustments in the model are sometimes required. The first or last word of a group can belong to the preceding or following column; an example is 100f, the first word of which could have been in the preceding column after 100e. Similar cases can usually be identified in Ibi when a word occurs by itself, isolated from the clause to which it belongs. Such cases would be caused by limitations of space, with the copyist being unable to reproduce the layout of the text in the model exactly and hence copying the last word of one column at the top of the next one. In a backward reading of the model this process would produce a garbled text.

The hypothetical models reconstructed in this chapter posit a first copy from an original manuscript to an intermediate vehicle for use on site. Such an intermediary stage between the archival texts and their transcription on the walls is attested in the 18th Dynasty in the form of ostraca found in a Theban tomb (Lüscher 2013). It is plausible that archived

texts would not have been removed from their storage place to the construction site but would have been copied on other media for transmission. Papyrus rolls, leather rolls, and wooden writing boards are all suitable media for the storage and transmission of religious texts (see Baines 2004, 26). Other type of supports could be potsherds and limestone flakes; a variety of materials could have been used at the same time (Baines 2012, 28–9; Parkinson forthcoming). Since the copying process might have involved several stages between the original manuscript to the model used for inscription in the pyramid, I refer to the latter copy as the ‘model’.

APPROACHING GARBLED TEXTS

PT 1002–PT 374

Like all the texts on the south wall, the spells analysed in this section are inscribed from right to left, and are to be read as such. However, *PT 1002* occurs in an unusual, presumably garbled, order in the fourth register of the south wall and is preceded by columns of an unidentified text, in a presumably normal order, that is paralleled only in the pyramid of Neith (Jéquier 1930, pl. xiii, cols. 368–75).

In order to analyse how the garbling occurred, I have reconstructed a model using the method outlined above. Because most copies of *PT 1002* in the pyramids are damaged, the Coffin Texts version, *CT 517*, is used here for the identification and numbering of the clauses. The figures below show the text as inscribed in Ibi (Fig. 4.4) and the hypothetical model (Fig. 4.5) from which the copyist would have created the inscribed text.

PT 1002, as well as its parallel *CT 517*, is expected to begin with *jt=k sm³ wr mwt=k sm³t wrt*: ‘your father is the Great Wild Bull; your mother is the Great Wild Cow’ (*CT VI*, 105e). However, this passage comes towards the end of the text in Ibi, being inscribed in cols. 7–8, while the end of the spell, which reads *⟨n hnn⟩ dhwtj j.jr.t-n=f n=k*: ‘Thoth ⟨will not disturb⟩ what he has done for you’ (*CT VI*, 107c), occurs in col. 1, omitting *n hnn*, which appears in isolation in the middle of col. 3. The model presented in Fig. 4.5 is written in retrograde and presents a hypothetical original layout of *PT 1002* that can account for the order in Ibi’s version (Fig. 4.4). An assumption that the model was read from right to left, instead of left to right, would explain the appearance of *n hnn* in col. 3 of the text in Ibi’s pyramid (Fig. 4.4), as against the bottom of col. 6 of the hypothetical model (Fig. 4.5). The intended correct reading of the retrograde model (Fig. 4.5) is from cols. 1 to 7. According to this order of reading, the text in col. 6, which ends with the first words of a

new clause *n hnn*, continues on the top of the next column (col. 7) with the end of the clause: *dwty j.jr.t-n=f n=k*. However, if the model was read incorrectly, in a non-retrograde direction from right to left, the reader would start with col. 7, continuing with cols. 6, 5, and so on. The reading of col. 6 before col. 5 explains how *n hnn* ended up isolated from the rest of its sentence in col. 7.

The use of a model similar to this one (Fig. 4.5) accounts for the garbled order of the text on the wall (Fig. 4.4), as the copyist would have started the copy from right to left (cols 7 to 1) instead of left to right, even though the spell began in col. 1. The layout of the hypothetical model, which is one column shorter than the text on the wall, suggests that the copyist would have needed to adapt the original text's layout to the length of the columns in the register. This adaptation would have been unproblematic if the direction of reading of the original had been followed, whereas, a copy in reverse order that did not reproduce the exact layout would lead to a garbled text.

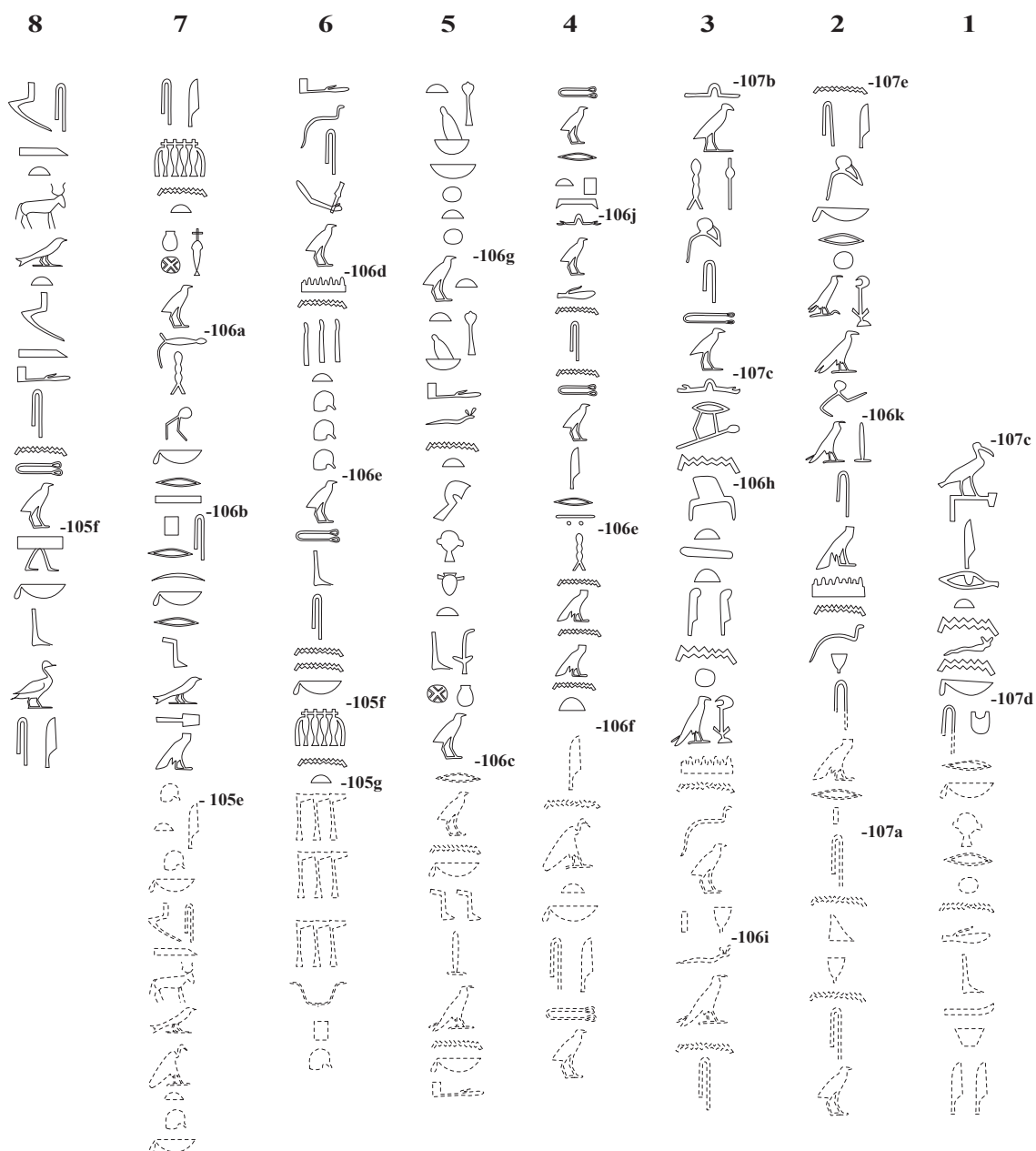


Fig. 4.4. *PT 1002* as found inscribed in Ibi. (Alvarez 2016, 27, fig. 2.2)

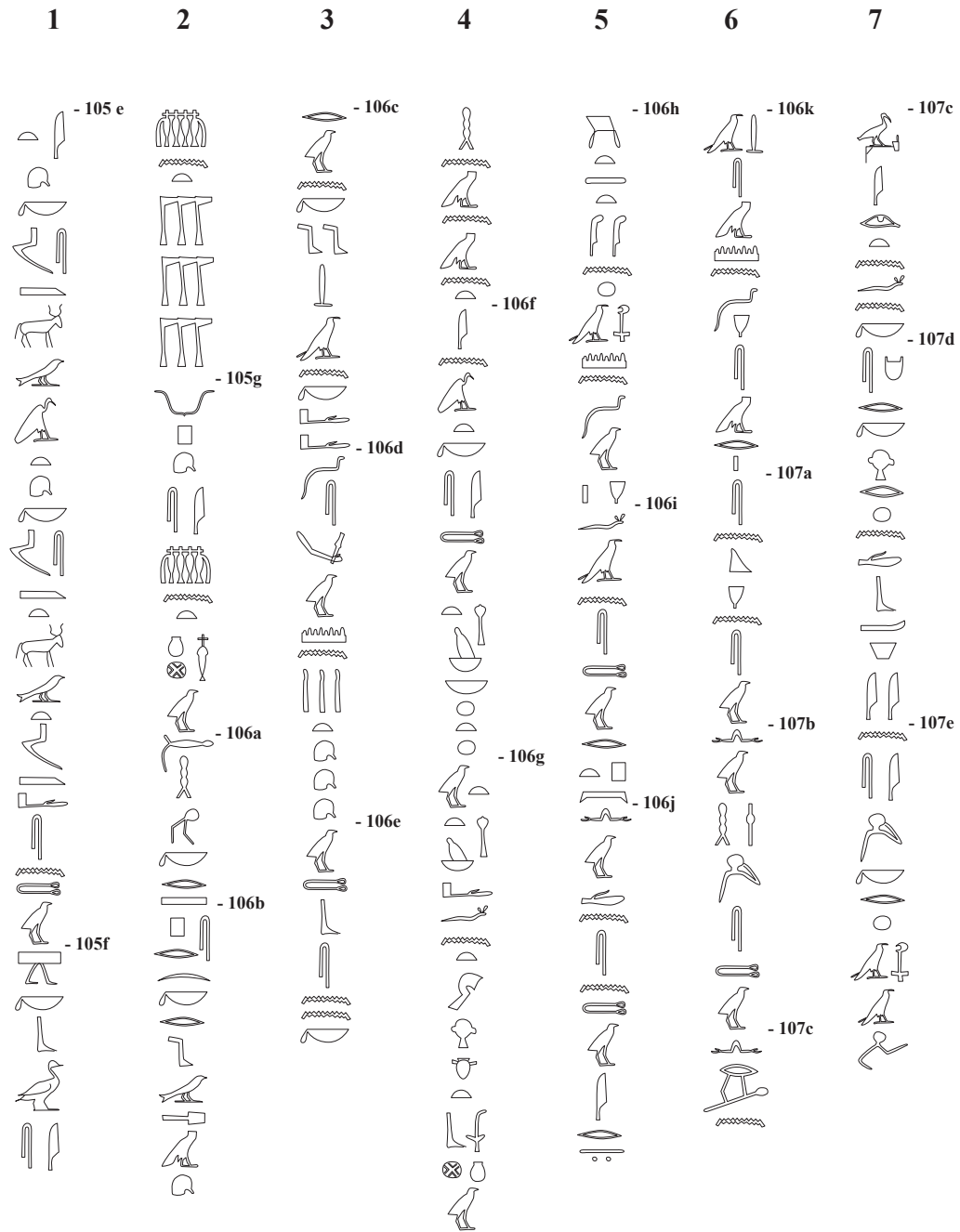


Fig. 4.5. Hypothetical model of *PT* 1002 in retrograde writing. To be read from left to right.
(Alvarez 2016, 28, fig. 2.3)

The section following *PT* 1002 is *PT* 374 (Jéquier 1935, pl. xi, cols 530–4), where the order is also unusual. The text begins with *Pyr.* 659c and ends with *Pyr.* 658c. The same process of misreading a retrograde model is likely to have happened here, as is shown by the reconstruction of a hypothetical model in Fig. 4.7. The only difference between the hypothetical model and the text in Ibi is the absence of *rmṯ* in the second column from the right (Fig. 4.6). This might be an error of omission, perhaps because the copyist had already inscribed *rmṯ* once after the verb *ms* further up the same column. Despite this difference, a backward copy of the hypothetical model is supported by the order of the clauses on the wall.

PT 374 precedes *PT* 1002 in seven versions of the *Pyramid Texts*: Teti (T/A/W 54–55 + T/A/S 1–3); Pepi I (P/F/Se 43–45); Merenre (M/F/Se 81–84); Iput (Jéquier 1933, 48 and pl. 38, frag. 8, col. 14–19); Ankhesenpepy II (AII/F/Se inf 77–83); Behenu B/F/Se 50–52 (Pierre-Croisau 2004, 264; Mathieu and Pierre-Croisau 2015, 78). The same spell, as Coffin Texts *CT* 517, occurs in three versions on a double rectangular coffin set from el-Bersha Tomb 21 of the 12th dynasty nomarch and high priest of Thoth Amenemhat (Kamal 1901, 17; B10C 287–91, B10C 429–33, B9C 339–44). According to Harco Willems (1988, 75), the coffin dates to the end of the reign of Senwosret I and the reign of Amenemhat II. As noted by Adriaan de Buck (1935–61, VI, 105, 4), all these three versions of *PT* 1002 = *CT* 517 on the coffins are also preceded by *PT* 374. In Ibi both spells also occur next to each other from right to left, but *PT* 374 follows *PT* 1002. Only the case of Teti is an exception with the spells on different walls, with *PT* 374 at the end of the west wall and *PT* 1002 the first spell of the south wall. This distribution could still support their belonging to a single sequence (Mathieu 2015, 78).

Since both spells are garbled in Ibi, one might suggest that they were written on a single source in eleven retrograde columns (Fig. 4.7). If the model was read as expected from a retrograde order (from left to right), *PT* 374 would come before *PT* 1002, but if it was read from right to left, *PT* 1002 would come first. Thus, the juxtaposition of the two spells in the hypothetical model in Fig. 4.7 accounts for the garbling of the whole section in Ibi (Jéquier 1935, pl. XI, cols. 523–34). It suggests that the copyist used a model similar in content and order to the parallel sources but started his copy in reverse order.

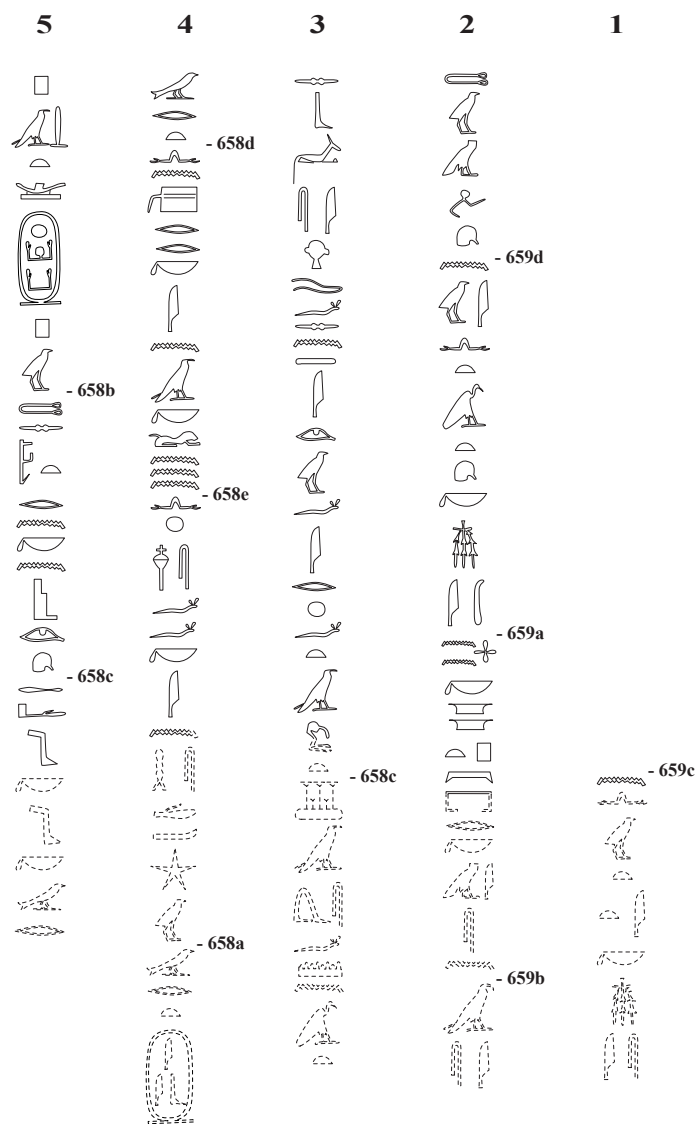


Fig. 4.6. *PT* 374 as found inscribed in Ibi.

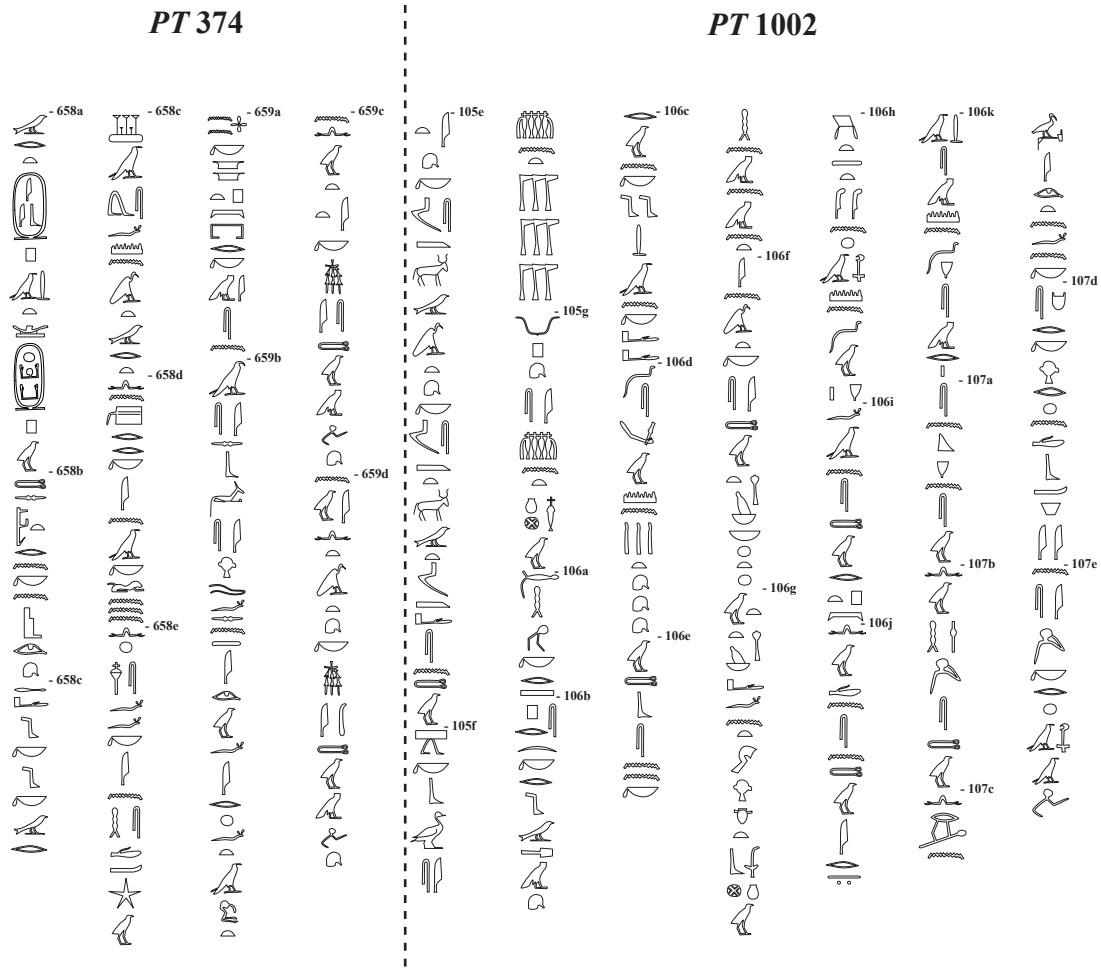
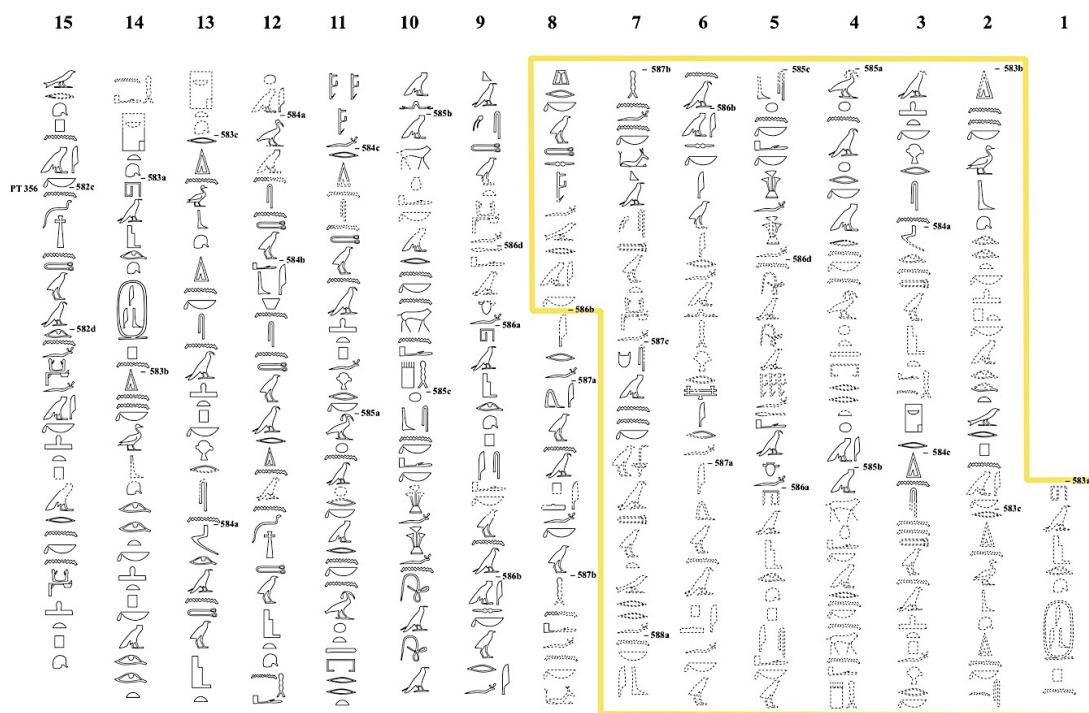


Fig. 4.7. Hypothetical model of *PT 1002* and *PT 374*.

PT 357

The fourth register in Ibi contains *PT 357* in fifteen columns between a garbled version of *PT 665* and a non-garbled version of *PT 475*. The first eight columns of *PT 357* are almost exactly as in parallel versions, but from the middle of col. 8 onwards the same content occurs again in a different order. This duplicated section can thus be divided into cols 1–8 and 8–15 (Fig. 4.8). The beginning of *Pyr.* 583a is likely to have started in the lacuna at the bottom of col. 1, because the second part of the clause, *Pyr.* 583b, is preserved at the top of col. 2. This spell runs as expected to col. 8, with the exception of two clauses missing in col. 3 (*Pyr.* 584a–b). In col. 8 the spell stops at *Pyr.* 588a, omitting 13 clauses from the middle of the spell. In the second part, from col. 8 onwards, the same text starts again with the last word of *Pyr.* 586b, then *Pyr.* 587a, and backward to the beginning of the spell (*Pyr.* 583b in cols 14 to 15), ending with the last clause of *PT 356*, 582c–d, in col. 15.



PT 357

PT 357, 587a-PT 356, 582c-d

PT 357, 583a-588a

Fig. 4.8. PT 357 as found inscribed in Ibi.

This duplication suggests that the text was copied twice from a single model, once in the correct direction of reading and once backward. The hypothetical model in Fig. 4.9 shows how the mistake would have occurred, with the arrows indicating the proposed process of copying. The copyist would have started at col. 1, copying towards the right, as is expected when using a retrograde model. He omitted to copy col. 3 and continued directly with cols 4 to 8. This section corresponds to the first part of Fig. 4.8 (col. 1-8). When he had reached col. 8 of the model, he apparently started reading in reverse order and copied out col. 7 to col. 1 again (corresponding to the second part of Fig. 4.8). His backward reading continues after the beginning of PT 357 in col. 1 with the inscription of the last column of another spell, PT 356. A few inconsistencies between this model and the wall are further discussed below.

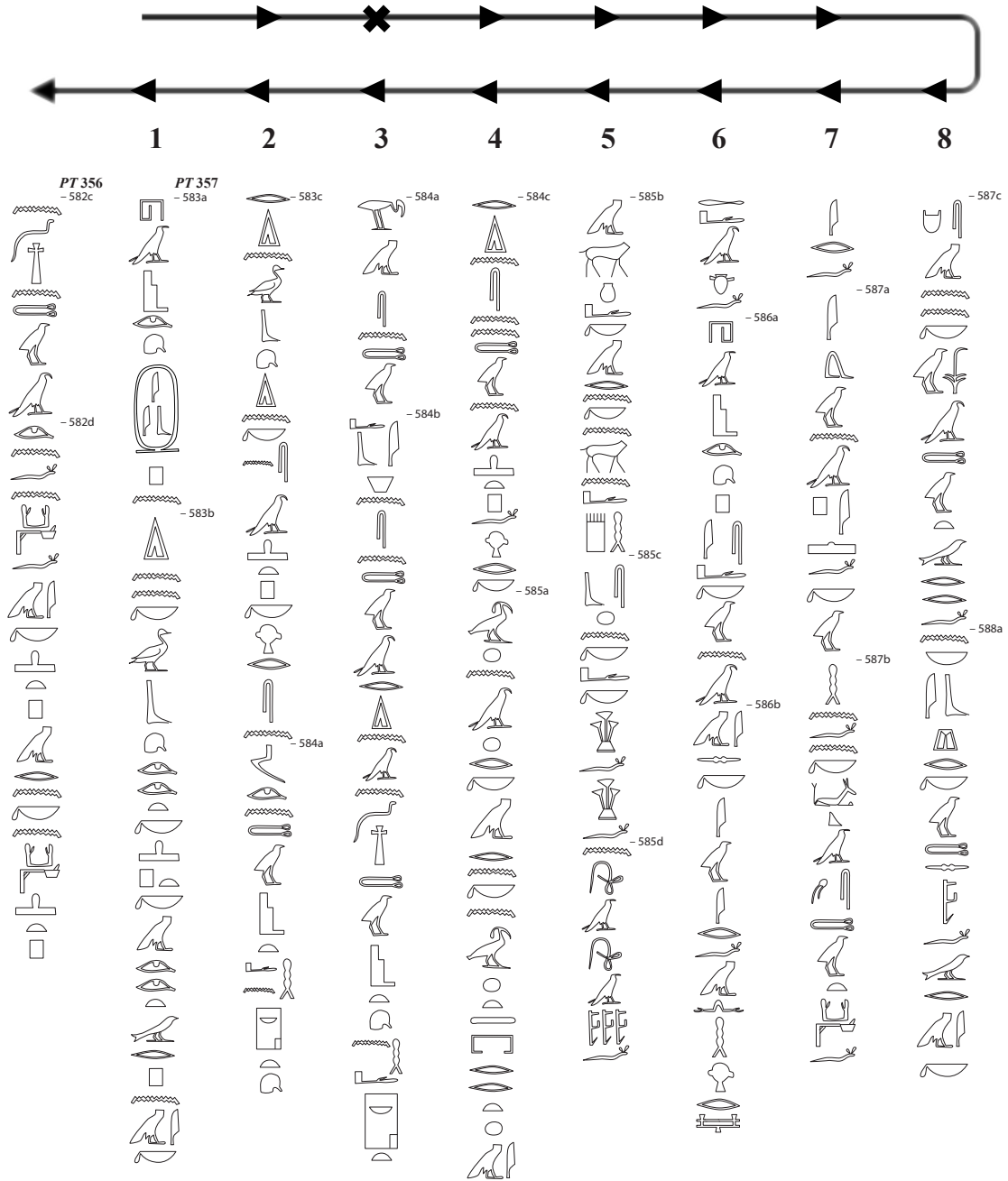


Fig. 4.9. Hypothetical model of *PT 357* with indication of the order of copy⁵⁴ (arrows indicate the direction of copy; the cross indicates that a column was not copied).

The inscribed text also contains straightforward errors of transcription by the ancient copyist or copyists and others by the modern copyist. The ancient copyist

⁵⁴ A  is inscribed on the wall in place of a  at the top of col. 12 (Fig. 4.8). The  is corrected here on the hypothetical original.

misunderstood some signs: the trace of $\llcorner$ in col. 8 (= Jéquier col. 579) might be the result of the copyist mechanically interpreting the word as hn^c ; a 𐤁 is inscribed in place of a 𐤀 at the top of col. 12 (Fig. 4.8); sbh is inscribed in col. 10 with the 𐤁 preceding $\llcorner$ and following it in col. 5; the 𐤁 in $jms.k(j)^{55}$ is present in col. 6 but not in col. 9. The copy of Jéquier also has some mistakes and inaccuracies (1935, pl. xi, cols 572–86). For instance, he did not leave enough space for the missing verb jp 𐤍 between hr 𐤁 and $=f$ 𐤍 in col. 579, but the photograph shows parts of the signs and confirms its presence (Fig. 4.8, col. 8). In col. 12 (Fig. 4.8; Jéquier col. 583), the spacing is accurate in $rdj.n$ and nd 𐤍 , but the photograph shows traces of a small 𐤁 .

This proposed layout of the model is supported by some misplaced single words. The random position of $jr.f$ (Pyr. 586b) in col. 8 and $jb.f$ (Pyr. 585d) in col. 9 (Fig. 4.8) is explained by their position at the top of columns on the hypothetical model (Fig. 4.9, cols 6 and 7). In a backward reading of the text, both words would end up isolated from their respective sentences. Two other elements diverge from the model; the omission of words or of a whole column can be explained by oversight of the copyist. The first mistake is the omission on the wall of col. 3 of the model (Fig. 4.8). The cross in the arrowed line above col. 3 indicates the omitted column. The omission assumed here is supported by the fact that this column occurs in col. 13 in the second version (Fig. 4.8). If both sections were copied from a single model, as I suggest, the column was omitted the first time but not in the backward reading. The omission could be explained by the copyist becoming distracted by the similarity of columns 2 and 3, both of which start with $rdj.n$: his eye could have skipped the column in the middle, in a relatively common type of error. Similarly, the end of Pyr. 586b $hr jr=f$ (col. 6, Fig. 4.9) occurs on Ibi's wall in the first section (Fig. 4.8, col. 6), but not in the second (it is absent in Fig. 4.8, col. 10). It was therefore present in the model but was omitted in the second inscribed copy. This omission could result from the copyist's pausing when arriving at the end of the spell and the bottom of the column, and then moving to the top of the next column to write the draft of the spell's end. In the process, he could have forgotten to go back to the bottom of the column in the model, instead continuing with the top of the next one. This analysis is partly speculative, but most of the details observed fit with the hypothesis that both parts were copied from the same model, once in the order of reading and then once backward.

⁵⁵ For forms of the first person singular stative ending, see Edel 1955, 271–2, §§572–3.

Concluding remarks

The preceding analysis of *PT* 1002, *PT* 374 and *PT* 357 confirms T. G. Allen's indication (1950, 59, n. 81) that the texts were copied from an original in the wrong order. This analysis suggests that the model was in retrograde and had to be copied in prograde (that is, normal right-to-left writing; cf. Simpson 2017, 337). The mistakes are thus likely to have resulted from the process of transcription and transposing between those different directions of reading and writing. The texts inscribed in pyramids almost always run in prograde facing left or right, depending on the wall on which they are inscribed. While the texts were presumably not intended to be copied retrograde on the wall, such a method could have produced a satisfactory result if column heights were equal between model and inscription.

Nonetheless, a few examples of retrograde occur in pyramids, such as in a section of text on the north wall of the antechamber of Wenis (Hays 2012, 113), on the east wall of the burial chambers of Behenu (Berger el-Naggar and Fraisse 2015, 47), and on the south wall of Wedjebteni (Allen 1986, 1). In the case of Wenis the retrograde is deliberate and does not show any mistakes resulting from the copying process. According to Hays (2012, 113), the reason for use of retrograde is aesthetic and related to the visual coherence of the arrangement of the texts in the antechamber. In Behenu, Berger el-Naggar and Fraisse propose (2015, 47) to understand a section on the east wall of the burial chamber as retrograde. However, the text itself is not inscribed in retrograde, but in prograde facing right and read from right to left. Their use of the term 'retrograde' refers to an interpretation of the arrangement of the spells into a possible coherent narrative sequence, not to the writing itself. This is therefore not comparable either with the retrograde found in Wenis, which is deliberate, or with the cases in Wedjebteni and Ibi, which are due to a process of copying from a retrograde original.

The retrograde in Wedjebteni, Wd/F/S, may not have been deliberate. J. P. Allen (1986, 1, 10 fig. 3) states that a section of text on the south wall was 'copied in the wrong order from a retrograde original' and proposes a reconstruction of one part of the model. He reconstructs a hypothetical model that corresponds to the garbled section in cols 233 to 38 of Wedjebteni's south wall (Jéquier 1935, pl. xxvi). On the wall, the first nine columns correspond to *PT* 217 in the expected order, followed by five garbled columns of both *PT* 217 and *PT* 553, followed again by *PT* 217 and *PT* 553. The miscopying is obvious in col. 234, where part of *PT* 553, 1353c *dsr.t jr w šw* is interrupted—omitting *hn^c tfnt m hwt ht mwt*

(Allen 1986, 10, fig. 3, *9)—and followed by the second half of *PT* 217, 160a [*j n.k*] *s3.kj n.k NN pn* (Allen 1986, 10, fig. 3, *9). As shown in Allen’s reconstruction, the normal reading of the text is col. *9 followed by *10, but a reversed copy occurred on the wall, where it reads ‘Those against Shu *your son. This NN has come to you*’ instead of ‘Those against Shu and Tefnut shall be swept from...’.

The text in cols 225 to 232 runs normally, with the full spell of *PT* 217 (152a–160c). This is followed by the beginning of *PT* 553, 1353a. It continues in the expected order for two more columns to 1355a, which would be *11 in J. P. Allen’s reconstruction (1986, 10, fig. 3). Then, from col. 234 the copyist went backwards again, copying again Allen’s cols *10, *9, both of which belong to *PT* 553. He kept copying several columns of *PT* 217 in the same wrong direction. Then, for some reason, he resumed copying in the expected order, moving again through the same part of *PT* 217 and following with the complete spell *PT* 553 in the correct order as well. This pattern exhibits three different directions of copying, as shown in Fig. 4.10: right-to-left, left-to-right, and then right-to-left again. Thus, the copying process for the section from cols 225 to 250 as a whole is here similar to Ibi’s section of *PT* 357 with more than one change of direction.

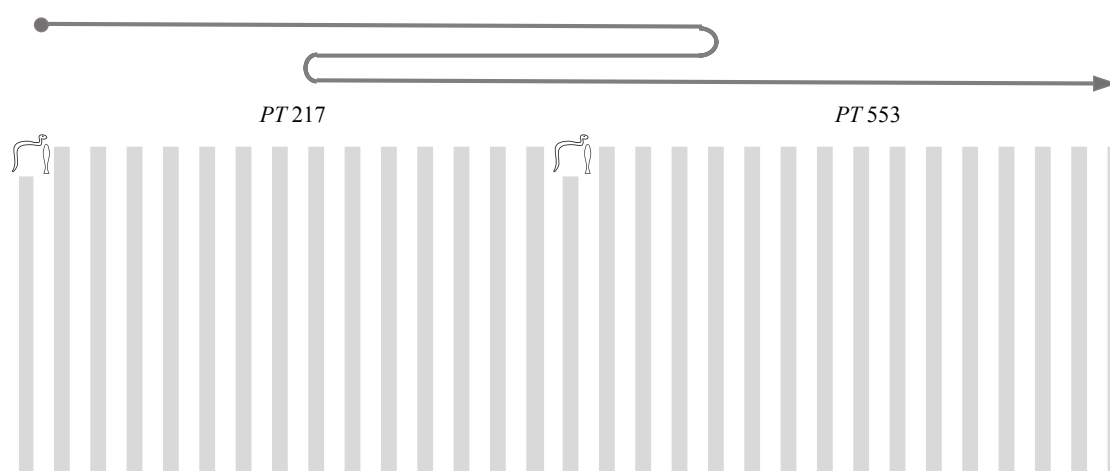


Fig. 4.10. Reconstruction of the reading of Wedjetbeni’s retrograde original. (This figure does not indicate the exact number of columns, only the directionality of the copying process.)

Alan H. Gardiner noticed a similar mistake in the copy of a spell on the 12th Dynasty coffin B17C from el-Bersha (*CTI*, 232, 3): ‘the scribe began at some point to copy his model in retrograde direction’ before continuing in the correct direction. This text too is inscribed on the coffin as a prograde text with signs facing right. The fact that this mistake consists of just a few columns copied in retrograde order might suggest that the copyist was

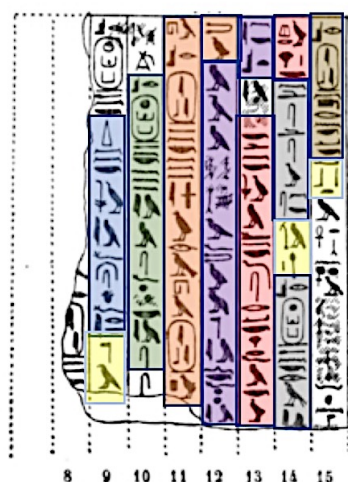
copying from a retrograde model into prograde and that his concentration lapsed at some point before he resumed inscribing in the correct order again. Something similar would have happened in the copying of *PT* 357, *PT* 1002 and *PT* 374.

COPYING PROCESS IN THE PYRAMID OF IBI

The examples discussed so far occur in texts from the south wall of Ibi in prograde facing right. However, various elements also hint at a similar process on the north wall, which consists of prograde facing left. Ibi/F/N II 4–10 (Jéquier 1935, pl. iii, 9–15) is relevant for the process of copying since the text is paralleled in a garbled version on the coffin of Neferi (B16C from Deir el-Bersha, 12th dynasty). J. P. Allen states that the text on the coffin of Neferi was miscopied from a retrograde original which he proposes a reconstruction (Allen 1976, 6, fig. 3).

Fig. 4.11 compares the texts found on the north wall of the burial chamber of Ibi with Allen's hypothetical model of the texts inscribed on the coffin of Neferi. The texts which are not highlighted on the model of Neferi were likely to have continued on the lost next register up the wall in Ibi. The text in Ibi follows the reading of the posited retrograde model for Neferi in the expected order, from cols *1 to *11, whereas these were copied in reversed order on the coffin. The rubrics are separated from the main text by blanks in the columns on the left side of the head of Neferi's coffin (Fig. 4.12). The other sections on the coffin are inscribed continuously, including the rubrics within the main text. The same occurs in Ibi, whereas parallels in Pepy II and Neith (Jéquier 1936, pl. iv, 289–303; Jéquier 1933, pl. xii, 305–28) keep the rubrics apart. The rubric highlighted in col. *4 occurs after the same text in both versions, whereas the rubric in col. *11 is not included at the end of the text corresponding to col. *11 in Ibi but at the end of spell on Neferi col. *10.

Ibi/F/N II 4–10
(Jéquier 1935, pl. iii)



Hypothetical original of Neferi
(Allen 1977, 6, fig. 3)

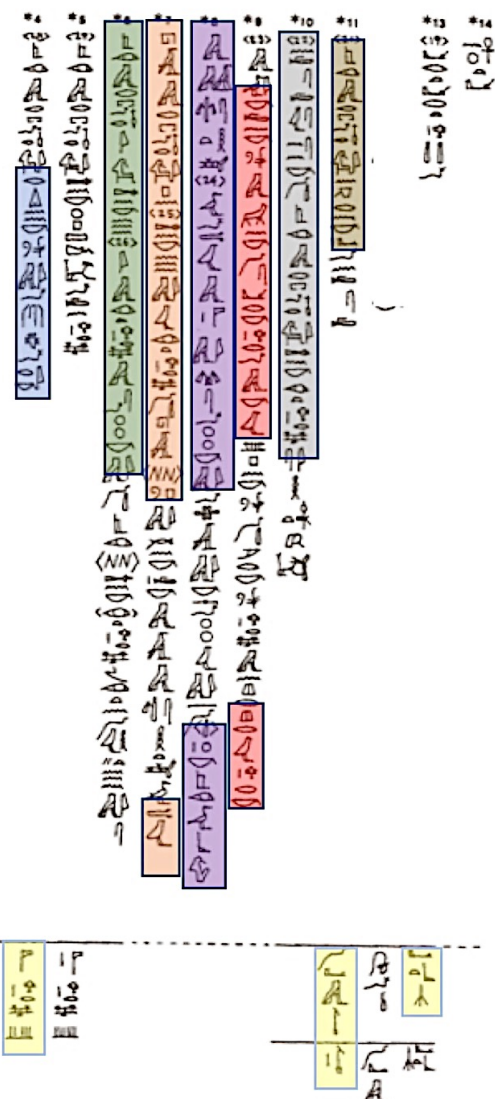


Fig. 4.11. Comparison of the text in Ibi and on the hypothetical model of Neferi. Highlighted passages are similar in the two versions.

It is possible to assume that comparable retrograde models were used for both Ibi and Neferi, but with different copying processes. In Ibi, the retrograde would have been copied following the order of reading, that is, from left to right, but adapted to a prograde text facing left. This transcription from retrograde into prograde might have been rather straightforward, since the same direction of reading and copying would have been involved; the only adaptation that would have been required would have been to turn the signs so that they faced left, a process that should not produce mistakes. However, in the coffin of Neferi, the copyist opted for a copy of the text following the direction of writing

instead of the direction of reading. The model was thus copied backwards, that is, from right to left, on the coffin.

This posited order of copying on the coffin also accounts for the different layout of the text between the foot and the head of the coffin. At the foot, the texts fill the depth of the columns, whereas there are blank spaces at the head in the left-hand columns (Fig. 4.12). The latter corresponds to the beginning of the text, so that it would have been the last part to be copied in this process of reversal. It seems that the copyist realised that he needed to spread the text out so as to fill up the remaining columns at the head.

According to Allen's reconstruction of the retrograde model (1976, 6, fig. 3–4, *1 to *30), there were 30 uneven columns before more regular full-length columns. The display of the text follows the layout of the manuscript only in the left section of the head of the coffin (Fig. 4.12). Although the copyist retained the manuscript layout on one section of the coffin, the amount of text in cols *6–*8 (Fig. 4.11) would not fit within single columns on the coffin. The last words of those columns had to be inscribed on the top of the following one, and the backward direction of copying garbled the text.

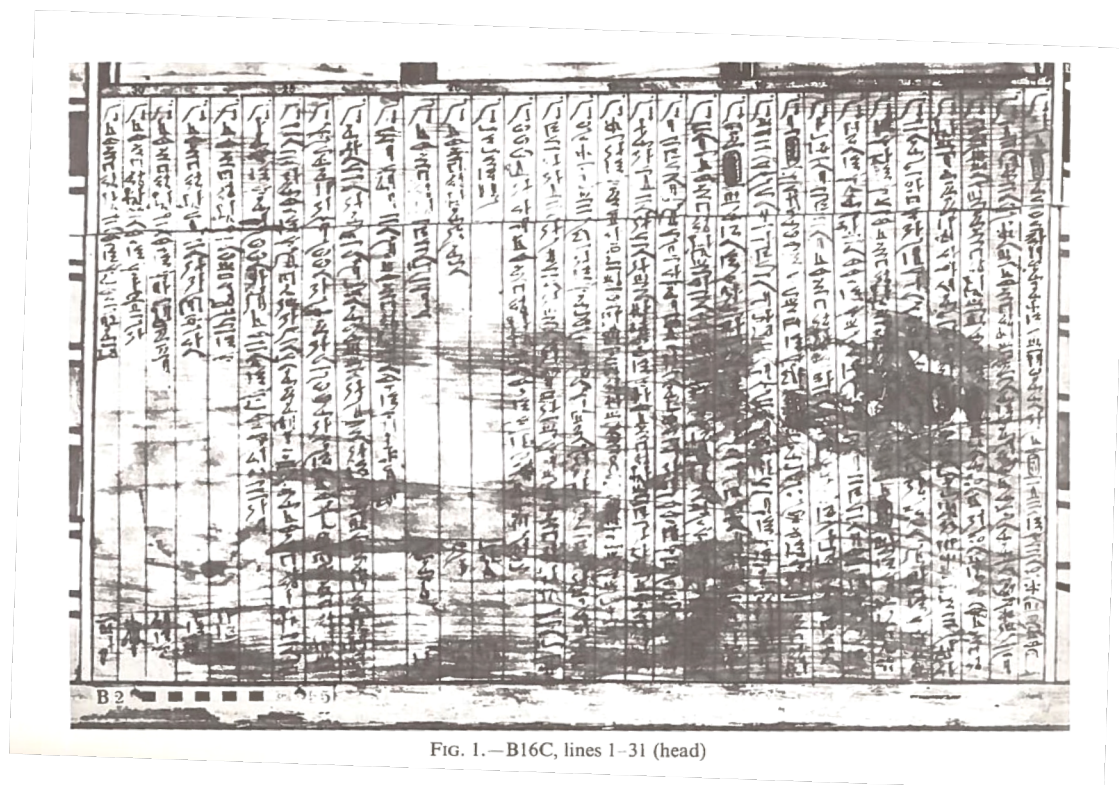


Fig. 4.12. Head of the coffin of Neferi (Allen 1976, 2, fig. 1).

Allen suggests (1976, 4) that the copyist was confused by the direction of the writing and copied the model backwards and that 'contrary to the usual practice, the scribe

also began his copy on the foot of the coffin; the same procedure is evident on the end of the inner coffin, B17C, but with the texts copied in proper order' (1976, 5). In addition, the fact that the copyist started inscribing the coffin in an unusual order could be linked to other factors that could have required him to depart from the usual procedure. For instance, several copyists and artists might have been working on other sections of the coffin. Such a hypothesis has been supported by Maya Müller (1986, 161, fig. 4) for the decoration of the tomb of Ramses VI, where she has identified evidence for four people working at the same time. In order to coordinate team work, constraints of space might have obliged a copyist to start a section at a different point from a reader.

According to Florence Mauric-Barberio (2003, 187), copyists preferred to copy a text from right to left, because this was their normal practice in writing. Even when its content ran from left to right (that is, was retrograde), it seems that they would prefer to start from the right and thus to work backward towards the beginning of the text. Scribes could indeed have been familiar with the practice of *reading* retrograde but less familiar with *writing* in that way (Sadek 1985, 317). This method of copying would not be problematic if the copyist respected the exact arrangement of the model; if, however, he happened to have more space at the bottom of a column and added text from the top of the next one, he would garble the text. According to Mauric-Barberio, this order of copying was common, but it can only be detected in examples where there are diagnostic mistakes, such as occur on the walls of Amenhotep II's tomb (*Ibid.* 2003, 177).

In the royal funerary texts in the Valley of the Kings, texts were related to the pictorial elements of the Amduat, which has different constraints relating to the direction of composition. There, the text was meant to be copied so that it would be read in retrograde on the wall. However, the process of copying garbled a retrograde that was meant to be inscribed in retrograde, because of the executant's preference for inscribing on the wall from right to left. A similar process occurs in Amduat papyri, also resulting from the copyist's preference for starting to write from the right, that is, from the end of the roll. Barbara Lüscher (1998, 92–4, pl. 2) has noted comparable instances in several New Kingdom Book of the Dead papyri, where columns of text are displayed together with vignettes, and the direction of writing changes accordingly. She remarks that some columns were copied in the wrong order. For instance, one section of the papyrus of Tjenna has a garbled text. Lüscher argues that in each case the scribe was probably copying from a model written in retrograde, disregarded their intended order of reading from left to right, and instead copied from the right. It would be inappropriate to consider such scribes as illiterate;

rather, he was presumably copying in a slightly mechanical manner. The other texts in this papyrus are correct, even those which needed to be adapted to a different direction of writing. The scribe was therefore familiar with the process, but his execution of it slipped at a few points.

In the case of Ibi, evidence on the easternmost part of the north wall also hints at the efforts required from copyists in adapting a text facing right into a left-facing inscribed form, and some inconsistencies in the orientation of the signs are visible. The prograde texts on Ibi/F/Ne run from left to right following the convention on north walls. However, sixteen individual signs or groups of signs face the other way (Fig. 4.13; Jéquier 1935, pl. vii–viii, cols 261–312). The most noticeable mistake is the signs , which occur in the opposite direction in col. 367. The individual signs include *m*'  in cols 272 and 310, *šw*  in col. 287, *rwḏ*  and *ds*  in col. 363, *tm*  twice in col. 397, and *m^cndt*  in col. 368. The deviation is even more noticeable with groups of signs such as the following: *stp*  in col. 267, *js*  in col. 268, *hṭp*  in col. 295, *snḏ*  in col. 303, *shkr*  in col. 304, *tj*  in col. 306, *shm*  in col. 308, and *sm*'  in col. 311. In some cases, groups are copied without modifying their order of reading, as in the examples like the *stp* just noted:  rather than *, or *hṭp*  instead of  etc. In other cases, the aim to correct the order of reading was met by placing the signs the other way around, but without turning them individually, for instance, *shm*  instead of  or *tj*  instead of .

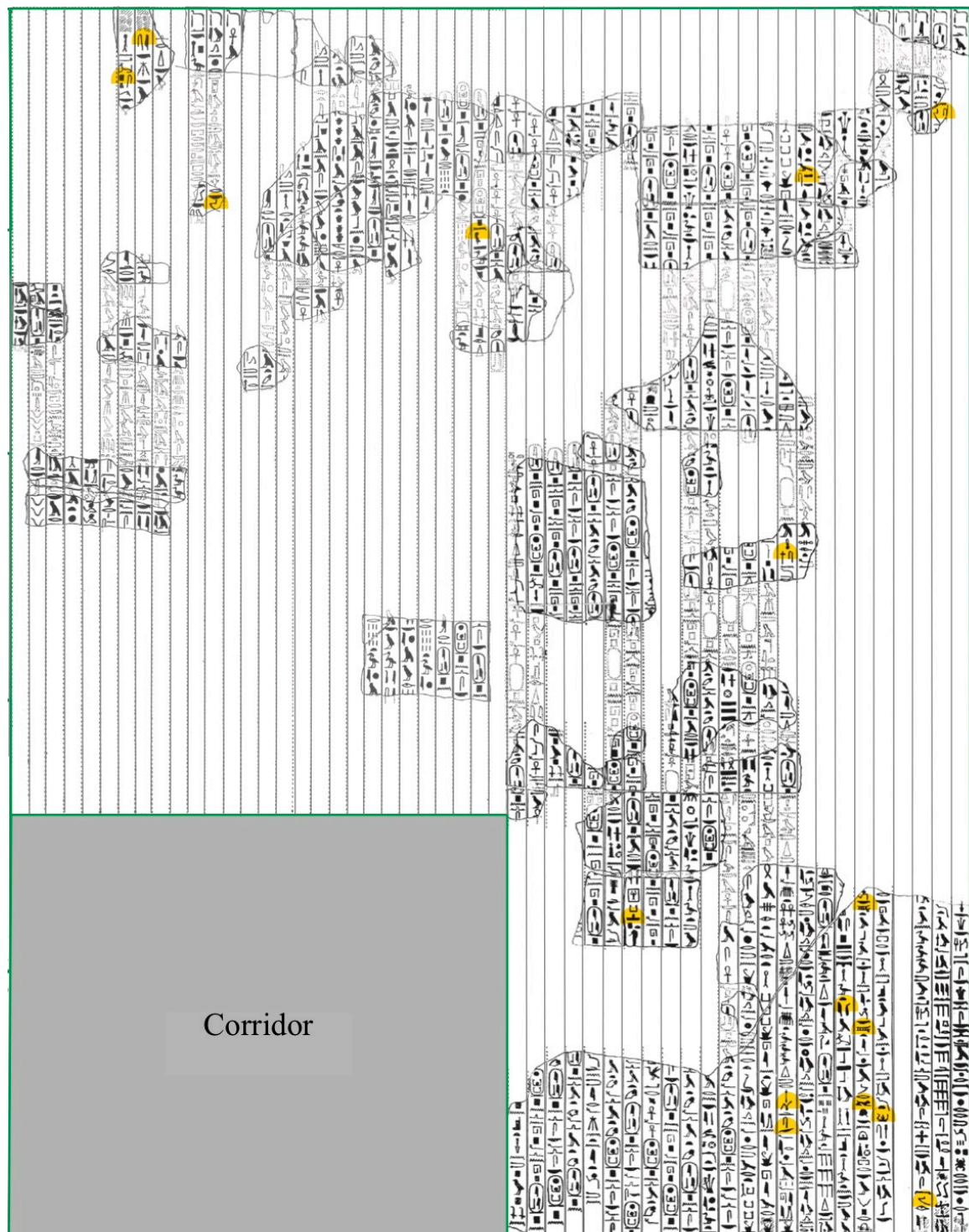


Fig. 4.13. Signs facing the wrong way in Ibi/F/Ne (highlighted in yellow).

Similar mistakes of direction were also observed by Jean Leclant (1975, 142–2, col. 4; 17) in the passage between the burial chamber and the antechamber of the pyramid of Pepy I. Among the signs facing the wrong direction, he noted several , , and .

mistakes on the north wall of Ibi are thus not isolated, but are also found in earlier pyramids. This might suggest a similar process to the one identified in the pyramid of Ibi.

FROM RETROGRADE TO PROGRADE

The analysis of *PT* 1002, 374, and 357 above shows that the garbling of the clauses was caused by copying a retrograde original in reverse order. For these different case studies, three hypotheses of the process of copying can be considered:

1. The text was copied from a retrograde model directly onto the wall;
2. The text was copied from a model that was produced so as to have the text ready to inscribe on the wall;
3. The text was taken from a retrograde original and compiled to an intermediate model (see also chapter 4), which was then adapted on the wall.

In Hypothesis 1, the copyist inscribed the texts on the wall directly from a retrograde model. This process would require significant adaptation from the model to the wall during the copying process, with the text being modified from retrograde to prograde. The prograde would face left on the north and west walls and right on the south and east walls. In the former case, the process seems more straightforward, since the direction of reading is the same (rightwards): hence, only the signs would need to be turned around. This can be related to the inconsistent direction of the signs on the north wall. In the latter case, the task would be more complex, since the copyist would have to read the text for copying from left to right and inscribe it directly from right to left. In both cases, the text would also need to be adapted to the depth of the registers.

Wedjebteni's garbled texts on the south wall show evidence against this hypothesis. There, the aim seems to have been to inscribe spell *PT* 217 followed by *PT* 553, as shown in Fig. 4.10. However, during the process, the copyist started writing in the opposite direction of reading and garbled some columns before resuming in the correct direction. The result, in which columns were copied in three phases, each time in a different order (rightwards, leftwards, and rightwards) seems likely to have resulted from a more mechanical process of copying between similar media—papyrus or the like—rather than between an archival model and the wall. In the latter case, the process of transcribing the texts from a model onto the wall would be slower, involving the transcription of signs in a neater cursive style and at a bigger scale, including the mutilation of signs (see Chapter 5). This would be a less mechanical process and would require a certain amount of reflection.

By contrast, the physical movements required for the copy from similar media such as papyri would be rather steady and limited to the eyes and hands. The movement of the eyes through the text running rightwards and the one of the hand writing leftwards could easily lead to such mistakes. A regular or rapid writing pace could also induce a mechanical movement that could lessen the copyist's attention (cf. Parkinson 2009, 90–112). The example noted by Gardiner on a coffin (mentioned above) could also suggest that the copyist would not notice the mistake, so that it would not be corrected.

Second, the text in Wedjeteni is inscribed on a section of the south wall that is a single register. The texts run from top to bottom, covering approximately three meters in height. In order to inscribe the texts, the copyist would have to move physically from the top of the wall to the bottom, probably using a ladder or scaffolding. This would involve a longer time span and more pauses, where the copyist would have to stop, look again at the wall and the model, notably before resuming at the top of the following column and at other junctures. Audran Labrousse (1996, 127–8) noticed another procedure in the corridor of the pyramid of Merenre and the vestibule of the pyramid of Pepy I. Instead of sketching out the text first in red ink then in black, as in Pepy I (Labrousse 1996, n. 6) and in Ibi, traces in Merenre show the opposite. Labrousse identified traces hinting at the following process: first, a copyist would inscribe a few neat signs in black ink at the base of the wall (between two and six), then another copyist would fill the entire columns with a quick sketch in red ink, covering the black signs at the bottom of the wall. This would give the copyist a sense of the arrangement of the text in a register, before starting to inscribe each column in full. In both cases, whether the copyist would write one column after the other or would sketch signs at the bottom of columns first, there would be more opportunities to look at the model and the wall and to notice mistakes than in a copy between similar media such as a papyrus. The procedure itself between copying a text from an original to a model and inscribing from a model onto a wall is different: a mechanical movement seems more likely to happen in the former case.

Third, the duplicated texts involve a considerable loss of space. Cols 234 to 244 of Wedjeteni's south wall correspond to a garbled version of the original's section consisting in *PT* 217, 153a – *PT* 553, 1353. This amounts to ten columns three meters high. The sketches on the wall would probably have taken into account some estimation of the amount of text that was needed to cover the wall. If such a mistake occurred directly on the wall, it would surely have been noticed and would have impacted on the original intended programme.

This evidence suggests that such mistakes would more likely have happened when copying between similar media and not directly on the wall. The intermediate model would be used inside the pyramid and copied onto the wall. The texts on the model would not be checked again during their transposition onto the wall, but rather would be copied as found. The normal procedure found in Ibi for carving texts in pyramids supports this argument: traces of sketches of the texts in red and black paint are still visible around the carved signs (verified *in situ* in October 2015) and I have not yet noticed any corrections. The presence of traces in more than one colour presumably documents successive stages of work before carving and suggest that the drafted inscriptions might have been checked against a model before being carved. Since no attempt seems to have been made to correct the miscopied sections, the mistakes might have occurred on the model itself.

If one considers that many people would have been involved in the project, mostly each with a specific task, it is conceivable that the garbled texts would not be noticed. The copyist whose role was to establish the layout of the texts on the wall would need to have several tasks in mind: organising the layout of the register, transcribing the cursive text into hieroglyphs, and arranging the grouping of signs in columns. The task of carving the text onto the wall is likely to have been undertaken by a different person. Indeed, different skills would have been required, and the carver might not have verified the content of the text. A comparable division of labour is noticeable in the texts in the pyramid of Neith, where the person in charge of filling the hieroglyphs with paint often interpreted the carved signs wrongly; moreover, in some cases these had also been misunderstood in the first sketch, so that errors had occurred at two stages of the work (Jéquier 1933, 18).

In light of these arguments, I suggest that an intermediate stage was required between a retrograde manuscript and its inscription on the walls. This leads to hypothesis 2, which proposes the existence of a model that corresponded to the intended layout on the wall. A possible counter-argument is that a model corresponding exactly to the three-meter-high wall section of Wedjebteni is unlikely. Moreover, a prepared model might have required to be adapted to the height of the registers on the walls once this was known. The sketching-out of the texts as mentioned by Labrousse (1996, 127) fits with a process that took place *in situ*. He also noticed red marks at the bottom of every ten columns on the corridor and suggested that these might have helped to arrange the text, proposing that a corresponding similar mark might also have been indicated on the model used to copy the texts. Finally, the signs facing the wrong way on the north wall of the pyramid of Ibi suggest that a model that was exactly adapted to the wall was not available.

Thus, hypothesis 3 is the most convincing one. It implies that a retrograde manuscript would have been copied on an intermediary medium before being inscribed onto the wall. The miscopying analysed in this chapter suggests that the transcription of a retrograde into a prograde text would have been the first stage. The intermediate model would be directly transferred and adapted onto the walls in red ink in the required orientation. The sketched-out text would be checked against the model and then redrafted in black ink. This would explain why no corrections of the garbled passages of text occur. Another argument in favour of this hypothesis is that models are likely to have been written in cursive script, as indicated by confusions between similar signs (Hays 2012, 114 with n. 469 for further references); in addition, cursive is consistently written facing right, whether the text is retrograde or prograde.

Evidence of different writings of the cartouches of Ibi on the south wall and on two unpublished fragments also supports the use of an intermediate model in cursive script. The writing of the cartouche (*ibi*) with the calf  occurs only once in the higher register of the south wall (Jéquier 1935, pl. ix, col. 328). This section is barely incised and is likely to have been left at its first carving state and never finished properly. This writing of the name of the king is only paralleled in the Turin kinglist (Gardiner 1959, pl. ii; Ryholt 2000, 99), and could therefore suggest a papyrus original. Two other instances show the second cartouche of Ibi (*k3-k3-r*) with an unusual spacing between its two lower signs (Ibi-61 and Ibi-266; unpublished). This spacing would make sense if the drafted cartouche included a full standing man, as in the Abydos King List  (Mariette, Abydos 1869, pl. 43, 53). The mistake might have been noticed too late, perhaps after the ellipse of the cartouche had been carved; hence the difficulty in adjusting the spacing. These examples suggest that the intermediate model used in the pyramid would have been written in cursive script and that further adjustments had to be made during the transcription on the wall.

The evidence of P T2147 from the mortuary temple of Pepy I can perhaps be related to such a process. The papyrus (Fig. 4.14) was discovered in a small sealed room (Berger el-Naggar 2004, 89–90, figs. 1–2; see also Baines 2007, 56–7). It consists of two separate sheets pasted together back to back (Berger el-Naggar 2004, 86). It shows on face A spell 217 inscribed in prograde from right to left, while on face B is spell 690 in retrograde. The date of the manuscripts is uncertain, and they were discovered as part of a late Middle Kingdom archive (Parkinson 2009, 148, n. 25). The two sides, consisting of half-height sheets, are apparently not of the same date. Nevertheless, their co-occurrence gives an

insight into the possible layout of mortuary literature on papyri or other materials that were used as sources.

Morales (2016b, 177, n. 45) argues that the two papyri would have adhered to each other accidentally, whereas Berger el-Naggar suggests that they were glued together to consolidate the oldest text. In view of the way the papyri are bound to each other, glued upside down one to the other, I believe that Berger el-Naggar's hypothesis is more convincing. However, I don't think that the face B, the later one, would have been used as a support for the other; discarding a papyrus of such quality seems less likely. Face A, with its hurried cursive style and its layout as a prograde copy of *PT* 217, could suggest that it had been used as a draft, perhaps even an intermediary model to inscribe the spell in a pyramid. The text is written continuously with a similar amount of signs in a column to a register on a wall. The absence of a title also fits with this hypothesis. The hurried writing indicates a fast pace, a circumstance under which some miscopying—such as is found in pyramids—is easily conceivable.

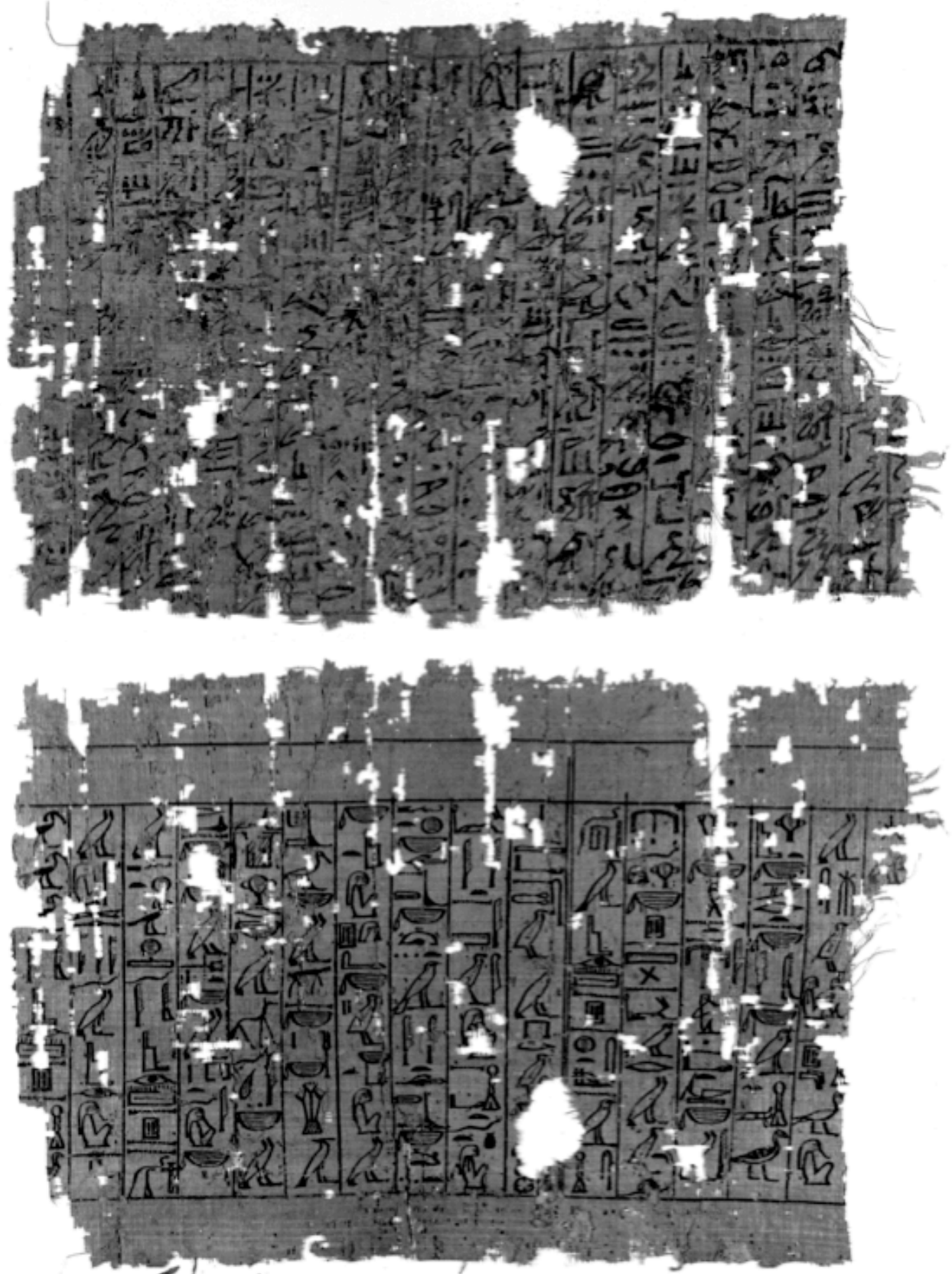


Fig. 4.14. Papyrus T 2147, face A (above) and face B (below).
Berger el-Naggar 2004, 89–90, figs. 1–2.

Face B, with its careful and neat signs and short columns, could be compared with papyri used by the priest during rituals in the funerary complex. According to Morales (2016b, 177, n. 45), ‘the verso of the papyrus shows the use of the non-explicit reference *Wsir mn pn*, and therefore betrays the operative nature—as an aide-mémoire—of the document’. The style can be compared with P. Ramesseum E (Gardiner 1955; London EA10753,2)⁵⁶, which contains a ritual to be performed while circulating around a mastaba. The number of signs per columns is slightly lower than the recto of P T2147, but a similar use can be suggested. Posener-Kriéger (1976, 17–8), in her analysis of the archives of Abusir, identified a ritual of circulating around the pyramid which was undertaken twice daily. Among the personnel involved in the ritual, one was responsible for taking the papyrus from the officiant, putting it back in a specific box, and sealing it. The confirmation that the seal had been applied to the box is mentioned in the archive. This evidence of the importance of the papyrus in the ritual perhaps also suggests its value as a copy for reference. The absence of a specific name is related to its use in different parts of the complex and through several generations. If it was used daily, it would have been likely to need consolidating at some point. Thus, P T2147 might be a draft or an intermediary model of limited purpose that could have been used later to consolidate another Middle Kingdom papyrus.

CONCLUSION

Mistakes that have been reviewed in this chapter result from the process of copying and do not necessarily imply incompetence on the part of the editor/copyist of the texts. I have suggested that the garbled texts on the south wall result from the mechanical process of copying a significant number of columns from an original in retrograde into prograde. At least three stages of one copying process have been proposed. The text would be copied from a manuscript in retrograde onto a media written prograde with signs facing right, before being adapted to the walls. Copyists might have copied a manuscript quickly, as Parkinson (2009, 92) has demonstrated in his analysis of the copying process in the 12th Dynasty papyri of *Sinuhe* and *The Eloquent Peasant*. The rapid writing identified in those texts ‘can correlate not only with ignorance (...) but also with professional expertise’. The

⁵⁶http://www.britishmuseum.org/research/collection_online/collection_object_details.aspx?objectId=111345&partId=1. Accessed June 12, 2018.

many corrections found in those copies prove that their copyists were highly competent while also documenting the intense focus required for the task. Many issues had to be taken into account while reading and writing, including refilling the pen, avoiding rough areas of the papyrus, arranging the texts in neat columns, thinking about the metrics of the text.

There is evidence for their having some knowledge of the content of the models they used and an awareness of how they were laid out. For instance, in *PT 357*, the copyist was able to establish correctly where the spell began before moving to a reversed copying process. According to the reconstruction in Fig. 4.9, the beginning of the spells occurs in col. 1 with 583a *h3 Wsir Ibi* (Fig. 4.9, col. 1) and was written in retrograde. The beginning of the spells was thus not at the beginning of the right-hand side of the original but had to be identified among the texts. He was further able to copy a retrograde text before beginning the part where the order is reversed. Implications of the fact that the copyist stopped after writing a few words of the following spell, *PT 356* (Fig. 4.8, col. 15), are uncertain, but the error might have been due to the layout of the spells on his model. Nevertheless, the treatment suggests that *PT 356* was written next to *PT 357* on the original but that it was not meant to be copied, since *PT 475* follows on the wall. This might imply that copyist intended to copy only *PT 357* and continue with *PT 475*. The possibility that *PT 356* came after *PT 357* in the original presupposes either that the copyist identified *PT 475* in another part of the same source or that it was in a different source. If the copyist was able to identify a spell among others, this suggests that he was not copying an archetype unthinkingly, but selecting and combining spells thoroughly, while the copying could become mechanical at times.

The large amount of texts inscribed on the walls of the pyramid of Ibi would have necessitated a vast amount of copying. If the verso of P T2147 is an example of an intermediate model used to inscribe texts in pyramids, its hurried style would document the rapidity with which manuscripts would be copied. In such circumstances, confusion in the direction of writing or omissions of words and other mistakes would be understandable. Haste could also account for misreadings while transcribing the content into hieroglyphs. Mistakes could have also been linked to the limited amount of time allowed for the construction of the pyramid. Visible traces of corrections have been noticed in several pyramids. In Wenis, the earliest of them, corrections point towards several stages of careful reading and collation on the walls (Mathieu 1996, 293; 289–311); the texts were apparently checked and reworked if necessary. In the pyramid of Pepy I, the recarving of major sections, as well as the alteration of the cartouche Nefersahor to Meryre, suggest that the

inscription of his pyramid started at an early stage, and his long reign seem to have allowed significant modifications to be made to three quarters of the textual programme (Pierre-Croisiau 1994, 312).

Such careful checking and reworking might not have been possible within the short reign of Ibi, which is given four years in the Turin kinglist two years, one month, and one day (Gardiner 1959, pl. II; Ryholt 2000, 91). The lack of corrections might relate not only to shortage of time but also to different scribal practices. Garbled texts in the royal tombs of the New Kingdom show that similar results were overlooked there too and that the texts were not always necessarily read and corrected after inscription (Mauric-Barberio 2003, 177; Hornung 1971, 32–7). Nonetheless, the reconstructions of the garbled sections in the chapter ‘copying processes’ show that the copyists had access to manuscripts that were not corrupt and that the mistakes were introduced during the copying process. I also suggest that the copyists are likely to have had as much expertise as their forebears, but that the copying process may have become mechanical at times, leading to errors such as copying a retrograde text as prograde for a few columns.

The mutilation of hieroglyphs

The forms of signs and the orthography of spells in all pyramids are unusual and characteristic of the context of the tomb. Pierre Lacau (1913) was the first to approach the altering of the writing in mortuary texts diachronically and comparatively. He analysed how in some mortuary texts hieroglyphic signs depicting certain living beings were suppressed, replaced by another sign, inscribed in two parts, or truncated. His study on the Pyramid Texts included the texts of Wenis, Teti, Pepy I, Merenre, and parts of Pepy II; the texts in the pyramids of queens those of and Ibi were only discovered later. Further studies, such as those of Nathalie Beaux (2004) and Racheli Shalomi-Hen (2000 and 2006), investigate the evolution of divine determinatives⁵⁷ throughout the Old Kingdom and Middle Kingdom. Additional studies by Isabelle Pierre-Croisau (1994 and 1997) focus on truncated signs in the texts of the pyramid of Pepy I. Finally, Ann Macy Roth (forthcoming) reassesses the hypotheses that have been proposed for the reasoning underlying the changes. She takes into account non-royal burials and highlights regional influences on this practice.

All these studies consider the rationale behind the orthographic changes in relation to posited developments in beliefs during and beyond the Old Kingdom. They compare the ways in which words are inscribed in successive pyramids and argue that the system for modifying signs became increasingly complex: from avoiding anthropomorphic signs in Wenis to gradually applying modifications to more categories of signs until the time of

⁵⁷ I prefer the term ‘determinative’ rather than ‘classifier’, because evidence discussed in this chapter suggests that modifications of signs in Pyramid Texts results from other mechanisms than an evolving system of knowledge categorisation. For a discussion about both terms see Angela McDonald (2004, 235–44) versus Frank Kammerzell (2015, 1–64).

Pepy II and his queens. The characteristic features of Ibi's signs, however, do not fit with this development. Racheli Shalomi-Hen argues (2006, 150) that the divergent aspects of the writing in his texts are indicative of the transition from the Pyramid Texts to the Coffin Texts. I describe this approach as horizontal, that is, it assumes a linear transmission of the writing in pyramids and does not take into account the fact that once the texts were inscribed in the burial chamber and the pyramid sealed, they would be inaccessible. It does not consider the process of altering the text from the model to the wall inscriptions and overlooks inconsistencies.

In this chapter, I reconsider the discussions on writing modifications in pyramids. First, I summarise the changes occurring in the pyramids as presented by Lacau (1913). I further include the pyramids of the queens, which he did not consider. Second, I investigate the texts of Ibi selectively, using as my sample a section of the south wall (Ibi/F/S V 1–25); I include words with anthropomorphic determinative in a synoptic table (Table 1). This table gives a general overview of the writing in each pyramid, providing a basis for further analysis of the modifications from a comparative perspective. Third, I examine the contexts in which these modifications are found and discuss the significance of the orthographic modifications in the tomb. Finally, I propose a 'vertical' approach, supplementing the horizontal approach, to account for the modifications in the writing. The vertical approach considers the link between an intermediate model and the texts inscribed on the walls, whereas the horizontal approach does not take this process of transmission into consideration but compares the texts of one pyramid directly to another. The aim of this chapter is thus to emphasise the context and process of modifying the writing inscribed in pyramids in order to account for aspects of its restriction and propose an alternative to the previously proposed explanations. It further aims to assess to what extent the orthography in the texts of Ibi is characteristic of the period in which they were produced.

FEATURES OF THE WRITING IN THE PYRAMIDS OF THE OLD KINGDOM

A modification in standard writings is first evident in the pyramid of Wenis, which features an almost complete absence of signs depicting the human figure, truncated hieroglyphs that are not attested in earlier inscriptions, and a prevalence of phonetic writings. These departures from standard orthography render reading more difficult, since many determinatives, which are a fundamental element in the writing system, are omitted. It seems that the absence of determinatives was found problematic in antiquity, since those

drafting the texts opted in several cases for a full phonetic writing. For instance, *špsw* ‘nobleman’ (Lacau 1913, 6) is written , a full phonetic writing that compensates for the lack of a determinative. The absence of determinatives in certain words leads to unusual writings such as  for *rmt* ‘men, mankind’ (PT 246, 246d), which lacks the normal seated man and woman  and adds the phonetic element  to produce a purely consonantal form. Where hieroglyphs are truncated, a sign representing a human being is reduced to the arm if it holds an object or down to the legs; the head never occurs in the texts of Wenis (Lacau 1913, 27). For instance, *hr*, ‘to fall’, is written  instead of . However, these usages were not developed systematically, and a variety of forms is present in later pyramids.

In the pyramid of Teti, there is a wider use of anthropomorphic signs than in Wenis, but in an extreme mutilated form (cf. Lacau 1913, 28). There, the avoidance of determinatives is more widespread, with animal signs also substituted by phonetic writings (Lacau 1913, 40–1). In the pyramid of Pepy I, Pierre-Croisiau (1994) has identified two stages of carving of the texts, which she labels ‘GM’ (grand module) and ‘PM’ (petit module), the latter designating the resizing of the column width at a smaller scale. The first carving stage is similar to that in the first pyramids in two respects: the wider columns, and the orthography, in which phonetic writing is prevalent and human signs are truncated up to the arms (Lacau 1913, 29). In the second stage, the process of truncating signs changes and is also applied to animal figures, which are halved by filling the rear part of their body with plaster (Pierre-Croisiau 1994, 311), leaving only the forequarters painted and visible. As far as human signs are concerned, the inscribed part is extended, and they are halved to show the most distinctive part (Lacau 1913, 26). For instance, the hieroglyph , which indicates an action linked to the mouth, includes only the upper part of the body , whereas *hms* ‘to sit’,  is written , since the lower part of the body is the relevant part (Lacau 1913, 32).

A similar treatment occurs in the pyramid of Merenre, except that animal signs are truncated by cutting the body into two parts, leaving a small space between the front and the rear. This pattern of development seems to indicate that orthography in pyramids was systematised progressively, yet changes did not all go in the same direction. Several further changes are found in the texts of Pepy II. For instance, the convention of suppressing animal determinatives in favour of complete phonetic writing of words is applied there and

could be seen as a move back to the rules in Teti's pyramid. Yet this convention is not present in his queens' pyramids, where animal signs are truncated or cut into two parts.

Queens Ankhesenpepy II and Behenu, whose pyramids are in the complex of Pepy I, display a limited number of human signs, while animal signs are usually truncated, up to the neck, such as  for  in *sm* 'wild bull' (Dobrev *et al.* 2000, 293, fig. 23, a–b; Berger el-Naggar and Fraisse 2008, 5). The three queens' pyramids in the complex of Pepy II exhibit some uniformity with Pepy II's texts, especially in their more frequent use of halved human signs as determinatives (Allen 1986, 1). However, the texts in Neith and Wedjebteni again have animal signs cut in two parts or truncated up to the head (Jéquier 1928, 6), in contrast with Pepy II's phonetic writing. On the few remaining fragments of Iput, human and animal signs are also truncated (Jéquier 1933, pl. xxxviii, frag. 8).

The modifications of the writing concerns animate signs. The representation of the whole body of humans, deities or of some mammals was considered inappropriate in the context of the tomb and was altered by different mechanisms. The form of a sign itself could be modified to different extent, reducing the figure up to the upper/lower part of the body or up to the arms of a sign. It could also be replaced by another sign considered as more suitable to the context, suppressed without being replaced or replaced by a phonetic writing.

FEATURES OF THE WRITING IN THE PYRAMID OF IBI

For this overview, I have selected a section of spells on the south wall of Ibi (Ibi/F/S/V 1–25 = chapter 4, Fig. 3.3), which has the advantage of being well preserved as well as being attested in earlier and later examples. I have selected words from this section of Ibi, including anthropomorphic signs, and present them in Table 1 together with the attestation of the same words in parallel versions. These include the Pyramid Texts of kings and queens, from Wenis to Ibi, as well as Pyramid Texts attested in the Middle Kingdom tombs of Senwosretankh (Hays 1937, pl. ix, cols 429–32) and Imhotep (Allen 2006); these spells are mostly lost in Pepy I. On the basis of the table in Fig. 5.2, I then analyse the anthropomorphic determinatives—non-divine and divine—occurring in Ibi and discuss them in comparison with the parallel versions. I then treat mammal signs in Ibi briefly by discussing various featured signs across all the walls. A quick glimpse at Fig. 5.2 shows that the version in Ibi consistently includes partial human figures, whereas they are mostly

absent from parallels. This analysis focuses on non-divine and divine determinatives. First, I present the orthography occurring in each entry. I then discuss the writing in Ibi.

In Fig. 5.2, the noun *p^ct* ‘nobleman’ is determined by the truncated seated man and woman  in Pepy II, Neith and Ibi; the other versions preserved are those of Wenis, Imhotep and Senwosretankh, which do not include any determinatives. Occurrences of *p^ct* in other spells indicate that it was usually written without determinatives in all pyramids. Exceptions include the determinative of the mineral plural  in Pepy I, and the truncated seated man and woman in Pepy II, Neith and Wedjebteni (*PT* 532, 1258a). One orthography does not exclude the other, since both occur in the pyramid of Pepy II. Thus, for this word the writing in the version of Ibi is not unique.

The following groups, *ꜥt* ‘to raise’ and *snq* ‘to suckle’, present anthropomorphic signs only in Ibi’s version; the determinatives are similar, although carved in more detail in the group *ꜥt* and facing against the direction of other signs (Fig. 5.1). It shows a truncated anthropomorphic sign holding a breast.

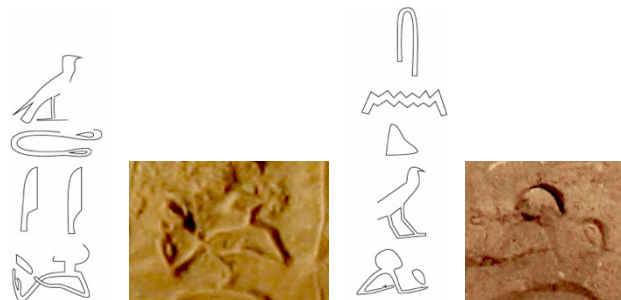


Fig. 5.1: Determinative of *ꜥt* (left) and *snq* (right) (drawings based on MafS photographs).

		W	T	N	Nt	An	J	L-JMH1	Sen
1 <i>PT</i> 268, 371a	<i>p^ct</i>								
2 <i>PT</i> 268, 371c	<i>3t</i>			∅					
3	<i>snq</i>								
4	<i>sqd</i>			∅		∅			
5 <i>PT</i> 268, 371c	<i>jst</i>		∅						
6	<i>nbt- hwt</i>		∅						
7 <i>PT</i> ^N 627B, 1778b	<i>jtm</i>	∅				∅		∅	∅
8 <i>PT</i> 268, 374a	<i>jhm.w- skj</i>								
9 <i>PT</i> 268, 374c	<i>jmy.w- 3ht</i>			∅		∅			
10	<i>jmj.w- qbhw</i>								

Fig. 5.2: Comparison of the use of anthropomorphic determinatives.

There is no determinative to ḥt in the versions of Wenis, Ankhesenpepy II, Imhotep, and Senwosretankh, while in Neith's version the bed sign ḥt is found (ḥt : *Wb.* I, 23). Lacau (1913, 14) understood the determinative of ḥt ḥt in Neith as a system to avoid the anthropomorphic sign. According to him (1913, 24), a determinative that is normally used with a phonetically similar word is used in some cases to avoid some categories of sign, such as the human-sign ḥt classifying hr 'to fall' substituted with the ox trussed for slaughter ḥt . He proposed that the rationale behind this substitution might be to retain the same root structure (see also Pierre 1997, 357–8). The occurrence of the bed determinative in Neith's version could thus be understood as a way of avoiding the human sign. However, Philippe Collombert (pers. comm.) has noticed several mistakes between the stages of carving and painting in the pyramid of Neith. Other factors might be related to this unusual sign, although the bed sign may relate to some extent to the idea of 'raising, nursing' (John Baines, pers. comm.).

The verb ḥt is not attested in other spells, so that it is not possible to establish a standard writing for the Pyramid Texts. However, it is likely to have been determined by ḥt , which is also the most commonly attested determinative in the Coffin Texts together with ḥt and ḥt (van der Molen 2000, 10 for ḥt). This determinative represents a seated woman offering her breast to a child held on her lap. The difficulty of truncating such a sign would have led to its being omitted in most versions and perhaps being substituted with another sign in Neith. In other examples, an attempt was made to truncate this sign, as in the verb mn^c (Fig. 5.3; only found in Pepy I), where just the upper body of the mother is represented and the child being is omitted; the sign in itself looks obscure out of context. Most occurrences of this verb in other spells omit the determinative (*Pyr.* 937e), replacing the determinative with a stroke (*Pyr.* 3431; 359a) or with a breast (*Pyr.* 1375a; 1704b).

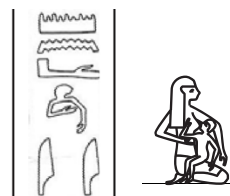


Fig. 5.3: *PT* 265, 352a (Pepy I); JSesh sign B5.

The word *snq* ‘to nurse’ is written consistently with a single breast  in Fig. 5.2, except in Ibi, which uses the same determinative as for the verb *ꜥt*. The sign of the breast as determinative is often elongated in other versions, to the point of having almost the shape of the sign  in the pyramid of Neith (unpublished MafS photographs). In other occurrences of this word, the determinative is omitted (*Pyr.* 252c, 381d, 1344b; *PT* *712, 10), the phonetic elements are followed only by a breast (*Pyr.* 252c, 371c, 531c, 623a-b, 729c, 911c, 1109a, 1354a, 1375b, 2003c), or the sign is reduced to the child’s mouth area or head suckling a breast:  in Teti and  in Pepy I.

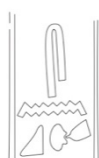


Fig. 5.4: *snq* in *PT* 412, 729 in Teti T/A-S/N 15 (facsimile kindly provided by E. Bène)

In the case of Ibi, the direction in which the determinative of *ꜥt* faces corresponds to the truncated form of . Unlike the sign in Pepy I (Fig. 5.3) the sign in Ibi uses an opposite approach, omitting the mother and truncating the child up to the head. This mutilation of the original sign also accounts for the orientation of the human figure against the direction of the other writing; the omission of the mother as the main sign of the group  meant that the child faces in the opposite direction. However, this explanation cannot account for the different orientation of the same determinative in *snq*, a few signs away (see chapter 3, Fig. 3.3, col. 5).

The orientation of the determinatives varies also in Teti and Pepy I. In three instances they follow the direction of the rest of the writing (*Pyr.* 623a-b: P; 911c: T; 2208b: P), and in two cases they face against the prevailing orientation (*Pyr.* 381d: P; 729c: T). It seems that the orientation of the mutilated sign posed some problem in relation to the generally expected orientation of signs. This unsettled orientation could derive from aesthetic considerations in adapting the new sign to the context, despite the fact that it loses its relation to the orientation of the original sign; it becomes normalised to the writing.

In Coffin Texts, occurrences of the verb *snq* show various determinatives: , ,  in *CT* 6d; ,  (van der Molen 2000, 514). The determinative differs from that for the verb *ꜥt*, where the signs are ,  and . This suggests that the two verbs are differentiated

for their meaning, with one emphasizing the action of suckling and the other the general role of mother. Such a distinction could also account for the different ways in which  is determined or truncated in the pyramids. If the anthropomorphic determinative of *snq* is not omitted, it always shows the child's head suckling a breast, whereas in the case of *ꜥt* or *mn*^c—both of which relate to the idea of raising and nursing—it shows a female human figure evoking the figure of the mother (the bearded male figure is likely to result from a confusion).

The last word with non-divine anthropomorphic signs in Fig. 5.2 is *sqd* 'to sail'. This is determined by different kind of ships with or without a tent and paddle. The human figure preceding the ship classifier is truncated at the arm in Wenis , replaced by a circle in Neith, halved in Ibi, replaced by a pot in Senwosretankh⁵⁸, and omitted in Imhotep. Wenis and Ibi, which provide the only attestations of an anthropomorphic sign with the word, show it truncated to different degrees. The sign in Ibi resembles the generic truncated seated man, but a break in the wall renders it unclear. Other attestations of paddlers in Ibi have a similar sign to the one in Wenis but show more of the human figure by adding the body and the head (Ibi/F/S I 29; III 75).

Fig. 5.2 (5 to 10) shows the names of the god *jtm* and goddesses *jst* and *nbt-ḥwt*, as well as the groups of divine entities *jhm.w-skj*, *šht-jꜥrw* and *jmy.w qbḥw*. Anthropomorphic signs are used only in Ibi, where all these words are determined by a truncated seated bearded male head , modified from . In Wenis, Imhotep, and Senwosretankh, the names *jst*, *nbt-ḥwt*, and *jtm* are not followed by a determinative; the sign of the falcon on standard  is used after *jtm* in Pepy II as well as after *jst* and *nbt-ḥwt* in Neith. In the Coffin Texts, most gods and goddesses are determined by an anthropomorphic determinative, but the falcon on standard , the generic seated woman , or no determinative are common variants (van der Molen 2000, 8: *jst*; 216: *nbt-ḥwt*; 728–34: *jtm*).

jhm.w-skj 'the imperishable stars', *jmy.w ꜥht* 'those in the Akhet', and *jmy.w qbḥw* 'those in the Cool Waters' are determined by three halved  signs in Ibi   , signifying that the words designate a group of beings related to the divine sphere. In the other versions, the plural is indicated only by the three stars in *jhm.w-skj*; the others are not followed by a determinative. The anthropomorphic determinatives might have been suppressed. This may be supported by the orthography in the Coffin Texts of *jhm.w-skj*, which can be determined

⁵⁸ In the Middle Kingdom, the pot replaces the circle in *kd* 'to build' (Gardiner, 530, 24).

that the changes in the orthography and occurrence of different determinatives ‘describes the system of Egyptian classifiers one of knowledge organisation, and aims to explain the various possible relations between words and their classifiers, and the rule-constrained system within which they operate, using tools of cognitive linguistics and ethnobiology’ (Shalomi-Hen 2006, 7). Thus, Shalomi-Hen also considers the use of determinatives from a diachronic perspective and analyses their occurrence in relation to an evolving system of categorisation of the world.

According to Shalomi-Hen (2006, 145), the modification of divine determinatives started in the pyramid of Teti, where the falcon-on-standard sign would have been used more extensively: ‘for the first time the king and his epithets, divine beings and their epithets, as well as members in other categories, receive the falcon on standard as their classifier. It is the first time that a complex structure of the category is formed through elaborate relations of chaining between members of the category.’ She then suggests that the development of the taxonomy of the divine would have slowly evolved towards the use of the seated bearded man as the standard determinative in the ‘post-Old Kingdom era’ (Shalomi-Hen 2006, 140). However, the studies of Beaux (2004) and Shalomi-Hen (2006) and have a tendency to overgeneralisation, as I argue below.

Roth⁵⁹ (forthcoming) reinvestigates the assumption of Lacau (1913) that the changes are related to an increasing fear of some signs. By looking at mutilation of signs in royal and non-royal tombs from a chronological and regional perspective, she argues that patterns seem to support the idea that beliefs relating to some categories of words and ideas in the context of the tomb were changing. ‘Their suppression may have been meant initially to prevent these determinatives from invading the realm of the gods and profaning the sacred texts’ and would have developed in royal and non-royal tombs independently according to a ‘cosmic view’ implying different requirements. For instance, signs challenging the order *M³c^t* would only be avoided in royal tombs, because it belonged to the duty of the king and not to the one of high officials. She therefore considers that the modification of writing in the context of tombs evolved together with a system of belief that would have originated and have been developed in the capital.

These interpretations of the modifications of the orthography, as being linked to ‘contemporary concerns’ (Lacau 1913, 49) or to innovations in the determinative system

⁵⁹ I am grateful to Ann Macy Roth for kindly providing me with her article before publication.

are limited. The posited development of fear of signs does not appear very plausible when one studies the inscriptions in detail; inconsistencies occur even within a single pyramid. For instance, the two modules ‘petit module’ and ‘grand module’ in the pyramid of Pepy I vary in their treatment dependent on the location of the text. ‘Petit module’ varies between the burial chamber—where anthropomorphic signs are limited to a minimum—and the descending corridor—where truncated human signs are prevalent. For instance, in the burial chamber’s ‘petit module’, *hms* is determined by a halved human sign (P/F/W 43), whereas *rmt* is not determined (P/F/W A 21). By contrast, the treatment of halved anthropomorphic hieroglyphs in the descending corridor shares features with the pyramids of Pepy II and his queens (Allen 1986, 1), and thus also with Ibi. Comparison of a spell occurring in Pepy I and Ibi (e.g. *PT* 587) shows that human signs are used similarly, except that the plural is indicated by the mineral sign in Pepy I as against the triple truncated human sign in Ibi.

Pierre-Croisiau (1994, 312) suggests that these differences are linked to the inscription of different areas of the burial apartments at different points. According to her, the texts in the descending corridor of Pepy I, which could have been the last to be inscribed, would thus show a different system of modification from that used in the burial chamber, which had been inscribed first. Once again, this proposed pattern of development seems to be incompatible with the texts of Ibi on several aspects. The prevalence of anthropomorphic signs could follow the same tendency that is found to a limited extent in texts of Pepy II and his queens. However, animals are not truncated at all in Ibi, whereas the proposed evolution would have introduced various techniques of avoidance and mutilation from Teti’s pyramid onward. Finally, signs such as the Seth animal and fish are strictly avoided in all pyramids, yet they occur in Ibi’s texts. These observations raise the questions of how the texts of Ibi fit into the proposed development and how far the horizontal approach can account for the modifications.

RECONTEXTUALIZING MODIFICATIONS IN WRITING

The context of the practice of modifying the writing needs to be reassessed in order to examine the assumptions based on a horizontal approach, which approach considers inscriptions without taking into account the processes that led to the modifications. Questions such as who did those modifications, how were they carried out or at what points were they made are not addressed.

The mutilation and suppression of hieroglyphs is attested in particular in the underground chambers of 5th and 6th dynasty pyramids. However, the practice is not confined spatially, temporarily, socially, or by gender: it also occurs in the pyramids of queens, in non-royal tombs, after the Old Kingdom, and outside the area of Saqqara. Its context, however, is always the same: the underground areas of the tomb. The earliest witnesses are both from the reign of Wenis: in his pyramid as well as in his vizier's Ihy tomb. The practice of avoiding human signs is common but not systematic in non-royal burials at Saqqara (Roth forthcoming).

According to Lacau (1913, 2) the unusual orthographies in the Pyramid Texts are linked to the liminal context of the burial chamber. This difference can be observed, for instance, between the writings of titles of Neith in her mortuary temple and those in her burial chamber. The human figure in *z3t smswt* 'eldest daughter' diverges in the two contexts: it is fully inscribed as  on the obelisk at the entrance of her mortuary complex (Jéquier 1933, 4, fig. 1), whereas the human form does not occur in the horizontal band around the sarcophagus (Jéquier 1933, pl. viii). This difference appears thus to relate to the context of the burial chamber and perhaps the proximity to the vulnerable body of the deceased (Lacau 1913, 2). Some signs representing living beings could have been thought to harm the deceased in the afterlife, and modifications to them could be 'an attempt to deprive the signs of magic motion' (Griffith 1898, 7).

Lacau (1913, 2) further stated that these treatments of the writing occur only 'dans les *textes funéraires*: nous entendons par là ceux qui sont destinés à l'usage personnel du mort et qui sont placés à côté de lui dans la chambre funéraire, sur les murs, sur le sarcophage, sur les objets d'offrande, etc.' However, few objects have been found inside the 5th and 6th Dynasty pyramids, and those that have been found rarely preserve signs that tend to be truncated or avoided in that context. The only artefact found in a Late Old Kingdom royal tomb and bearing Pyramid Texts consists of wooden fragments found in the burial chamber of queen Meritites II's pyramid in the complex of Pepy I (Leclant and Labrousse 2006, 108, fig. 4). Those fragments, which may have belonged to a box, bear parts of spells *PT* 359, 374, and 422 painted in cursive writing. Among the words preserved, only one written with the hare  (in column 7) may be relevant to addressing the modification of hieroglyphs. This sign is replaced in the verb *wn* by —perhaps a flower—partially in the texts of Pepy I (Lacau 1913, 37) and entirely replaced from Merenre onward (also Iput: Jéquier 1933, pl. xxxviii–ix, frags 8, 27). If the texts on Meritites II's wooden

fragments fit with tendencies in the modification of writings, they should be likely to be closer to the second conventions of Pepy I—Pierre-Croisiau’s ‘GM’—and to Pepy II, in view of her status of the oldest daughter of Pepy I and wife of Pepy II (Leclant and Labrousse 2006, 107).

The occurrence of the hare rather than the flower on the wooden fragment may suggest that the orthography was not modified on wooden furniture, or perhaps because the script is cursive: constraints on the use of animate signs may have been linked not only to the context but also to the hieroglyphic script. This possibility can be further supported by the texts inscribed in cursive script in the Middle Kingdom tomb of the high official Reherishfnahkt in the complex of Pepy I (Leclant and Labrousse 2006, 118; 119, fig. 14, col. 3; Berger el-Naggar and Labrousse 2005, 26–8). One fragment bears the spells *CT* 335 and *PT* 214–17. There, the dead human figure  is not avoided and occurs in cursive writing on the wall of the burial chamber. Except in three, perhaps inadvertent cases, this sign is omitted or truncated in all the pyramids (Lacau 1913, 19), including Ibi as well as Senwosretankh (this word is not attested in the tomb of Imhotep).

These examples suggest that Lacau’s definition of the media on which writing was modified needs to be narrowed. The context seems to be bound not only to the subterranean areas of the tomb but also to the script itself, since modified signs were not inscribed in cursive script on Meritites II’s wooden fragments or Reherishfnahkt’s walls. Additional examples, such as the texts in burial chambers of 6th Dynasty high officials in the Teti cemeteries also show the suppression of some specific signs. The texts inscribed in hieroglyphs in Mereruka’s burial chamber omit anthropomorphic signs whereas they occur in cursive script on his sarcophagus (Firth and Gunn 1926, I, 176). In both cases, the texts are painted; the only difference resides in the script. It can be ambiguous whether a passage of script is cursive or hieroglyphic, since different degrees of cursiveness can be found. As a comparison from another context, the two sides of P T2147 exhibit different degrees of cursiveness, because the signs on face B (cf. Chapter 4, Fig. 4.14) do not have a systematically joined shape (e.g. , Fig. 4.14, B, col. 2) and some signs are closer to line-drawing (e.g. , Fig. 4.14, B, col. 4). Thus, both the context and the non-cursive hieroglyphic script seem to be the prerequisites for modified writing.

ADDRESSING INCONSISTENCIES

This suggests that mutilation of hieroglyphs only occurs from the intermediate model to the wall. The transcription from intermediate model to the wall discussed in Chapter 4, which would have included the transcription from cursive to hieroglyphic script, might have been strongly affected by decisions of the person in charge. For instance, in the pyramid of Pepy I, a falcon on standard was carved over an Apis bull (Pierre-Croisiau 1994, 308; 314, Fig. 9), while a fully carved seated bearded man  was truncated into  after being carved by scratching away the lower part of the body. In these cases, the original signs were the ordinary bull sign and the deity, which were amended to fit the requirements of the tomb context. Lacau also noted (1913, 21) that the seated bearded figure as determinative is truncated in Pepy I, whereas Pepy II has a falcon on standard. He therefore argued that the intermediate model used by the copyist inside the pyramid would have been written with the anthropomorphic sign in the case of Pepy I, which would therefore have needed to be amended. Some inadvertent inclusions occur also in Teti, where only one full man is found at the top of the east wall of the antechamber (Bène and Mathieu 2015, 39) and in Wedjebteni, where two complete goddess signs  are present on a fragment (Jéquier 1928, pl. xi, frag. 62, cols 9, 13).

The writing of cartouches in Ibi is also likely to have been amended when being transcribed on the wall to avoid the calf sign and the standing figure. This modification seems to have been omitted a few times on the wall. There is one known example of the writing of Ibi's second cartouche in the form as found in the Turin kinglist:  (Jéquier 1935, pl. ix, col. 328; see Gardiner 1959, pl. ii; Ryholt 2000, 99). This suggests that the copyist transcribing the texts onto the wall omitted to alter the writing of the cartouche into  on one occasion. The location of this mistake in the upper registers of the south wall could account for its omission: the quality of the texts there, which are barely incised and not well balanced, may suggest that it was difficult to work on this section, so that the copyist's attention lapsed and he forgot to make the modification. This detail also suggests that the other cartouche of the king ($k^3-k^3-R^c$) had to be systematically modified by truncating the human signs. The first cartouche of Ibi in the Abydos King list is written  (Mariette 1869, pls 43, 53), with a full standing human figure. Inside the pyramid, the cartouche is altered to . Possible evidence for this truncating of the human figure in the cartouche is present in two unpublished fragments where the spacing between the

signs is unusual and would fit with an initial standing  hieroglyph (Ibi–61 and Ibi–266; see chapter 3).

These details bring out the human agency involved in modifying the writing, which can be further discussed with the example of *PT* 357, which is analysed in the previous chapter, where, I show that the inscription on the wall of the pyramid of Ibi derives from copying a manuscript section in two directions. One would expect the writing to be the same in the two cases because it was produced by copying the same intermediate model. However, the names of gods do not have the same determinatives: the truncated seated bearded man varies (Fig. 5.5).

	First copy	Second copy
<i>gb</i>	 col. 2	 col. 13 and 14
<i>wr pn</i>	 col. 2	 col. 14
<i>nbt-ḥwt</i>	 col. 3	 col. 14
<i>jst</i>	[...]	 col. 12
<i>wsir</i>	[...]	 col. 13
		 col. 9 and 14

Fig. 5.5: Comparison of the divine determinatives in both inscribed versions of *PT* 357.

The writing of the names *gb*, *wr*, *nbt-ḥwt*, *jst*, *wsir*, in the two versions of *PT* 357, labelled ‘first copy’ for cols 1 to 8 and ‘second copy’ for cols 8 to 15 in the pyramid of Ibi. The writing of *gb* is followed by the determinative in both cases. However, the writing of *wr pn* and *nbt-ḥwt* diverges between the two versions: once without determinative, then with determinative. The truncated male head might result from a confusion with the seated woman  instead of  as observed above with *ḥt* in the Coffin Texts. The other words cannot be compared since they are lost in the lacuna. Although not every instance is

preserved, it seems that the occurrence of the determinative is more systematic in the second version, where it follows the name of the god, except in one case (Isis col. 13), which could be linked to its inscription at the bottom of a column and a lack of space.

This passage shows that in the copy of a text supposedly deriving from the same original, the two versions are not identical. More broadly, it shows that the statement of Shalomi-Hen, that  is the standard determinative in Ibi, is not accurate: the divine can be determined by the falcon on standard, by the truncated seated bearded man , or not determined at all. Practice varies between the walls of the burial chamber: the truncated  occurs only on the south wall, within a section of which it can vary, as in *PT* 357. This evidence brings to the fore the cognitive processes of the copyist who adapted the signs, as well as supporting the assumption that the intermediate model bore no indication of how signs should be modified, and that the person using the manuscript had to take the decision.

Examples such as these demonstrate that the altering of signs could be undertaken while transcribing the texts from the manuscript onto the wall. They further suggest that manner of writing of the intermediate model was quite close to that of the original. It follows that divergences between versions in different pyramids might be linked to the process of remediating the text, so that more than one inscribed form could derive from a single archetype or from closely similar ones.

THE EDITING PROCESS

The texts inscribed in the pyramid of Ibi are likely to have been edited at various stages: some features would have been amended on the intermediate model, while others would have been treated on the wall. A vital change made between the two stages is the alteration of the pronoun from first person to the third. This modification is linked to ‘the modification of the original performance structure from interlocutive to delocutive, that is from the use of the active voice first-person pronoun for the ritualist or beneficiary—typical in the speech acts—to the addressee being a passive recipient in second or third person’ (Morales 2016b, 175 and n. 34). Hays noted (2012, 138; 144) that editing evidence in Pyramid Text spells can be identified through the grammatical inconsistencies that attest to their adaptation. According to him, twenty spells are in the first person, while more than seventy others show evidence of editing away from the first person. He notes (2012, 148–58) three types of evidence for editing away from the first-person pronoun: variation between the

first to the third person in a single spell or between versions (Hays's 'vacillation'); 'doubling', where the first person stands next to the third; 'residual' first-person verbal endings; 'disagreement' and 'extraposed noun', which designates, according to Hays, an unsyntactic placing of the noun in the sentence, suggesting that it replaces a pronoun in the source (Hays 'advanced noun').

Although many of these changes were undertaken during the process of editing the text from a source manuscript to an intermediate model, some omissions or mistakes were later corrected on the walls. For instance, several areas in Pepy I's pyramid show the modification of the texts from first to third suffix pronoun, with traces of  under , or from first person independent pronoun, with *jnk* visible under a cartouche written horizontally to fit the space (e.g. P/C med/W 52). By contrast, none of the texts in Ibi were edited away from the first-person pronoun (Ibi/F/E II: *PT* 473, 402, 403, 625B; Ibi/F/E III: *PT* 587; Ibi/F/E IV: *PT* 602). First-person endings are especially prevalent on Ibi's east wall and in some registers of the south wall. For instance, *PT* 587 (Jéquier 1935, cols 732–42) shows the truncated first-person suffix *.j*  altered from , as well as the independent pronoun *jnk*  instead of . The older versions in Pepy I and Pepy II use the third person or the cartouche at this point: Pepy II reads *wn.sn n hrw swt jr sn swt s^ch^c sn* 'they will open to Horus: he is the one who made them, he is the one who erected them', whereas Ibi (cols 735–6) reads *wn.sn n.j [jn]k jr sn jn[k s]^ch^c [sn]* 'they will open to me, I am the one who made them, I am the one who erected them'.

Thus, passages like these in Ibi were not edited away from the first person or altered on the wall. Several other elements fit with a minimum degree of editing from the original manuscript, notably the presence of hieroglyphs avoided from Teti onwards, such as the Seth animal . Seth's name is written with the Seth animal 32 times in Wenis, but is then being replaced by phonetic writings from Teti onwards (Beaux 2004, 55). Other animal signs were also particularly avoided: the hare  and the fish . The fish is already omitted in the texts of Wenis, being replaced by its phonetic writing, although no other animal signs are avoided. According to Roth (forthcoming), this omission is 'the most thorough and consistent throughout the Pyramid Texts' and is related to its impurity: 'seen as generally unclean, their suppression in royal burial chambers in particular may be related to the negative role assigned to the fish that ate Osiris's genitals, according to Plutarch's account of the myth'. However, in some cases these signs can be found on the wall, suggesting that these signs were constantly present in the intermediate model. The signs of

the hare and the fish, which are strictly avoided in the texts of Pepy II, nonetheless occur almost next to each other in the easternmost part of the north wall of the burial chamber (*PT* 223, 217b and *PT* 224, 218c), suggesting that the copyist might have been briefly distracted (Lacau 1913, 37). Similarly, in the texts of Wedjebteni, one instance of a fish remains (Jéquier 1928, pl. xii, frag. 84).

In light of these observations, the occurrence in Ibi of the truncated triple seated man  or seated god  can be correlated with this limited amount of modifications to the writing. A comparison of the occurrences of the *ḥtjw* ‘brewers’ in the Pyramid Texts (*PT* 407) shows that it is determined in different ways. In Teti it is determined by three falcon-on-standard signs, in Pepi I with one truncated man followed by three dots, and one of the two occurrences of the spell in Pepy II has only the three dots as determinative while the other has the three falcon-on-standard signs. In the texts of Ibi, the words are followed by three truncated seated men (Ibi/F/E I 64 = Jéquier 1935, pl. xiii, 645k). These variations can be understood as different strategies to adapt the writing to the context of the tomb. Teti’s falcon on standard can be understood as the most elaborate alteration: it indicates both the plural and a divine connection, whereas Pepy I’s mineral determinative as an alternative to the human sign only indicate plurality. In Ibi, the three truncated seated men might derive from a non-truncated writing of these three signs in the archetype or the intermediate model. The plural non-truncated seated man is widespread in non-royal inscriptions of the Old Kingdom. When the seated man occurs as classifier, its plural form will be a group of three determinatives (Edel 1955, 118, §274), such as  in the inscriptions of Weni (*Urk* I, 102, 5) or  in a hieratic letter, where it follows a soldier as a thematic determinative (Gunn 1925, 246, II). Examples are found in the 4th dynasty, and the usage might be even older (*Urk*. I, 4 = Zorn 2011, 49, fig. 32, cols 3, 4, 7; Brinkmann 2010, 200, fig. 160–1).

According to Lacau, what he termed ideograms would have existed at the time of the first inscribed Pyramid Texts, but would have been later suppressed as they were inscribed on the walls so as to avoid the human figure. This resulted in the creation of very unusual exclusively phonetic writings, such as the *rmṯ* noted above. Later, after the pyramids of Wenis and Teti, some new categories of determinatives would have been created, such as the truncated forms of the determinatives , , and  in Pepy II. Lacau considered these signs to be an innovation to the writing system (1913, 5 n. 3; 7 n. 5). According to him, the absence of such truncated signs in Wenis and Teti is not related to

the suppression of these signs but to the fact that they had not been devised by at that time. James P. Allen also states that Wenis' texts 'show no evidence of the exclusion or mutilation of signs evident in later pyramids' (2017, 4). This assumption is contradicted, for instance, by determinatives that occur in non-royal tombs as early as the reign of Snefru at the beginning of the 4th dynasty. For instance, the words 'Overseers of the deliveries', *jmj-r3 sjn.w* or 'Land owners' *nstjw* are both determined by three seated men  in the tomb of Metjen (e.g. *Urk.* I, 4 = Zorn 2011, 49, fig. 32, cols 3, 7). *smr.w*, 'Friends', is also determined by the generic  in a relief of the causeway in the royal mortuary complex of Sahure (Brinkmann 2010, 200, fig. 160–1).

These numerous and divergent approaches—removing the determinatives, replacing them with the falcon on standard, using a neutral indication of the plural (three dots ; plural ending *.tjw*  or *.w* ) , or truncating the seated-man sign—might thus be different strategies for avoiding anthropomorphic signs with various degrees of elaboration. Seen against this background, the texts in Ibi would have been transformed to a lesser extent, by a process that was limited to halving anthropomorphic signs, rather than substituting them by alternative signs or replacing them by a phonetic writing.

AN ALTERNATIVE INTERPRETATION

I have argued that the horizontal approach on the modification of the writing system has weaknesses because it compares the inscribed texts without considering the process of modification and the relation of the inscription to the intermediate model. Evidence supports one-to-one alterations and emphasises the importance of the role of the individual in charge of transcribing the texts onto the wall. Although Morales has stated (forthcoming) that the high frequency of determinatives in the pyramids of the queens 'reveals the dependence of the scribe on a fixed distinctive version rather than his interaction at modifying the texts during the process of inscription', much evidence points in an opposite direction. This assumption that texts were altered on the spot is also supported by Frank Kammerzell:

Almost one half (693 from a total of 1504) of the graphemes attested in the source of W, T, M, N have a frequency lower than three, and about one third of the whole collection, 495 graphemes, show up each in a single instance only! Hence it is utterly implausible that writers/readers of the Pyramid Texts had learned in advance an inventory of many hundreds of logograms and determinatives which was of so little practical use. (2015, 1411–12)

According to him, the truncated signs found in the pyramids are too divergent from each other to be part of a conventionalised system. An individual input into modifying the texts could also account for the variation in how the hieroglyph  was avoided. The nursing woman and child in Pepy I (Fig. 5.4) is not always altered in the same way. Some signs might have been more straightforward to modify than others: for instance, the seated man is usually halved , whereas  could be modified by removing the child or by removing the mother. This further suggests that the copyists worked creatively and would have tried different ways to modify a sign. Such an approach can be supported by treatment of the verb  *hr*, ‘to fall’ in the texts of Ibi, which is modified in different ways on the south and east wall by halving the upper  or the lower  part of the body (e.g. Ibi/F/S IV 20 vs Ibi/F/E 41). As Mark Smith notes (2017, 214), the texts in Neith were only partially adapted to the feminine pronoun. The demonstrative is never modified after the name of the queens—it is always ‘NN *pn/pw*’—but some pronouns are inconsistently adapted, where only the first and the last suffix pronouns were altered to the feminine pronoun *tn*. According to him, ‘an effort was made to convert masculine pronouns to the more appropriate feminine ones, but this was not carried through systematically’.

Although we do not know how many persons were working together or involved at each stage of the writing, one can speculate that guidelines would be established at the beginning of the process of transcription but that each copyist would use his initiative to modify the text, as is shown by the examples discussed above. Lacau pointed out (1913, 36–7) that the copyist drafting the texts on the walls must have adapted each sign carefully to suit the new context of the tomb and that different scribes might have undertaken the task differently depending on their personal ideas. Roth (forthcoming) takes up Lacau’s statement about ‘sculptors with different ideas’ to explain the variation in the 6th dynasty private tomb of the women Bebi. There, only one door jamb shows inscriptions with truncated anthropomorphic signs.

The vertical approach does not discard the horizontal one but supplements and reorients assumptions that result from it. The conclusion reached in chapter 3—that the texts were copied from a cursive intermediate model to the wall—implies that truncated hieroglyphs would not have occurred on this cursive model; they were thus generated each time on the spot. This further implies that the writing on the wall would not be preserved in any other context and could not be transmitted as such, because the burial chambers were immediately closed and inaccessible. A general knowledge of the systems and strategies

for modifying the writing might have been in circulation and have developed over time into a more or less complex system. However, it is likely that only the walls of pyramids would have borne the entire textual programme with its altered orthography (*contra* Morales, forthcoming, who argues for different ‘*Vorlagen*’). The vertical approach thus complements the horizontal one by emphasizing the cognitive role of the copyist transcribing the texts on the walls. It accounts for divergences, the non-linear development of aspects of the orthographic changes in pyramids, and the characteristics of the writing system of the pyramid of Ibi.

CONCLUSION

In this chapter, I have emphasised the relationship between the modification of the writing and the editing process of the transcription of the texts on the walls, which I term a ‘vertical approach’. I argue that the disjuncture between modifications of the writing in different parts of a pyramid or between pyramids relates to the materiality of the manuscript and to the amount of editing practised. The modifications of the writing were not solely based on a transmission of monolithic conceptions of how writing should be done in the context of the tomb. Any consideration that the varying determinatives in Pyramid Texts should be considered as evolving ‘classifiers’ (e.g. Beaux 2004, Shalomi-Hen 2006)—that is as a strict categorisation of the world at a particular time—is compromised by the process itself of inscribing the texts in pyramids.

According to this vertical view, divergences of writing within one pyramid, such as that of Pepy I, need not provide evidence for texts that were composed at different dates or show ideas of Pepy’s time about writing or orthography in tombs. Instead, these divergences might provide evidence for people’s involvement in editing the texts during the process of transcription on the walls. A more involved system of adapting the writing in the tomb context—where anthropomorphic signs and animal signs were altered to different extent—might have been particularly time-consuming. Although the people involved may have been very skilled, this process might have required an extensive knowledge of both cursive and hieroglyphic scripts as well as of the meaning of each word in order to propose a phonetic writing or an alternative determinative within this specialized corpus and context in a constant and systematic manner.

Investigation of the modifications of signs in Ibi has shown that the only one practised was the truncation of anthropomorphic signs. No other types of alterations were

undertaken and the animal signs remained unchanged. These features do not fit into the theory of an increasing fear of animate signs in pyramids or more recent adaptation of the writing. Shalomi-Hen's claim that occurrence of certain determinatives shows that the writing in Ibi is 'the "missing link" between the orthography of the Pyramid Texts in the earlier Old Kingdom, and the later Coffin Texts of the Middle Kingdom' (2006, 150) needs clarifications. Some aspects of the texts of Ibi are closer to Wenis (non-truncated animals), others to Pepy II (prevalence of halved anthropomorphic signs), and others are similar to Coffin Texts (notably determinatives of divine beings). I propose that these features are linked to the less elaborate system of alteration of the writing rather than showing that a more 'up-to-date' style of orthography was being used. For instance, the determinative of the seated man, occurs already earlier in letters or non-royal inscription as has been shown above. The reason for it being absent in older pyramids relates to different strategies used to avoid the anthropomorphic sign not of a different classification of the writing system.

The proximity of the orthography of the texts of Ibi to that of Coffin Texts spells would fit with the proposed limited amount of editing and altering that the spells underwent. The Coffin Texts are usually inscribed in a cursive script that does not require modifications in the tomb context. If little editing was undertaken in the transcription process, the inscribed texts, the intermediate model, and the writing in the original source text would be relatively close to one another. Little-edited texts such as those texts of Ibi or the Coffin Texts are thus likely to be more revealing of the character of the original manuscripts than is the case with earlier Pyramid Texts.

Synthesis

The investigation of the arrangement of the spells in the burial chamber of the pyramid of Ibi (chapter 2), of the compilation of the texts (chapter 3), of the copying (chapter 4), and of the editing (chapter 5) sheds light on aspects of the process of inscribing this pyramid, and by extension other pyramids. In this section, I consider the outcome of each chapter in relation to the ongoing discussion of the creation and transfer of the Pyramid Texts from the oral to the written, and from manuscripts to the walls of subterranean areas of pyramids. In synthesising the results of the chapter seeking to take the discussion further, some repetition of the content is inevitable.

INSCRIBING A PYRAMID: FROM MANUSCRIPT TO THE WALLS

The most comprehensive discussion so far about the transmission of Pyramid Texts is Baines's 'Modelling sources, processes, and locations of early mortuary texts' (2004). He relies on informed speculation to address the question of the background from which Pyramid Texts were drawn and their development on different media. Hays (2012; 2015) and Morales (2016a and b; 2017) have both particularly focused on two aspects of the Pyramid Texts's transmission: their *Sitz im Leben* in the context of various performances (Reintges 2011) and their transmission into written forms. The latter process has been referred to as a process of entextualisation, that is the transfer from oral to written, involving also other features related to the adaptation from the oral-compositional form to a literary form. Hays (2012; 2015) discusses the transfer from oral to written in two stages: the entextualisation and the monumentalisation, while Morales (2016, 97) considers the entextualisation and textualisation as the main phases, and the monumentalisation as a subcategory of the textualisation.

Ramadan B. Hussein (2017, 304) explores this process of transferring texts onto the walls of tomb on the basis of the passages of compositions inscribed on the ostraca that were used during the decoration of the New Kingdom Theban Tomb of Nakhtmin (TT87; see also Lüscher 2013). To discuss this process, he uses the term ‘remediation’ to refer ‘to the transference of textual and pictorial materials from one medium of transcription to another’. The layout of the text on the wall of the tomb of Nakhtmin reproduces many features of a manuscript. The title of the book *pṛt m t3 r m33 itn* is inscribed above a figure of Nakhtmin before the beginning of the text (Guksch 1995, pl. 14). The content of the texts is then displayed in a columnar layout and the whole text starts with a *dd-mdw* followed by the name of the spell in red ink. The relationship with the original manuscript is also thematised by the indication of parts of the texts lost in the manuscript with the word *gm wš* ‘found destroyed’ in red ink. The purpose of this display is perhaps to be understood in relation to the age of the papyrus, which might have been damaged by worms or other agents of decay. The indication of the gaps could emphasize the value of the ancient content and its precise transcription, and therefore act as a legitimisation and validation of the text’s authority.

Comparison of the texts that are written on the walls with the intermediate model on the ostraca does not show much alteration. The modifications consist of ‘minor rearrangement and orthographic variations in the form of split orthography, and sign conversion from hieratic to cursive hieroglyphs’ (Hussein 2017, 307). The script varies slightly, but is in cursive script in both settings. Following on Hussein’s discussion, Lucia Diaz-Iglesias points out that these elements of remediation show that the process was not ‘a mechanical one and did not consist purely of copying. Instead, in the course of this process, editorial changes were introduced by the copyist with a direct impact on the length, content, and written form’ (2018, 36).

The monumentalisation of the texts in the subterranean areas of pyramids was apparently much further removed from their original manuscript forms. The cursive text was transcribed into carved hieroglyphs, which required other alterations to the orthography. Features specific to manuscripts were removed: there was no title, paratextual markers, colophon, red ink, or indications of lacunas. One aim of my research contributes to further contextualize some aspects of the process of inscribing pyramids. The breakdown of the remediation process presented in Fig. 6.1 is intended to help to contextualise the changes and to present their implications for textual transmission. The investigation of the copying processes in Ibi in Chapter 4 has shown the use of an intermediate model in the

process of inscribing the texts inside the pyramid. Although it may seem obvious that this would be done, no material evidence supports this possibility, which is unsurprising given that such materials would have been removed from the pyramid before the burial. The contextualisation of the miscopying as occurring prior to the transcription of the texts onto the wall is therefore informative and significant. It suggests that an intermediate model was used for the pyramid and that the texts were not necessarily checked as they were inscribed—as was shown by the large miscopied sections in the pyramid of Wedjebteni. Procedures for correction certainly changed over time, and in different situations because some recarvings directly on the inscribed walls to correct the texts are visible in Wenis (Mathieu 1996, 293) and Pepy I (Pierre-Croisiau 1994, 312). The discussion of the mutilation of hieroglyphs in Chapter 5 has shown that the mutilation of hieroglyphs was undertaken on the spot. These features of the Pyramid Texts are tightly linked to the status of hieroglyphic script and the context of the tomb, and thus are unlikely to have been transmitted on any intermediate copy inscribed in cursive script. This accounts for the diversity of signs found in pyramids and for the non-linear development of the system of mutilation.

In Fig. 6.1, I indicate the characteristic changes involved in the different phases of remediation—entextualisation, followed by textualisation and monumentalisation—in consideration of their respective media:

1. entextualisation: the notation and possible alteration of oral material into a written form in a manuscript
2. textualisation: the editing a text from manuscript to an intermediate model
3. monumentalisation: the transcription and adaptation of the text to the stone walls.

According to Morales (2016b, 177), most of these processes would have been undertaken ‘in the temple repository, while minor modifications could have been executed on site.’ The texts would thus have been edited extensively from manuscripts, and changes could have been made at different stages of the threefold remediation. As shown in Chapter 4 on ‘Copying process’, some spells continued to be entextualized during the Old Kingdom. This entextualisation, as well as the preparation of the intermediate model, would have been done in a place where the textual programme could be selected and compiled from stored manuscripts, while other modifications would have been made on site. Further modifications and corrections could have followed after the inscriptions were laid out in

draft on the walls. These last stages, the monumentalisation, as described in Fig. 6.1, could be broken down by taking into account the different stages of sketching the text on the walls, carving, and painting, but fewer editorial changes would have occurred then, and these changes are not directly relevant to the discussion in this section.

In Fig. 6.1, the left column lists elements discussed in the previous chapters that were modified in the process of remediation, notably the material, the format, the reference to the deceased, the grammatical pronouns, the orientation of the writing, and the script. Each aspect is described further below. This three-phase presentation is inevitably reductive, because there might have been several phases of textualisation. This initial table in Fig. 6.1 makes it possible to contextualise features of the transmission process, and more research would develop and fill out this overview.

	entextualisation	MANUSCRIPT	textualisation	INTERMEDIATE MODELS	monumentalisation	STONE INSCRIPTION
1. Material		Papyrus, leather rolls		Papyrus		Stone walls
2. Format		Horizontal titles and paratextual markers		Removed		Removed
3. Reference to the deceased		Generic		Name		Name
4. Grammatical pronouns		1st and 2nd person pronoun		3rd person pronoun		3rd person pronoun/cartouche
5. Orientation of the writing		Retrograde		Prograde left-to-right		Prograde right-to-left or left-to-right
6. Script		Cursive		Cursive		Modified hieroglyphs

Fig. 6.1: Summary of the remediation process from manuscript to the walls of pyramids.

The ‘material’ is likely to have consisted in papyrus rolls, but could also have included leather manuscripts or writing boards (Baines 2004, 26). The intermediate model is likely to have been on a papyrus medium, because this would have been the most convenient material to be used and taken to the site. From the New Kingdom Theban Tomb of Nakhtmin come ostraca used as intermediate models for the transcription of the texts on the wall; but no such inscribed ostraca have been found in the pyramid complexes or on Old Kingdom sites in general (see Hussein 2017, 304–5). Limestone flake ostraca are a particular feature of the Theban necropolis that has few parallels elsewhere, but pottery ostraca are also possible. Nonetheless, there could have been other local habits of writing that happen not to have been found. The amount of text to be inscribed onto the walls would

have required a large supply of such writing materials, and papyrus roll seems the likeliest medium to have been used for this purpose (so also Morales 2016, 76). The final stage would have been the crystallisation of the texts on the stone walls, where they would have been sketched in paint before being reviewed, corrected, carved, and painted.

The written format would have differed significantly between the three phases, all of which had their own different requirements of display linked to their function. The entextualisation of spells would have involved their recording in a format suitable for performance. The layout of the source manuscript would probably have included a horizontal band indicating the title and the use of columnar retrograde cursive writing, paratextual information, such as the indication of the speakers following *dd-mdw*, postscripts (*Nachschriften*) or colophons, and generic references to the deceased. These references could either have the form *nsw*, intended for a generic king, or *mn (pn)* intended for a non-royal individual. The script is likely to have been a relatively neat cursive perhaps partly in order to facilitate its use during performances. The mention in the archives of Abusir of a papyrus used for the performance of the ritual of circulating around the pyramid twice daily (Posener-Kriéger 1976, 17–18), suggests that papyri would have been employed in less frequently performed rituals in the mortuary complex, such as the opening of the mouth of the statues (for the use of papyrus see Hays 2009b and Meyer-Dietrich 2010). Texts would also have been stored as master-copies that should have been clearly written, probably in a cursive form, in order to ease the process of transmission.

In the textualisation phase, that is, the creation of the textual programme of a pyramid, the format would have been transformed from stored manuscripts to an intermediate model. As has been argued in Chapter 4, analysis of miscopied sections highlights aspects of the copying process where the orientation of writing had been changed. This supports the hypothesis that religious manuscripts were inscribed in retrograde before the Middle Kingdom (for Old Kingdom textual evidence see Posener-Kriéger 1973 and Collombert 2011): as argued in Chapter 4, the process would have included copying from retrograde manuscript to prograde texts. The prograde on the intermediate model might have been written consistently in the same orientation, from right to left, and would have been adapted directly inside the tomb according to the wall on which was inscribed.

This process of remediation from the manuscript to the intermediate copy would also have been the phase of the removal of ‘introductory titles as well as postscripts that specified how texts should be performed and declared how effective they were’ (Baines

2007, 150). Although some paratextual information are likely to have been omitted during the copying, such as the remaining postscript in *PT* 456 (see Baines 2004, 31 and Hays 2012, 3), it was indeed ‘during the Middle Kingdom that the practice of including paratextual information with the monumental copies was introduced’ (Hays 2012, 3 with further reference to Sethe 1931, 531). It would also have involved the change of the grammatical pronouns from first to third person. Hays (2012, 136–75) studied those editorial alterations and recognised that many spells offer evidence for modifications prior to the carving. Thus, by this process the initial function of the manuscript from which the texts were copied would be lost and transformed. Although modifications of the cartouches could occur on the spot, other types of change would also have needed to be made between source manuscripts and an intermediate model.

The corrections of the cartouche in Wenis above a carved and slightly erased *nsw*, can be understood in two ways: either the copyist omitted to replace *nsw* when copying from manuscript to intermediate model (and this was noticed once the text had been carved), or the copyist had been meant to change the intermediate model during inscription by adding the name of the king on the wall, and he could have overlooked this requirement once. The instance of the cartouche of Ibi that was not transcribed in the appropriate form (that is by omitting the hieroglyph of the calf that was used elsewhere in the burial chamber) might result from the same process as that which has just been suggested for Wenis.

The name of the king is likely to have been added during the textualisation phase, because the presence of the name could affect the length of the texts. Practices of textualisation might have also changed over time: if Papyrus T 2147 happened to be an intermediate model, then the addition of the name of the king would have had to be done on the wall itself, because that text has a generic reference for the king as *mn pn*. Overall, the inscripational practice for cartouches is not systematic in the subterranean areas of pyramids. The cartouches can give only the throne name or can alternate between the birth name and throne name. In the pyramids of Wenis and Teti, only the throne name occurs, while both occur in the pyramids of kings Pepy I, Merenre, Pepy II, and Ibi. The two names could be displayed one after the other or could alternate from one clause to another. In Merenre and Pepy II, both names are juxtaposed consistently, displaying Nemtiemsaf Merenre and Pepy Neferkare. The case of Pepy I is a little more complex, because the carving and recarving there was done in several stages. The cartouche names in Pepy I have been modified successively and they vary between the walls, with some wall sections having been entirely recarved. According to Gundacker (2016, 238), the modifications of

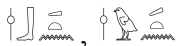
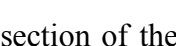
the name from Nefersahor to Meryre in the pyramid of Pepy I could relate to ideological and political motivations connected with the harem conspiracy, known from the biography of Weni.

It is possible that following the phase of textualisation, texts would have been copied once more in order to have a clean manuscript from which the version on the wall would be inscribed. The editorial work required to produce the textual programme, including the labour of copying out a significant number of texts, is perhaps unlikely to have been done in neat cursive writing. It is more likely that such a draft would then be adapted again to a less cursive form, which would be closer to the form of script to inscribe on the wall and thus a more suitable format for use in the tomb. This could have been undertaken in some sort of a workshop. If this was what was done, my suggestion in Chapter 4 that Papyrus T 2147 could resemble an intermediate copy has to be clarified. I assume that the copying involved in the production of the textual programme of a pyramid would have been somewhat demanding, because many elements had to be taken into account while copying: orientation of writing from retrograde to prograde right-to-left, addition of the name of the king, alteration of the grammatical pronouns, and removal of titles and paratextual markers. I argue further that the miscopying derives from the mechanical copying during this process and not directly from the process carried out in the tomb. At this earlier stage of drafting, a more rapid style of writing is to be expected.

This hypothetical papyrus roll recording the textual programme in rapid writing is likely to have been reworked into a more appropriate format for use inside the tomb. This stage might have involved transposition into neat cursive signs, as well as possibly the use of numerous individual sheets of papyrus or other material. This interim format could perhaps have included indications of the location of the text in the subterranean chamber. The increasing use of multiple registers on the walls might be linked to strategies to simplify and accelerate the transcription process. The number of signs in a column of a manuscript is approximately the same in a register in the pyramids. As shown in Chapter 4, differences between the texts on the walls and the hypothetical originals are relatively small. Thus, the transposition of the texts from the hypothetical papyrus to wall would have been eased in several ways. First, the assessment of how much text could be transposed on a register of the wall would have been easier than if it were for drafting it onto the entire area of a wall. The traces of paint at the bottom of every tenth column that are visible in some areas of the pyramid of Merenre (Pierre-Croisiau pers. comm.) could hint at such a process. Second, the physical process of drafting the texts would have been more

manageable with this envisaged process. The scaffold or similar support could have been altered once the whole register was written, involving either adding or subtracting a level; inscribing a text on the three meters high surface of the wall would have been more complex and time consuming.

The style of writing between the manuscript, the intermediate model, and a possible working model would have changed each time: from neat cursive writing, through a rapidly copied draft, and back to a neat cursive. This process could account for the mistakes that are often assumed to derive from hieratic signs: the retranscription from the intermediate model to the working model could plausibly have been the stage where such mistakes occurred most easily. The context of a workshop, where draughtsmen would copy the texts into a form suitable for a blueprint, could account for mistakes, since those people would be less familiar with the content of such texts than the more specialised person who compiled them.

Evidence of the different writing of the cartouches in Wedjebteni and Ibi might provide traces of the second intermediate model process, when the text would be adapted to the cursive writing for its inscription in the burial chamber. J. P. Allen (1986, 9) has noticed variations in the writing of the cartouche of Wedjebteni only on the miscopied section of the south wall. The cartouche occurs in the following writings: , , and , whereas all the occurrences of the name of the queen in the section of the burial chamber are systematically written  (e.g. Jéquier 1928, 21, fig. 26; 22, fig. 28). The difference between the first two writings of her name is likely to result from confusion between the hieratic forms of  and . The third writing, which occurs only once (Jéquier 1935, xxvi, col. 218), needs to be verified *in situ*, because the placing of a  before the name is strange. The order  could also be due to a mistake in transposing the name from retrograde to prograde, as with some mistakes in the north wall of Ibi. It is surprising that a copyist would make such a mistake in the name of the queen, but the context of the garbling and the possible confusion of signs could indicate that it is simply due to a loss of concentration at this point.

In the phase of monumentalisation, the format would be adapted from the intermediate model to the walls of the subterranean chambers. Next to the monumentalisation itself, which involved enlarging the signs to the scale of the wall, the transfer would require modifications of the direction of writing and the script. The script, which would have been cursive to varying degrees on the manuscript and intermediate

model, was to be transcribed onto the wall and to be turned into full hieroglyphs. The process of transcription itself would have taken the form of first sketching the text in cursive hieroglyphs, as is visible in some sections of Pepy I. The transformation to carved hieroglyphs would have required alterations that do not occur in the parallel case of the New Kingdom tomb of Nakhtmin, because the script remained cursive in that case. The change to hieroglyphs required the symbolic neutralisation of some signs by avoidance or mutilation, something that was not required for cursive signs. Such modifications to the writing vary between the pyramids, but they usually include different degrees of alteration of the orthography, from ‘mutilation’ of signs to phonetic writings. These changes would be quite demanding, since many signs would need it, even in cartouches. In Ibi, both of the king’s cartouches are modified. The cartouche ($k^3-k^3-R^c$) is carved with a truncated man  instead of the full standing sign, which is the form that is given in the Abydos kinglist (Mariette 1869, pls 43, 53). The praenomen (*Ibi*) is written consonantally, avoiding the calf  which is present in the hieratic Turin kingslist (Gardiner 1959, pl. II; Ryholt 2000, 91). It is surprising that the animal was modified, since animals are usually not truncated or avoided in the rest of the texts of Ibi.

THE TEXTUAL PROGRAMME IN THE PYRAMID OF IBI

The textual programme in the pyramid of Ibi implies the use of different sources in its compilation and provides hints for the development of practices in the compilation of material at the end of the Old Kingdom. The sources would derive from the transmission of manuscripts used to prepare the inscriptions in older pyramids and more recently composed texts. Access by the designer or designers of the textual programme of Ibi to archives containing the texts used in previous pyramids is supported by the presence of a large amount of material that is the same as earlier Pyramid Texts, such as parts of spells *PT* 407, 268, and the beginning of *PT* 625B (Chapter 3), as well as larger sections, such as *PT* 213–22 and *PT* 245–6 (Ibi/F/Ne B). The presence of a text that is only paralleled in Neith (Chapter 3, case study 1) suggests that the designer(s) of the textual programme had access to the textual sources used for that pyramid, and this hypothesis is supported by confusions of signs and the mistaken addition of phonetic complements that are found in both pyramids, also suggesting derivation from the same transmitted manuscript (Chapter 3, note 5).

I have argued that the text that is only paralleled in Neith could be a recent entextualisation, because of its formulaic content that points towards an oral-compositional form. The spell of the ferryman, *PT* 475, could be an example of an entextualisation or a new composition during the period of Ibi, or at least very late in the Old Kingdom. Ibi's version of this spell diverges from those found in earlier pyramids in structure and its content, as well as with the mention of the god Aqen, who is unattested in earlier texts (Bickel 2004, 95; and Chapter 5). It also diverges from versions in the Coffin Texts. According to Susanne Bickel (2004, 112), the compositions of the Coffin Texts, *CT* 396–404 (Bickel 2004, 91, and 117, fig. 2), and that of Ibi are unlikely to derive from each other, but they might have been produced at around the same time.

As has been shown in the different chapters of this thesis, the process of designing the textual programme of Ibi was not one of simple reproduction but was complex and multi-layered, exemplifying Scalif's opinion that:

studies of transmission of Egyptian funerary literature have often revealed the characteristics of scribal copying more than composition, and the dynamic has led to discussions of “productive” versus “reproductive” traditions. However, such a dichotomy obscures the complexity involved in the production of such texts: interpreting sources, compiling exemplars, linguistic updating, restoring, interpreting, and supplementing. To understand the “copying” process as mechanistic “reproduction” removes the agency of the actors who actually made the choices by which these objects came into existence. Furthermore, this focus almost exclusively privileges written transmission. (2017, 211)

The textualisation of the Pyramid Texts of Ibi seems to incorporate different practices of reproduction and production, as well as the use of a wide range of written sources. The selection of specific texts and the exclusion of others can be supported through analysis of the miscopied section (Chapter 5), which showed that a few words of *PT* 356 were copied inadvertently during the copying of *PT* 357, but that the copyist intended to add *PT* 475 after *PT* 357. This finding suggests that the copyist was selecting spells from among numerous possibilities and was not simply copying out a whole papyrus in order to fill up the walls of Ibi's burial chamber. Some texts were reproduced as they stood, an example being the one that shares the mistakes of Neith (mentioned above). Other spells, however, display different types of rearrangement, as discussed in Chapter 3. There, I argue that Ibi/F/S 1–25 (case study 2) was composed by using texts transmitted from pyramids of kings together with a new version of spell *PT*^N627B. The combination of *PT*^N627B with ‘Unnumbered’, which can actually be seen as a different version of *PT*^N627B, implies that both versions were available to the designer(s): the version transmitted from older kingly sources, and a version that might have been a new composition. The spells were thus not

only copied as found, but were shortened and grouped in a sequence that, while not showing any relation with previous sequences of texts, is thematically coherent.

The practice of remodelling transmitted sequences of spells is also supported by the second register of the east wall, as discussed in Chapter 2. There, I argue that the sequence of spells in Ibi/F/E II was reduced in a meaningful way, by abbreviating it so that the thematic flow was not interrupted. The underlying reason for reducing sequences does not seem to be related to a lack of space, because other spells were added, so that there was not necessarily a gain in space. It seems more to be compositional in character, or perhaps to result from negotiation between both space and content. It is thus debatable how much can be considered as a reduction or as the remodelling of a composition. This process, which has no known parallel, seems to show a deliberate and creative process of producing texts and of merging them in new ways, perhaps as a way to deal with the significant bulk of material that had transmitted over time while taking account of new entextualisations.

Another feature of this section is the absence of spell dividers, which is also characteristic of the texts inscribed on the south wall. I argue that the removal of *dd-mdw* can be linked to this remodelling of textual material into new compositions. This remodelling of sequences in ways that diverge from those in kings' pyramids can already be observed in the texts of the pyramid of queen Behenu, where it is done in a more conventional way. There, the texts on the east wall of the burial chamber seem to be arranged in a new sequence that is thematically coherent to the point of indicating a 'narrative progression' (Berger-el Naggar and Fraisse 2015, 47), but the spells are inscribed in full and remain distinct units within *hwt*-frames, although they also form part of a larger composition. The section in Ibi/F/S 1–25 (Chapter 3, case study 2) exhibits the same process, but it goes one step further by removing spell dividers, shortening spells, and adapting their syntax so as to link one spell to another. This practice is further exemplified in the Coffin Texts especially in those of Djehutnakht, where the absence of spell dividers and the merging of different spells in a new composition can also be observed.

Although the composition of the textual programme shows that there was a process of selecting spells and compiling them in new ways, the editing and copying were not always thorough. Sections were miscopied during the textualisation (Chapter 4), most probably because of occasional inadvertence of the copyist. The garbled texts hint at the demanding requirements of copying retrograde sources into prograde, which could easily have led to the garbling of some columns. The sources manuscripts need not have been corrupted. It is perhaps because of the mechanical transposition between directions of

writing that many parts of the texts were not systematically edited, and the copyist left the original first-person pronoun instead of altering it to the third-person pronoun (Chapter 5).

Finally, the transcription of the texts onto the walls shows that some relatively limited editing was done at this stage, altering only anthropomorphic signs. In other pyramids, the complexity of the alteration varies from transcription into a full phonetic writing to various degrees of mutilation of signs, including those representing anthropomorphic figures and other animate beings, as well as the complete suppression of some signs. The less extensive altering of the signs in Ibi provides evidence for a high degree of coherence in the transcription process: a single system of mutilation is used, which suggests that it was done in a unitary and well-planned process.

The arrangement of the texts on the walls can be compared with that in older pyramids to various extents. As discussed in Chapter 2, about half of the chamber consists of more traditional spells as found in other pyramids with clear demarcation between spells, while the other half displays a more creative approach to mortuary literature, merging and selecting texts to create unique compositions. The texts on Ibi/F/Ne A and B correspond to those in the burial chamber of Wenis. They are easily identifiable, and the spells are clearly demarcated by dividers within the texts and at the top of columns. On Ibi/F/S, spells are not demarcated from one another, while sequences barely resemble those in earlier pyramids. The tripartite division of the north wall of Ibi, with the presence of the texts usually inscribed on the south wall, may have been made in order to free up space on the south wall. This arrangement is comparable to that of the north wall of the pyramid of Wedjebteni.

Allen (2015, 302) and Mathieu (2015, 75) have argued that this displacement of the texts was a strategy to include more material in the burial chamber of the pyramid of Neith and Ankhesenpepy II, and this intention could also account for this layout in Ibi. A different but comparable strategy together with the inclusion of new texts is visible in the arrangement in Teti, where newly added texts occupy distinct sections of the walls (Bène and Mathieu 2015, 39). The general tendency to increase the number of texts and to revise existing ones, is significant, leading from Wenis's 229 spells to Pepy II's 633 (Hays 2009, 59). The layout of pyramids of queens, in which the amount of space for inscription was reduced, but not necessarily a reduced corpus of source texts, since new spells occur as well (e.g. Ankhesenpepy II; see Mathieu 2015, 71, Fig. 1). This change shows that the textual programmes of pyramids developed continuously throughout their use in the Old Kingdom. The textual programme of Ibi is no exception to those tendencies; what has

seemed to scholars to be unusual may rather be indicative of the continuous development of scribal practice.

The pyramid of Ibi exhibits all the principal elements of the Memphite tradition of inscribing pyramids as it evolved over time. The systematic arrangement of the texts in relation to the architecture that is found in the pyramid of Wenis (Allen 1994) is likely to have been less strict in later pyramids. Changes in practice in decorating the internal walls of the pyramids might perhaps be linked to the development and transmission of the textual material and to different uses of ritual manuscripts. Different levels of involvement and care in editing and copying, as well as the new arrangement of texts in registers and the simplified conventions for mutilating signs, could all be strategies for completing the pyramid in a limited amount of time.

Nonetheless, it is noteworthy that some of the characteristic spells in the textual programme of Ibi were selected for inscription in the tombs of highly literate people who had a passion for texts. The same version of *PT* 475 of the pyramid of Ibi (Ibi/F/S IV 3–19) was transmitted to the Heliopolitan tomb of the high priest Radjaa and the later Theban tomb of the lector-priest Petamenemope, around the 25th–26th Dynasty (Bickel 2004, 97), while a different version was transmitted on coffins in the Memphite area (*CT* 397). The direct transmission of texts that are first attested in Ibi and perhaps composed for Ibi (Ibi/F/Nw II: Chapter 4) is also attested not much later in the selection of texts of the 9th Dynasty Herakleopolitan king Wahkare Khety which was later used to inscribe the 12th Dynasty coffin of Neferi. The relatively short gap in time between Ibi and Wahkare shows how dynamically selections of texts would be varied and then transmitted to later users. The selection and copying of some texts for Radjaa and Petamenemope may hint that some compositions found in the textual programme of Ibi were particularly valued.

A holistic approach to Pyramid Texts and their sources can highlight the complexity of ancient textual practices and help to contextualise aspects of such practices within a multilayered process, across different social settings and media. The building of a pyramid and its internal decoration were subject to various constraints, as in any project, where negotiation between different factors, such as human involvement, time, and considerations ranging from the theological to the pragmatic, has fundamental impacts on the final result. Although texts such as the ones inscribed in pyramids might have been inscribed on different media now lost, it is possible that the decontextualisation from recorded rituals to their adaptation to the subterranean chambers of pyramids would have had an impact on their transmission and development as literary genre. There would be a reciprocal influence

between the transmission of texts in manuscript collections and inscription on the wall, and Ibi provides important evidence in relation to this complex process.

References

- Allen, J. P. 1976. 'The funerary texts of king Wahkare Akhtoy on a Middle Kingdom coffin'. In Johnson, J. H. and E. F. Wente (eds.) *Studies in honor of George R. Hughes, January 12, 1977*, Studies in Ancient Oriental Civilization 39: 1–29. Chicago: The Oriental Institute.
- 1986. 'The Pyramid Texts of queens *Jpwt* and *Wd̄bt-n.(j)*'. *Journal of the American Research Center in Egypt* 23: 1–25.
- 1989. 'The cosmology of the Pyramid Texts'. In Anonymous (ed.), *Religion and philosophy in ancient Egypt*, Yale Egyptological Studies 3: 1–28. New Haven: Yale Egyptological Seminar.
- 1994. 'Reading a pyramid'. In Berger, C., G. Clerc, and N. Grimal (eds), *Hommages à Jean Leclant*, Bibliothèque d'étude 106/1: 5–28. Cairo: Institut français d'archéologie orientale.
- 1996. 'Coffin Texts from Lisht'. In Willems, H. (ed.), *The world of the Coffin Texts: proceedings of the symposium held on the occasion of the 100th birthday of Adriaan de Buck, Leiden, December 17–19, 1992*. Egyptologische Uitgaven 9: 1–15. Leiden: Nederlands Instituut voor het Nabije Oosten.
- 2005. *The ancient Egyptian Pyramid Texts*, Writings from the Ancient World 38. Atlanta: Society of Biblical Literature Press.
- 2006. *The Egyptian Coffin Texts, volume 8: Middle Kingdom copies of Pyramid Texts*, Oriental Institute Publications 132. Chicago: The Oriental Institute.
- 2013. *A new concordance of the Pyramid Texts*. 6 vols. Providence: Brown University.
https://www.dropbox.com/sh/0xo88uy04urnz0v/o16_ojF8f_. Accessed 4 August 2018.
- 2015. *The ancient Egyptian Pyramid Texts*, Writings from the Ancient World 38. 2nd edition. Atlanta: Society of Biblical Literature Press.
- 2017. *Grammar of the Ancient Egyptian Pyramid Texts. Volume 1: Unis*, Languages of the Ancient Near East 7. Winona Lake: Eisenbrauns.
- Allen, T. G. 1950. *Occurrences of Pyramid Texts, with cross indexes of these and other Egyptian mortuary texts*, Studies in Ancient Oriental Civilization 27. Chicago: University of Chicago Press.
- Altenmüller, H. 1972. *Die Texte zum Begräbnisritual in den Pyramiden des Alten Reiches*, Ägyptologische Abhandlungen 24. Wiesbaden: Otto Harrassowitz.
- Alvarez, C. 2016. 'An epigraphical journey in the pyramid of Ibi: between textual transmission and mistakes'. In Alvarez, C., A. Belekdanian, A.-K. Gill, and S. Klein (eds), *Current Research in Egyptology 2015: proceedings of the sixteenth annual symposium, University of Oxford, 15–18 April, 2015*: 20–33. Oxford: Oxbow.

- in preparation. ‘Les travaux de Gustave Jéquier à la pyramide d’Ibi: quelques reconsidérations architecturales’. In Legros, R. (ed.) [festschrift volume].
- Anthes, R. 1957. ‘Die Sonnenbote in den Pyramidentexten’. *Zeitschrift für Ägyptische Sprache und Altertumskunde* 82: 77–89.
- Assmann, J. 1970. *Der König als Sonnenpriester. Ein kosmographischer Begleittext zur kultischen Sonnenhymnik in thebanischen Tempeln und Gräbern*, Abhandlungen des Deutschen Archäologischen Instituts Kairo, Ägyptologische Reihe 7. Glückstadt: J. J. Augustin.
- 1990. ‘Egyptian mortuary liturgies’. In Israelit-Groll, S. (ed.), *Studies in Egyptology presented to Miriam Lichtheim* 1: 1–45. Jerusalem: Magnes Press, Hebrew University.
- 2002. *The mind of Egypt: history and meaning in the time of the pharaohs*. Translated by Andrew Jenkins. New York: Holt.
- Bagnall, R. S. 2006. ‘Alexandria: library of dreams’. In Bagnall, R. S., *Hellenistic and Roman Egypt: sources and approaches*, Variorum Collected Studies series 864: 348–62. Aldershot; Burlington, VT: Ashgate.
- Baines, J. and J. Malek 2002. *Cultural atlas of ancient Egypt*, revised ed. New York: Checkmark Books.
- 2004. ‘Modelling sources, processes and locations of early mortuary texts’. In S. Bickel and B. Mathieu (eds), *D’un monde à l’autre. Textes des Pyramides et Textes des Sarcophages: Actes de la table ronde internationale ‘Textes des Pyramides versus Textes des Sarcophages’, Ifao, 24–26 septembre 2001*, Bibliothèque d’Étude 139: 15–41. Cairo: Institut Français d’Archéologie Orientale.
- 2007. *Visual and written culture in ancient Egypt*. Oxford: Oxford University Press.
- 2012. ‘Scripts, high culture, and administration in Middle Kingdom Egypt’. In Houston, S. D. (ed.), *The shape of script: how and why writing systems change*. Santa Fe: School for Advanced Research Press.
- 2015. ‘Ancient Egypt’. In Feldherr, A. and G. Hardy (eds), *The Oxford history of historical writing, vol. 1: Beginnings to AD 600*: 53–75. Oxford: Oxford University Press.
- Barguet, P. 1971. ‘Les chapitres 313–321 des Textes des Pyramides et la naissance de la lumière’. *Revue d’Égyptologie* 22: 7–14.
- Bárta, M. 2005. ‘Location of the Old Kingdom pyramids in Egypt’. *Cambridge Archaeological Journal* 15/2: 177–91.
- Barta, W. 1981. *Die Bedeutung der Pyramidentexte für den verstorbenen König*, Münchner Ägyptologische Studien 39. Berlin: Deutscher Kunstverlag.
- Baud, M. 2010. ‘The Old Kingdom’. In Lloyd, A. B. (ed.), *A companion to ancient Egypt* 1: 63–80. Blackwell Companions to the Ancient World. Chichester; Malden, MA: Wiley-Blackwell.

- Beaux, N. 2004. 'La marque du "divin": comparaison entre deux corpus funéraires: les Textes des Pyramides et les Textes des Sarcophages'. In S. Bickel and B. Mathieu (eds), *D'un monde à l'autre. Textes des Pyramides et Textes des Sarcophages. Actes de la table ronde internationale 'Textes des Pyramides versus Textes des Sarcophages', IFAO, 24–26 septembre 2001*, Bibliothèque d'Étude 139: 43–56. Cairo: Institut Français d'Archéologie Orientale.
- Beckerath, J. von 1984. 'Qa-ka-re'. *Lexikon der Ägyptologie* V: 37–8.
- Bène, E. 1999. 'Textes des Pyramides et pyramides de reines'. *Égypte, Afrique & Orient* 12: 33–40.
- and Guilhou, N. 2004. 'Le "Grand Départ" et la "Suite A" dans les Textes des Sarcophages'. In S. Bickel and B. Mathieu (eds), *D'un monde à l'autre. Textes des Pyramides et Textes des Sarcophages: Actes de la table ronde internationale 'Textes des Pyramides versus Textes des Sarcophages', Ifao, 24–26 septembre 2001*, Bibliothèque d'Étude 139: 57–83. Cairo: Institut Français d'Archéologie Orientale.
- and B. Mathieu 2015. 'Tradition et innovation dans les *Textes des Pyramides*: la paroi ouest de l'antechambre de Têti (T/A/W): un cas exemplaire'. In Legros, R. (ed.), *50 ans d'éternité. Jubilé de la Mission archéologique française de Saqqâra (1963–2013)*, Bibliothèque d'Étude 162: 23–39. Cairo: Institut Français d'Archéologie Orientale.
- Berger el-Naggar, C. 1994. 'À la quête de nouvelles versions des Textes des Pyramides: à propos des reines de la fin de l'Ancien Empire'. In Berger, C., G. Clerc, and N. Grimal (eds), *Hommages à Jean Leclant*, Bibliothèque d'Étude 106/1: 73–80. Cairo: Institut Français d'Archéologie Orientale.
- 1999. 'Des archives sacrées à Saqqâra dans le temple de Pépy Ier?' *Égypte, Afrique & Orient* 12: 29–32.
- Leclant, J., and I. Pierre-Croisiau 2001. *Les textes de la pyramide de Pépy Ier. Description et analyse*, Mémoires de l'Institut français d'archéologie orientale 118/1. Cairo: Institut Français d'Archéologie Orientale.
- 2004. 'Des Textes des Pyramides sur papyrus dans les archives du temple funéraire de Pépy Ier'. In Bickel, S. and B. Mathieu (eds), *D'un monde à l'autre. Textes des Pyramides et Textes des Sarcophages. Actes de la table ronde internationale 'Textes des Pyramides versus Textes des Sarcophages', Ifao, 24–26 septembre 2001*, Bibliothèque d'Étude 139: 85–90. Cairo: Institut Français d'Archéologie Orientale.
- and A. Labrousse. 2005. 'La tombe de Rêherychefnakht à Saqqâra-Sud, un chaînon manquant?' *Bulletin de la Société Française d'Égyptologie* 164: 14–28.
- and M.-N. Fraisse 2008. 'Béhénou, "aimée de Pépy", une nouvelle reine d'Égypte'. *Bulletin de l'Institut Français d'Archéologie Orientale* 108: 1–27.
- and M.-N. Fraisse 2015. 'La paroi est de la chambre funéraire de Béhénou: le dernier voyage de la reine'. In Legros, R. (ed.), *50 ans d'éternité. Jubilé de la Mission archéologique française*

- de *Saqqâra* (1963–2013), Bibliothèque d'Étude 162: 41–52. Cairo: Institut Français d'Archéologie Orientale.
- Bickel, S. 2004. 'D'un monde à l'autre: le thème du passeur et de sa barque dans la pensée funéraire'. In Bickel, S. and B. Mathieu (eds), *D'un monde à l'autre. Textes des Pyramides et Textes des Sarcophages: Actes de la table ronde internationale 'Textes des Pyramides versus Textes des Sarcophages', Ifao, 24–26 septembre 2001*, Bibliothèque d'Étude 139: 91–117. Cairo: Institut Français d'Archéologie Orientale.
- Billing, N. 2002. *Nut. The Goddess of Life in text and iconography*, Uppsala Studies in Egyptology 5. Uppsala: Akademitryck.
- 2011. 'Monumentalizing the beyond: reading the pyramid before and after the Pyramid Texts'. *Studien zur Altägyptischen Kultur* 40: 53–66.
- Borchardt, L. et al. 1913. *Das Grabdenkmal des Königs Šaḥu-Re^c II, Die Wandbilder, Ausgrabungen der Deutschen Orient-Gesellschaft in Abusir 1902-1908* 7. Leipzig: J. C. Hinrichs.
- Brinkmann, V. (ed.) 2010. *Sahure: Tod und Leben eines grossen Pharaos; eine Ausstellung der Liebieghaus Skulpturensammlung, Frankfurt am Main, 24. Juni bis 28. November 2010*. Frankfurt: Liebieghaus Skulpturensammlung.
- Buck, A. de and A. H. Gardiner [1935-61]. *The Egyptian Coffin Texts*. 7 vols. Chicago: University of Chicago Press.
- Burn, J. 2010. 'An ecological approach to determine the potential influence that the Pyramid Texts have had upon the Sixth Dynasty tomb decorations'. In Bárta, M., F. Coppens, and J. Krejčí (eds), *Abusir and Saqqara in the year 2010*, 233–45. Prague: Czech Institute of Egyptology.
- 2011. 'The Pyramid Texts and tomb decoration in Dynasty Six: the tomb of Mehu at Saqqara'. *Bulletin of the Australian Centre for Egyptology* 22: 17–34.
- Callender, V. 2011. 'Queen Neit-ikrety/Nitokris'. In M. Bárta, F. Coppens, and J. Krejčí (eds), *Abusir and Saqqara in the year 2010*: 246–60. Prague: Czech Institute of Egyptology.
- 2015. 'Case study of an ancient royal woman: Queen Neith and the 6th Dynasty'. In Navrátilová, H. and R. Landgráfová (eds), 2015. *Sex and the golden goddess II: World of the love songs*: 1–13. Prague: Faculty of Arts, Charles University.
- Carrier, C. 2010. *Textes des Pyramides de l'Égypte Ancienne*, IV. *Textes des Pyramides de Mérenrê, d'Aba, de Neit, d'Ipout et d'Oudjebten*, Melchat 15. Paris: Cybèle.
- Collombert, P. 2010. *Le tombeau de Mérérouka: paléographie*. Paléographie hiéroglyphique 4. Cairo: Institut Français d'Archéologie Orientale.
- 2011. 'Les papyrus de Saqqâra: enquête sur un fonds d'archives inédit de l'Ancien Empire'. *Bulletin de la Société Française d'Égyptologie* 181: 17–30.
- in preparation. 'Les Textes des Pyramides de la reine Neit'. In P. Collombert (ed.) *La pyramide de Neit. Recherches complémentaires*. Le Caire: Institut Français d'Archéologie Orientale.

- Coulon, L. 2004. 'Rhétorique et stratégies du discours dans les formules funéraires: les innovations des Textes des Sarcophages'. In Bickel, S. and B. Mathieu (eds), *D'un monde à l'autre. Textes des Pyramides et Textes des Sarcophages: Actes de la table ronde internationale 'Textes des Pyramides versus Textes des Sarcophages', Ifao, 24–26 septembre 2001*, Bibliothèque d'Étude 139: 119–42. Cairo: Institut Français d'Archéologie Orientale.
- Díaz-Iglesias Llanos, L. 2018. 'Products of the same master copy: deification of body limbs in Book of the Dead Spll 42 in TT 11 and pHanover KM 1970.37'. *Zeitschrift für ägyptische Sprache und Altertumskunde* 145/1: 22–42.
- Dobrev, V., A. Labrousse, and B. Mathieu 2000. 'La dixième pyramide à textes de Saqqâra: Ânkhessenpépy II. Rapport préliminaire de la campagne de fouilles 2000'. *Bulletin de l'Institut Français d'Archéologie Orientale* 100: 275–96.
- 2017. 'A necropolis from the First Intermediate Period at Tabbet el-Guesh (Saqqara South)'. In Bárta, M., F. Coppens, and J. Krejčí (eds), *Abusir and Saqqara in the year 2015*: 53–61. Prague: Faculty of Arts, Charles University.
- Edel, E. 1955. *Altägyptische Grammatik I*, *Analecta Orientalia* 34. Rome: Pontificium Institutum Biblicum.
- Eyre, C. 2002. *The Cannibal Hymn: a cultural and literary study*. Liverpool: Liverpool University Press.
- 2013a. *The use of documents in Pharaonic Egypt*, *Oxford Studies in Ancient Documents*. Oxford: Oxford University Press.
- 2013b. 'The practice of literature: the relationship between content, form, audience, and performance'. In Enmarch, R. and V. M. Lepper (eds), *Ancient Egyptian literature: theory and practice*, *Proceedings of the British Academy* 188: 101–42. Oxford: Oxford University Press.
- Faulkner, R. O. 1962. *A Concise Dictionary of Middle Egyptian*. Oxford: Griffith Institute.
- 1969. *The Ancient Egyptian Pyramid Texts*. Oxford: Clarendon Press.
- 2004. *The ancient Egyptian Coffin Texts: Spells 1–1185 and indexes*. Oxford: Aris & Phillips.
- Fischer, H. G. 1977. *The orientation of hieroglyphs: part I. Reversals*. *Egyptian Studies* 2. New York: Metropolitan Museum of Art.
- 1986. *L'écriture et l'art de l'Égypte ancienne: quatre leçons sur la paléographie et l'épigraphie pharaoniques*. *Essais et conférences*. Paris: Presses Universitaires de France.
- Firth, C. M. and Gunn, B. 1926. *Teti pyramid cemeteries*, *Excavations at Saqqara*. Cairo: Institut Français d'Archéologie Orientale.
- Gardiner, A. H. 1955. 'A unique funerary liturgy'. *Journal of Egyptian Archaeology* 41: 9–17.
- 1957. *Egyptian Grammar: being an introduction to the study of hieroglyphs*, 3rd ed. Oxford: Oxford University Press for Griffith Institute.

- 1959. *The Royal Canon of Turin*. Oxford: Oxford University Press for Griffith Institute.
- Gauthier, H. 1925–1931. *Dictionnaire des noms géographiques contenus dans les textes hiéroglyphiques*, 7 vols. Cairo: Société Royale de Géographie d'Égypte.
- Gee, J. 2015. 'Did the Old Kingdom collapse? A new view of the First Intermediate Period'. In Manuelian, P. Der and T. Schneider (eds), *Towards a new history for the Egyptian Old Kingdom: perspectives on the pyramid age*, Harvard Egyptological Studies 1: 60–75. Leiden; Boston: Brill.
- Gestermann, L. 2003. 'Neues zu Pap. Gardiner II (BM EA 10676)'. In Hawass, Z. and L. Pinch Brock (eds), *Egyptology at the dawn of the twenty-first century: proceedings of the Eighth International Congress of Egyptologists, Cairo, 2000* 1: 202–208. Cairo; New York: American University in Cairo Press.
- 2004. 'Sargtexte aus Dair al-Biršā: Zeugnisse eines historischen Wendepunktes? In S. Bickel and B. Mathieu (eds), *D'un monde à l'autre. Textes des Pyramides et Textes des Sarcophages. Actes de la table ronde internationale 'Textes des Pyramides versus Textes des Sarcophages', Ifao, 24–26 septembre 2001*, Bibliothèque d'Étude 139: 201–17. Cairo: Institut Français d'Archéologie Orientale.
- Gilula, M. 1982. 'An Egyptian etymology of the name of Horus?' *Journal of Egyptian Archeology* 68: 259–65.
- Goebis, K. 2008. *Crowns in Egyptian funerary literature. Royalty, rebirth, and destruction*. Oxford: Griffith Institute.
- Goedicke, H. 1971. *Re-used blocks from the pyramid of Amenemhet I at Lisht*, Publications of the Metropolitan Museum of Art Egyptian Expedition 20. New York: Metropolitan Museum of Art.
- Goelet Jr., O. 2010. 'Observations on copying and the hieroglyphic tradition in the production of the *Book of the Dead*'. In D'Auria, Sue H. (ed.), *Offerings to the discerning eye: an Egyptological medley in honor of Jack A. Josephson*, Culture and History of the Ancient Near East 38: 121–32. Leiden; Boston: Brill.
- Goldwasser, O. 1995. *From icon to metaphor: studies in the semiotics of the hieroglyphs*. Orbis Biblicus et Orientalis 142. Freiburg; Göttingen: Universitätsverlag; Vandenhoeck & Ruprecht.
- 1999. 'The determinative system as a mirror of world organization'. *Göttinger Miszellen* 170: 49–68.
- Griffith, F. L. 1898. *A collection of hieroglyphs: a contribution to the history of Egyptian writing*, Archeological Survey of Egypt 6. London: Egypt Exploration Fund.
- Grimal, N. 1992. *A history of ancient Egypt*. Translated by Ian Shaw. Oxford: Blackwell.
- Guilhou, N. and B. Mathieu 1997. 'Cent dix ans d'étude des Textes des Pyramides. Bibliographie'. In Berger, C. and B. Mathieu (eds), *Études sur l'Ancien Empire et la nécropole de Saqqâra*

- dédiées à Jean-Philippe Lauer* 2: 355–362. Montpellier: Université Paul Valéry-Montpellier III.
- Guksch, H. 1995. *Die Gräber des Nacht-Min und des Men-cheper-Ra-seneb: Theben Nr. 87 und 79*, Archäologische Veröffentlichungen, Deutsches Archäologisches Institut, Abteilung Kairo 34. Mainz: Philipp von Zabern.
- Gundacker, R. 2010. 'Königliche Pyramidentexte im Mittleren Reich? Zur Herkunft und zu einigen Besonderheiten der Pyramidentexte Sesostrisanchs'. *Studien zur Altägyptischen Kultur* 39: 121–40.
- Gunn, B. 1925. 'A Sixth Dynasty letter from Saqqara'. *Annales du Service des Antiquités de l'Égypte* 25: 242–55.
- Hannig, R. 2007. 'Umbruchfehler auf dem Sarg des Penju'. *Bulletin of the Egyptian Museum* 4: 51–55.
- Hawass, Z. 2010. 'The excavation of the headless pyramid, Lepsius XXIX.' In Hawass, H., P. Der Manuelian, and R. B. Hussein (eds), *Perspectives on ancient Egypt: studies in honor of Edward Brovarski*, Supplément aux Annales du Service des Antiquités de l'Égypte 40: 153–70. Cairo: Conseil Suprême des Antiquités de l'Égypte.
- Hayes, W. C. 1937. *The texts in the maṣṭabeh of Se'n-Wosret-'ankh at Lisht*, Egyptian Expedition Publications 12. New York: Metropolitan Museum of Art.
- Hays, H. M. 2002. 'The worshipper and the worshipped in the Pyramid Texts'. *Studien zur Altägyptischen Kultur* 30: 153–67.
- 2009a. 'Unreading the pyramids'. *Bulletin de l'Institut français d'archéologie orientale* 109: 195–220.
- 2009b. 'Between identity and agency in ancient Egyptian ritual'. In Nyord, R. and A. Kjølbj (eds), *'Being in ancient Egypt': thoughts on agency, materiality and cognition; proceedings of the seminar held in Copenhagen, September 29–30, 2006*. BAR International Series 2019: 5–30. Oxford: Archaeopress.
- 2012. *The organization of the Pyramid Texts: typology and disposition*, Probleme der Ägyptologie 31. 2 vols. Leiden: Brill.
- 2015. 'The entextualization of the Pyramid Texts and the religious history of the Old Kingdom'. In Manuelian, P. Der and T. Schneider (eds), *Towards a new history for the Egyptian Old Kingdom: perspectives on the pyramid age*, Harvard Egyptological Studies 1: 200–26. Leiden; Boston: Brill.
- Hornung, E. 1971. *Das Grab des Haremhab im Tal der Könige*. Bern: Franke.
- Hussein, R. B. 2017. 'Text transmission or text reproduction? The shifting materiality of Pyramid Texts spells 267.' In Bickel, S. and L. Díaz-Iglesias (eds), *Studies in ancient Egyptian funerary literature*, Orientalia Lovaniensia Analecta 257: 295–329. Leuven: Peeters.

- Jacq, C. 1986. *Le voyage dans l'autre monde selon l'Égypte Ancienne: épreuves et métamorphoses du mort d'après les Textes des Pyramides et les Textes des Sarcophages*. Monaco: Le Rocher.
- Jánosi, P. 1996. *Die Pyramidenanlagen der Königinnen: Untersuchungen zu einem Grabtyp des Alten und Mittleren Reiches*, Österreichische Akademie der Wissenschaften, Denkschriften der Gesamtakademie 13; Untersuchungen der Zweigstelle Kairo des Österreichischen Archäologischen Institutes 13. Wien: Österreichischen Akademie der Wissenschaften.
- Jéquier, G. 1928. *Fouilles à Saqqarah. La pyramide d'Oudjebten*. Service des Antiquités de l'Égypte, Fouilles à Saqqarah. Cairo: Institut Français d'Archéologie Orientale.
- 1930. 'Rapport préliminaire sur les fouilles exécutées en 1929–1930 dans la partie méridionale de la nécropole memphite'. *Annales du Service des Antiquités de l'Égypte* 30: 105–16.
- 1932. 'Rapport préliminaire sur les fouilles exécutées en 1931–1932 dans la partie méridionale de la nécropole memphite'. *Annales du Service des Antiquités de l'Égypte* 32: 47–49.
- 1933. *Les pyramides des reines Neit et Apouit*. Service des Antiquités de l'Égypte, Fouilles à Saqqarah. Cairo: Institut Français d'Archéologie Orientale.
- 1935. *La pyramide d'Aba*. Service des Antiquités de l'Égypte, Fouilles à Saqqarah. Cairo: Institut Français d'Archéologie Orientale.
- 1936. *Le monument funéraire de Pepi II I: Le tombeau royal*. Service des Antiquités de l'Égypte, Fouilles à Saqqarah. Cairo: Institut Français d'Archéologie Orientale.
- 1940. *Douze ans de fouilles dans la nécropole memphite (1924–1936)*, Mémoires de l'Université de Neuchâtel 15. Neuchâtel: Secrétariat de l'Université.
- Kahl, J. 1996. *Steh auf, gib Horus deine Hand: die Überlieferungsgeschichte von Altenmüllers Pyramidentext-Spruchfolge D*, Göttinger Orientforschungen 4. Ägypten 32. Wiesbaden: Harrassowitz.
- 2007. *Ancient Asyut: the first synthesis after 300 years of research*, The Asyut Project 1. Wiesbaden: Harrassowitz.
- 2016. 'Zum Alter der Sargtext-Artefakte aus Assiut'. In Dils, P. and L. Popko (eds), *Zwischen Philologie und Lexikographie des Ägyptisch-Koptischen: Akten der Leipziger Abschlusstagung des Akademienprojekts 'Altägyptisches Wörterbuch'*, Abhandlungen der Sächsischen Akademie der Wissenschaften zu Leipzig, Philologisch-Historische Klasse 84/3: 29–55. Leipzig; Stuttgart: Sächsische Akademie der Wissenschaften zu Leipzig; Hirzel.
- Kamal, A. 1901. 'Fouilles à Deïr-el-Bersheh (mars-avril 1900)'. *Annales du Service des Antiquités de l'Égypte* 2: 14–43.
- Kammerzell, F. 2015. 'Egyptian verb classifiers'. In Kousoulis, P. and N. Lazaridis (eds), *Proceedings of the Tenth International Congress of Egyptologists: University of the Aegean, Rhodes. 22–29 May 2008*, 2, *Orientalia Lovaniensia Analecta* 241: 1395–1416. Leuven: Peeters.

- Kees, H. 1928. 'Die Grosse Festdarstellung'. In Bissing, F. W. von (ed.), *Das Re-Heiligtum des Königs Ne-woser-re (Rathures)* III. Leipzig: J. C. Hinrichs.
- Labrousse, A. 1996. *L'architecture des pyramides à textes I : Saqqara Nord*, 2 vols, Mission archéologique de Saqqara III, Bibliothèque d'étude 114. Cairo: Institut Français d'Archéologie Orientale.
- 1999. *Les pyramides des reines: une nouvelle nécropole à Saqqâra*. Paris: Hazan.
- forthcoming. *Observations sur le complexe funéraire du roi Ibi*. Cairo: Institut Français d'Archéologie Orientale.
- Lacau, P. 1913. 'Suppressions et modifications de signes dans les textes funéraires'. *Zeitschrift für ägyptische Sprache und Altertumskunde* 51: 1–64.
- Leclant, J. 1973. 'Les Textes des Pyramides'. In [Sauneron, S.] (ed.), *Textes et langages de l'Égypte pharaonique: cent cinquante années de recherches 1822–1972. Hommage à Jean-François Champollion*, 3 vols, Bibliothèque d'Étude 64: 2, 37–52. Cairo: Institut Français d'Archéologie Orientale.
- 1975. 'À la pyramide de Pepi I, la paroi nord du passage A-F (antichambre–chambre funéraire)'. *Revue d'Égyptologie* 27: 137–49.
- 1982. 'Etat d'avancement (été 1979) de la recherche concernant les nouveaux Textes des Pyramides de Têti, Pépy Ier et Mérenrê'. In Anonymous (ed.), *L'égyptologie en 1979. Axes prioritaires de recherches II*, Colloques internationaux du Centre national de la recherche scientifique 595: 31–5. Paris: Éditions du Centre national de la recherche scientifique.
- and A. Labrousse 2006. *Découvertes récentes de la Mission archéologique française à Saqqâra (campagnes 2001-2005)*, Comptes rendus des séances de l'Académie des Inscriptions et Belles-Lettres 150: 103–20.
- Lehner, M. 1997. *The complete pyramids*. London: Thames and Hudson.
- Leitz, C. (ed.) 2002. *Lexikon der ägyptischen Götter und Götterbezeichnungen I*, Orientalia Lovaniensia analecta 110. Leuven: Peeters.
- Lepsius, R. 1872–3. *Denkmäler aus Aegypten und Aethiopien*. Geneva: Belles-Lettres.
- Lüscher, B. 1998. *Untersuchungen zu Totenbuch Spruch 151*, Studien zum Altägyptischen Totenbuch 2. Wiesbaden: Harrassowitz.
- 2013. *Die Vorlagen-Ostraka aus dem Grab des Nachtmin (TT 87)*, Beiträge zum Alten Ägypten 4. Basel: Orientverlag.
- Malek, J. 1994. 'King Merykare and his pyramid'. In Berger, C., G. Clerc, and N. Grimal (eds), *Hommages à Jean Leclant*, Bibliothèque d'Étude 106/4: 203–14. Cairo: Institut Français d'Archéologie Orientale.
- Mariette, A. 1869. *Abydos: description des fouilles exécutées sur l'emplacement de cette ville*. Paris: A. Franck.
- Maspero, G. 1894. *Les inscriptions des pyramides de Saqqarah*. Paris: Émile Bouillon.

- Mathieu, B. 1997. 'La signification du serdab dans la pyramide d'Unas. L'architecture des appartements funéraires royaux à la lumière des Textes des Pyramides'. In Berger, C. and B. Mathieu (eds), *Études sur l'Ancien Empire et la nécropole de Saqqâra dédiées à Jean-Philippe Lauer*: 289–304. Montpellier: Université Paul Valéry-Montpellier III.
- 1999. 'Que sont les textes des pyramides?' *Égypte, Afrique & Orient* 12: 13–22.
- 2004. 'La distinction entre Textes des Pyramides et Textes des Sarcophages est-elle légitime?'. In Bickel, S. and B. Mathieu (eds), *D'un monde à l'autre. Textes des Pyramides et Textes des Sarcophages: Actes de la table ronde internationale 'Textes des Pyramides versus Textes des Sarcophages', Ifao, 24–26 septembre 2001*, Bibliothèque d'Étude 139: 247–62. Cairo: Institut Français d'Archéologie Orientale.
- 2015. 'La paroi est de la chambre funéraire de la reine Ânkhessenpépy II (AII/F/E). Contribution à l'étude de la spatialisation des Textes des Pyramides'. In R. Legros (ed.), *50 ans d'éternité. Jubilé de la Mission archéologique française de Saqqâra*, Bibliothèque d'Étude 162: 69–76. Cairo: Institut Français d'Archéologie Orientale.
- and Pierre-Croisau, I. 2015. 'Une nouvelle formule des Textes des Pyramides: TP 1002. Edition synoptique et traduction commentée'. In R. Legros (ed.), *50 ans d'éternité. Jubilé de la Mission archéologique française de Saqqâra (1963–2013)*, Bibliothèque d'Étude 162: 77–95. Cairo: Institut Français d'Archéologie Orientale.
- 2017. 'Re-reading the pyramids. Repère pour une lecture spatialisée des Textes des Pyramides'. In Bickel, S. and L. Díaz-Iglesias (eds), *Studies in ancient Egyptian funerary literature*, Orientalia Lovaniensia Analecta 257: 375–462. Leuven: Peeters.
- Mauric-Barberio, F. 2003. 'Copie de textes à l'envers dans les tombes royales'. In G. Andreu (ed.), *Deir el-Médineh et la Vallée des Rois: la vie en Égypte au temps des pharaons du Nouvel Empire. Actes du colloque organisé par le Musée du Louvre, 3–4 mai 2002*: 173–94. Paris: Éditions Khéops.
- McDonald, A. 2004. 'Review: O. Goldwasser 2000. *Prophets, lovers and giraffes: wor(l)d classification in ancient Egypt*'. *Classification and Categorization in Ancient Egypt* 3; *Göttinger Orientforschungen* 4: 38. Wiesbaden: Harrassowitz'. *Lingua aegyptia. Studia monographica* 12. Hamburg: Widmaier.
- Meyer-Dietrich, E. 2010. 'Recitation, Speech Acts, and Declamation'. In Grajetzki, W. and Wendrich, W. (eds), *UCLA Encyclopedia of Egyptology* (September). UCLA: Department of Near Eastern Languages and Cultures. <http://digital2.library.ucla.edu/viewItem.do?ark=21198/zz00252xth>. Accessed 4 Août 2018.
- Molen (van der), R. 2000. *A hieroglyphic dictionary of Egyptian Coffin Texts*, Probleme der Ägyptologie 15. Leiden; Boston: Brill.

- Morales, A. J. 2013. *The transmission of the Pyramid Texts into the Middle Kingdom: philological aspects of a continuous tradition in Egyptian mortuary literature*. PhD dissertation, University of Pennsylvania. Ann Arbor: UMI.
- 2016a. ‘From voice to papyrus to wall: Verschriftung and Verschriftlichung in the Old Kingdom Pyramid Texts’. In M. Hilgert (ed.), *Understanding material text cultures: a multidisciplinary view*, *Materielle Textkulturen* 9: 69–130. Berlin; Boston: Walter de Gruyter.
- 2016b. ‘Text-building and transmission of Pyramid Texts in the third millennium BCE: iteration, objectification, and change’. *Journal of Ancient Near Eastern Religions* 15/2: 169–201.
- 2017. *The transmission of the Pyramid Texts of Nut. Analysis of their distribution and role in the Old and Middle Kingdoms*, *Studien zur Altägyptischen Kultur Beihefte* 19. Hamburg: Helmut Buske.
- forthcoming. ‘Pyramid Texts as ritual icons: Mechanisms of monumentalization and adaptation in the chambers of the Old Kingdom queens’. In Quack, J. F. and D. C. Lutz (eds), *Schrift und Material: Praktische Verwendung religiöser Text-und Bildträger als Artefakte im Alten Ägypten*.
- Moreno García, J. C. 2016. ‘Administration, power and ideology in Egypt, from the Old Kingdom to the Middle Kingdom’. In Giovetti, P. and D. Picchi (eds), 2016. *Egypt: millenary splendour: the Leiden collection in Bologna*: 90–5. Milano: Skira.
- Müller, M. 1986. ‘Zum Werkverfahren an thebanischen Grabwänden des Neues Reiches’. *Studien zur Altägyptischen Kultur* 13: 149–64.
- Müller-Wollermann, R. 2014. ‘End of the Old Kingdom’. In Grajetzki, W. and W. Wendrich (eds), *UCLA Encyclopedia of Egyptology* (August). UCLA: Department of Near Eastern Languages and Cultures.
<https://escholarship.org/uc/item/2ns3652b>. Accessed 27 June 2016.
- Navrátilová, H. 2015. *Visitors’ graffiti of Dynasties 18 and 19 in Abusir and northern Saqqara: with a survey of the graffiti at Giza, southern Saqqara, Dahshur and Maidum*, 2nd, revised ed. Wallasey: Abercromby Press.
- Nyord, R. 2009. *Breathing flesh: conceptions of the body in the ancient Egyptian Coffin Texts*, CNI Publications 37. Copenhagen: Museum Tusculanum Press.
- Osing, J. 1986. ‘Zur Disposition der Pyramidentexte des Unas’. *Mitteilungen des Deutschen Archäologischen Instituts* 42: 131–44.
- Papazian, H. 2015. ‘The state of Egypt in the Eighth Dynasty’. In Manuelian, P. Der and T. Schneider (eds), *Towards a new history for the Egyptian Old Kingdom: perspectives on the pyramid age*, *Harvard Egyptological Studies* 1: 393–428. Leiden; Boston: Brill.
- Parkinson, R. B. 2009. *Reading ancient Egyptian poetry: among other histories*. Chichester: Wiley-Blackwell.

- 2010. *Poetry and culture in Middle Kingdom Egypt: a dark side to perfection*. Revised reprint. London: Equinox.
- forthcoming. ‘Libraries in Ancient Egypt, c. 2600–1600 BC’.
- Pérez Die, M. 2005. ‘La nécropole de la Première Période Intermédiaire du Moyen Empire à Héracléopolis Magna: nouvelles découvertes et résultats récent (campagne 2001)’. In Pantalacci, L. and C. Berger-El-Naggar (eds), *Des Néferkarê aux Montouhotep: travaux archéologiques en cours sur la fin de la VIe dynastie et la première période intermédiaire; actes du colloque CNRS–Université Lumière-Lyon 2, tenu le 5–7 juillet 2001*, Travaux de la Maison de l’Orient et de la Méditerranée 40: 239–54. Paris: Maison de l’Orient et de la Méditerranée; Lyon: de Boccard.
- Piankoff, A. 1968. *The pyramid of Unas*, Bollingen Series 40/5. Princeton: Princeton University Press.
- Pierre(-Croisiau), I. 1994. ‘La gravure des textes dans la pyramid de Pépi I^{er}. Les différentes étapes’. In Berger, C., G. Clerc, and N. Grimal (eds), *Hommages à Jean Leclant*, Bibliothèque d’Étude 106/1: 299–314. Cairo: Institut Français d’Archéologie Orientale.
- 1997. ‘Les signes relatifs à l’homme dans les Textes des Pyramides: quelques particularités et graphies inhabituelles, jeux graphiques et fautes d’orthographe’. In Berger, C. and B. Mathieu (eds), *Études sur l’Ancien Empire et la nécropole de Saqqâra dédiées à Jean-Philippe Lauer* 2: 355–62. Montpellier: Université Paul Valéry-Montpellier III.
- 2004. ‘Nouvelles identifications de Textes des Sarcophages parmi les “nouveaux” Textes des Pyramides de Pépy Ier et de Mérenrê’. In Bickel, S. and B. Mathieu (eds), *D’un monde à l’autre. Textes des Pyramides et Textes des Sarcophages: Actes de la table ronde internationale ‘Textes des Pyramides versus Textes des Sarcophages’, Ifao, 24–26 septembre 2001*, Bibliothèque d’Étude 139: 263–78. Cairo: Institut Français d’Archéologie Orientale.
- Posener-Kriéger, P. 1976. *Les archives du temple funéraire de Néferirkarê-Kakaï (Les papyrus d’Abousir): traduction et commentaire*, 2 vols, Bibliothèque d’Étude 65. Cairo: Institut Français d’Archéologie Orientale.
- 1973. ‘Les papyrus de l’Ancien Empire’. In [S. Sauneron] (ed.), 1973–1974. *Textes et langages de l’Égypte pharaonique: cent cinquante années de recherches 1822–1972. Hommage à Jean-François Champollion*, 3 vols, Bibliothèque d’Étude 64: 2, 25–35. Cairo: Institut Français d’Archéologie Orientale.
- Postel, L. 2005. ‘Une variante septentrionale de la formule d’offrande invocatoire à la Première Période Intermédiaire prt-xrw nt’. In Pantalacci, L. and C. Berger-El-Naggar (eds), *Des Néferkarê aux Montouhotep: travaux archéologiques en cours sur la fin de la VIe dynastie et la première période intermédiaire; actes du colloque CNRS–Université Lumière-Lyon 2, tenu le 5–7 juillet 2001*, Travaux de la Maison de l’Orient et de la Méditerranée 40: 255–278. Paris: Maison de l’Orient et de la Méditerranée; Lyon: de Boccard.

- Pourille, D. 2000. *Recherches sur le Nou(n) dans l’Egypte Ancienne de l’Ancien Empire au Nouvel Empire*. Thèse d’Egyptologie pour l’obtention du grade de Docteur de l’Université Paris IV.
- Quack, J. F. 2011. ‘Bedeutungen von Pyramiden’. *Sokar* 23: 39–69.
- Ranke, H. 1924. ‘Die Vergottung der Glieder des menschlichen Körpers bei der Ägyptern’. *Orientalistische Literaturzeitung* 27/10: 558–64.
- Reintges, C. 2011. ‘The oral compositional form of Pyramid Text discourse’. In Hagen, F., J. Johnston, W. Monkhouse, K. Piquette, J. Tait, and M. Worthington (eds), *Narratives of Egypt and the ancient Near East: literary and linguistic approaches*, *Orientalia Lovaniensia Analecta* 189: 3–54. Leuven: Peeters.
- Roth, A. M. forthcoming. ‘Fear of hieroglyphs: patterns of suppression and mutilation in Old Kingdom burial chambers’.
- Ryholt, K. 2000. ‘The late Old Kingdom in the Turin King-List and the identity of Nitokris’. *Zeitschrift für Ägyptische Sprache und Altertumskunde* 127: 87–100.
- 2004. ‘The Turin King-List’. *Ägypten und Levante* 14: 135–55.
- Sadek, A. A. F. 1985. *Contribution à l’étude de l’Amdouat. Les variantes tardives du Livre de l’Amdouat dans les papyrus du Musée du Caire*, *Orbis Biblicus et Orientalis* 65. Fribourg and Göttingen: Academic Press Fribourg; Vandenhoeck & Ruprecht.
- 1994. ‘Le papyrus Louvre N 3071’. In Berger, C., G. Clerc, and N. Grimal (eds), *Hommages à Jean Leclant*, *Bibliothèque d’Étude* 106/4: 323–35. Cairo: Institut Français d’Archéologie Orientale.
- Scalf, F. 2016. ‘From the beginning to the end: how to generate and transmit funerary texts in ancient Egypt’. *Journal of Ancient Near Eastern Religions* 15/2: 202–23.
- Schenkel, W. 1978. ‘Zur herakleopolitanischen Tradition der Pyramidentexte’. *Göttinger Miszellen* 28: 35–44.
- Schott, S. 1950. ‘Bemerkungen zum ägyptischen Pyramidenkult’. In Ricke, H. (ed.), *Beiträge zur ägyptischen Bauforschung und Altertumskunde* 5: 131–252. Cairo: Schweizerisches Institut für Ägyptische Bauforschung und Altertumskunde.
- Seidlmayer, S. 2000. ‘The First Intermediate Period (c. 2160–2055 BC)’. In Shaw, I. (ed.), *The Oxford history of ancient Egypt*: 118–47. Oxford: Oxford University Press.
- Sethe, K. 1908–1922. *Die altägyptischen Pyramidentexte nach den Papierabdrücken und Photographien des Berliner Museums*. 4 vols. Leipzig: J. C. Hinrichs.
- 1931. ‘Die Totenliteratur der alten Ägypter: die Geschichte einer Sitte’. *Sitzungsberichte der Preussischen Akademie der Wissenschaften, Philosophisch-historische Klasse* 1931/18: 520–41.
- 1933. *Urkunden des Alten Reichs*, *Urkunden des ägyptischen Altertums* 1. 2nd ed. Leipzig: J. C. Hinrichs.

- [1935-1939]. *Übersetzung und Kommentar zu den altägyptischen Pyramidentexten*, vols 1–4. Glückstadt; Hamburg: Augustin.
- Shalomi-Hen, R. 2000. *Classifying the divine: determinatives and categorisation in CT 335 and BD 17*. Classification and Categorization in Ancient Egypt 2; Göttinger Orientforschungen 4: 38. Wiesbaden: Harrassowitz.
- 2006. *The writing of gods: the evolution of divine classifiers in the Old Kingdom*. Classification and Categorization in Ancient Egypt 4; Göttinger Orientforschungen, 4: 38. Wiesbaden: Harrassowitz.
- Silverman, D. P. 1989. 'Textual criticism in the Coffin Texts'. In Anonymous (ed.), *Religion and philosophy in ancient Egypt*, Yale Egyptological Studies 3: 29–53. New Haven: Yale Egyptological Seminar.
- 2000. 'The Threat-Formula and Biographical Text in the Tomb of Hezi at Saqqara'. *Journal of the American Research Center in Egypt* 37: 1–13.
- Simpson, R. S. 2017. 'Retrograde writing in ancient Egyptian inscriptions'. In Jasnow, R. and W. Ghislaine (eds), *Illuminating Osiris: Egyptological studies in honor of Mark Smith*. Material and Visual Culture of Ancient Egypt 2: 337–45. Atlanta: Lockwood Press.
- Smith, M. 2009. 'Democratization of the Afterlife'. In Grajetzki, W. and W. Wendrich (eds), *UCLA Encyclopedia of Egyptology* (June). UCLA: Department of Near Eastern Languages and Cultures.
<http://www.escholarship.org/uc/item/70g428wj>. Accessed 27 June 2016.
- 2017. *Following Osiris: perspectives on the Osirian afterlife from four millennia*. Oxford: Oxford University Press.
- Smith, W. S. 1946. *A history of Egyptian sculpture and painting in the Old Kingdom*. London: Oxford University Press.
- Spiegel, J. 1956. 'Das Auferstehungsritual der Unaspyramide'. *Annales du Service des Antiquités de l'Égypte* 53/2: 339–439.
- 1971. *Das Auferstehungsritual der Unas-Pyramide: Beschreibung und erläuterte Übersetzung*, Ägyptologische Abhandlungen 23. Wiesbaden: Harrassowitz.
- Stadelmann, R. 1985. *Die ägyptischen Pyramiden: vom Ziegelbau zum Weltwunder*, Kulturgeschichte der Antiken Welt 30. Mainz: Philipp von Zabern.
- 1991. 'Das Dreikammersystem der Königsgräber der Frühzeit und des Alten Reiches'. *Mitteilungen des Deutschen Archäologischen Instituts Kairo* 47: 373–87.
- Terrace, E. L. B. 1968. *Egyptian paintings of the Middle Kingdom*. London: Allen and Unwin.
- Theis, C. 2010. 'Die Pyramiden der Ersten Zwischenzeit nach philologischen und archäologischen Quellen'. *Studien zur Altägyptischen Kultur* 39: 321–39.
- Valloggia, M. 1986. *Balat I: Le mastaba de Medou-Nefer*, 2 vols, Fouilles de l'Institut Français d'Archéologie Orientale 31. Cairo: Institut Français d'Archéologie Orientale.

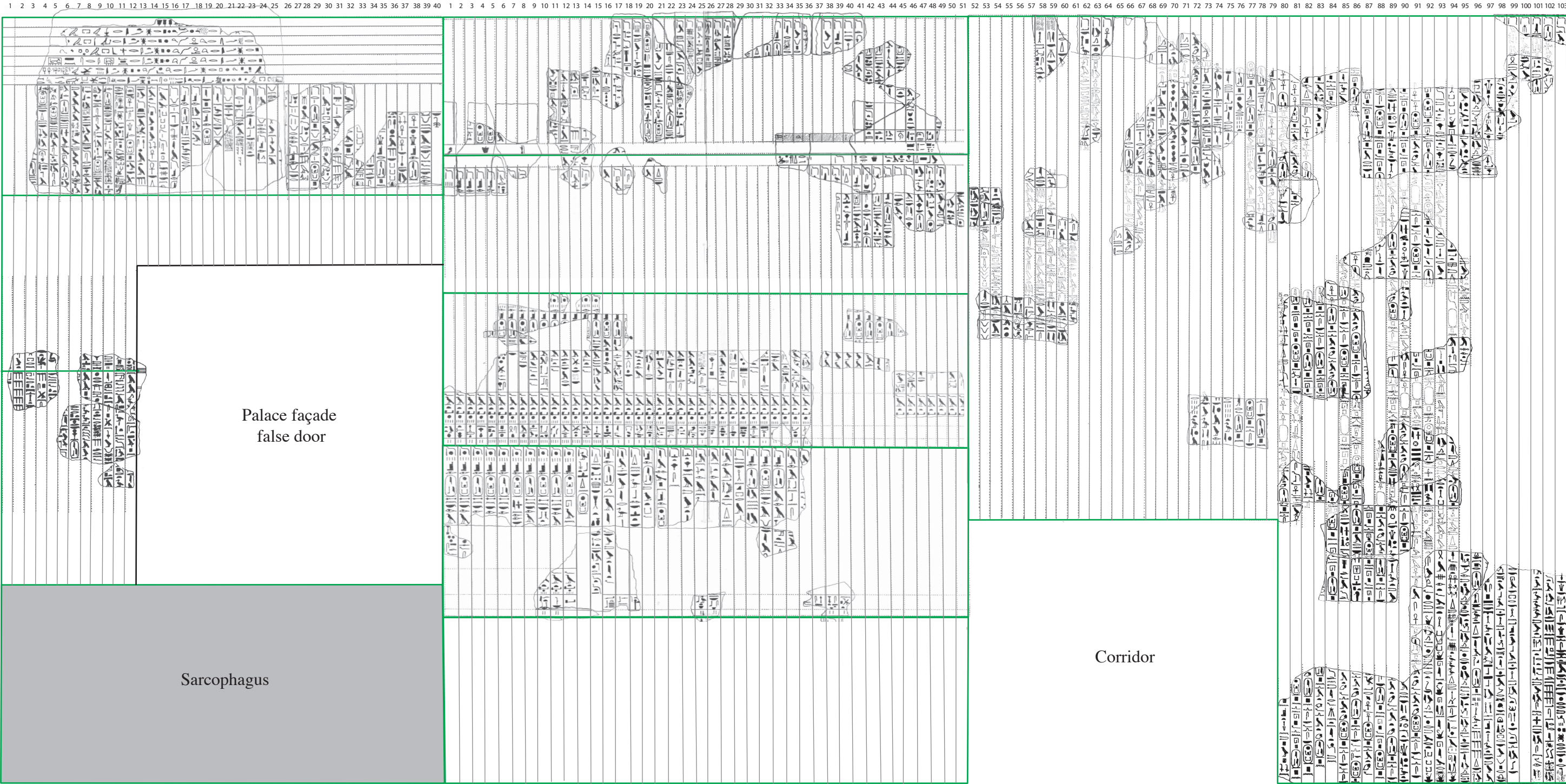
- Vischak, D. 2003. 'Common ground between Pyramid Texts and Old Kingdom tomb design: the case of Ankhmahor'. *Journal of the American Research Center in Egypt* 40: 133–57.
- 2006. 'Agency in Old Kingdom elite tomb programs: traditions, locations, and variable meanings'. In Fitzenreiter, M. and M. Herb (eds), *Dekorierte Grabanlagen im Alten Reich. Methodik und Interpretation: Beiträge*: 255–76. London: Golden House.
- Willems, H. 1988. *Chests of life. A study of the typology and conceptual development of Middle Kingdom standard class coffins*, Mededelingen en Verhandelingen van het Vooraziatisch-Egyptisch Genootschap "Ex Oriente Lux" 25 Leiden: Ex Oriente Lux.
- 2008. *Les Textes des Sarcophages et la démocratie: éléments d'une histoire culturelle du Moyen Empire Égyptien*. Edited by Christiane Zivie-Coche. Paris: Cybèle.
- 2010. 'The First Intermediate Period and the Middle Kingdom'. In Lloyd, A. B. (ed.), *A companion to ancient Egypt* 1: 81–100. Blackwell Companions to the Ancient World. Chichester; Malden, MA: Wiley-Blackwell.
- 2014. *Historical and archaeological aspects of Egyptian funerary culture: religious ideas and ritual practice in Middle Kingdom elite cemeteries*, Culture and History of the Ancient Near East 73. Leiden; Boston: Brill.
- 2017. 'The method of "sequencing" in analyzing Egyptian funerary texts: the example of Coffin Texts spells 283 and 296'. In Bickel, S. and L. Díaz-Iglesias (eds), *Studies in ancient Egyptian funerary literature*, Orientalia Lovaniensia Analecta 257: 599–619. Leuven: Peeters.
- Zibelius, K. 1972. *Afrikanische Orts- und Völkernamen in hieroglyphischen und hieratischen Texten*, Beihefte zum Tübinger Atlas des Vorderen Orients B (Geisteswissenschaften) 1. Wiesbaden: Reichert.
- Zorn, O. and Bisping-Isermann, D. 2011. *Die Opferkammern im Neuen Museum Berlin*. Museale Studien. Berlin: Michael Haase.

J/F/Nw

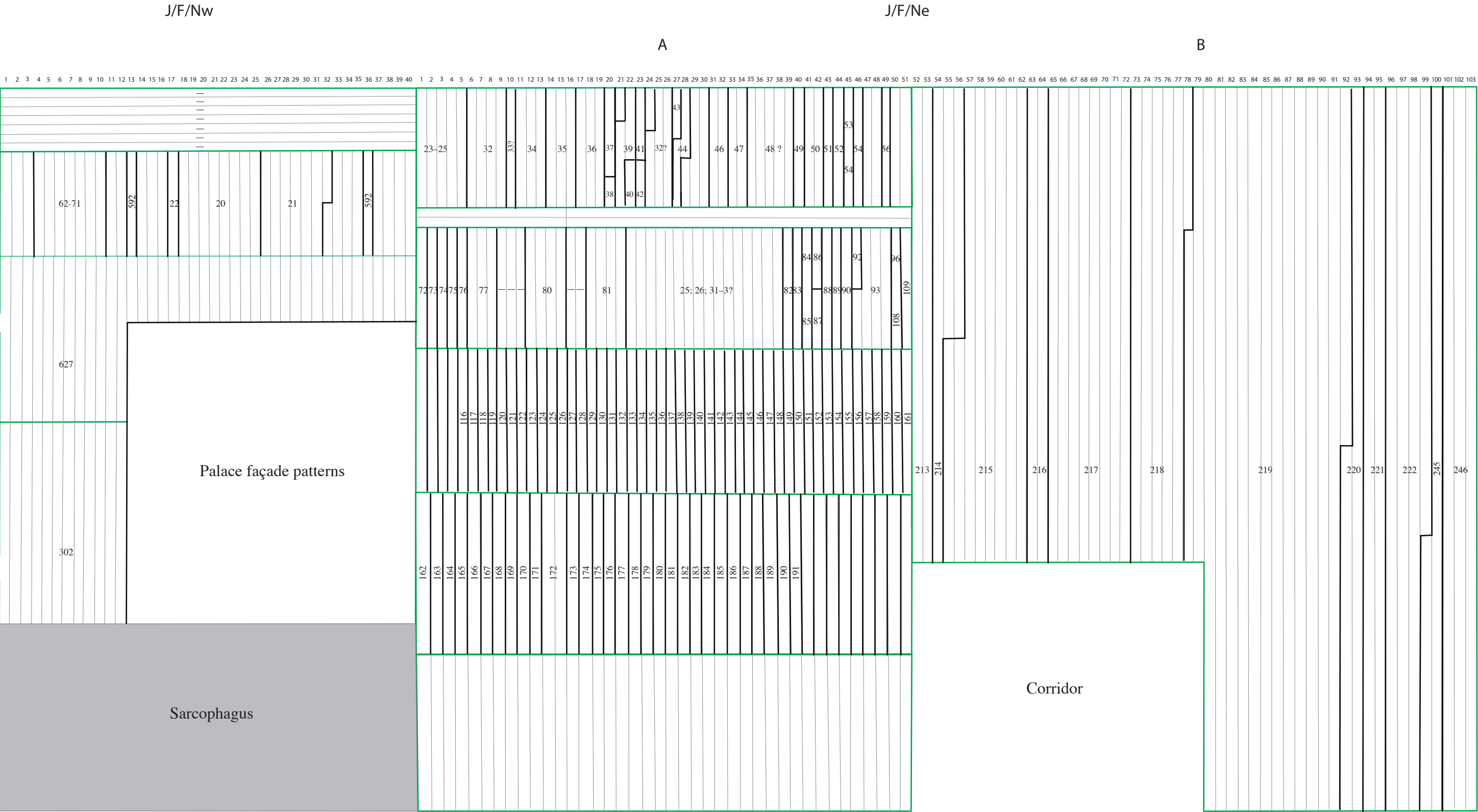
J/F/Ne

A

B



North wall – Texts



North wall – Spells

J/F/Se

J/F/Sw

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91

Palace façade patterns

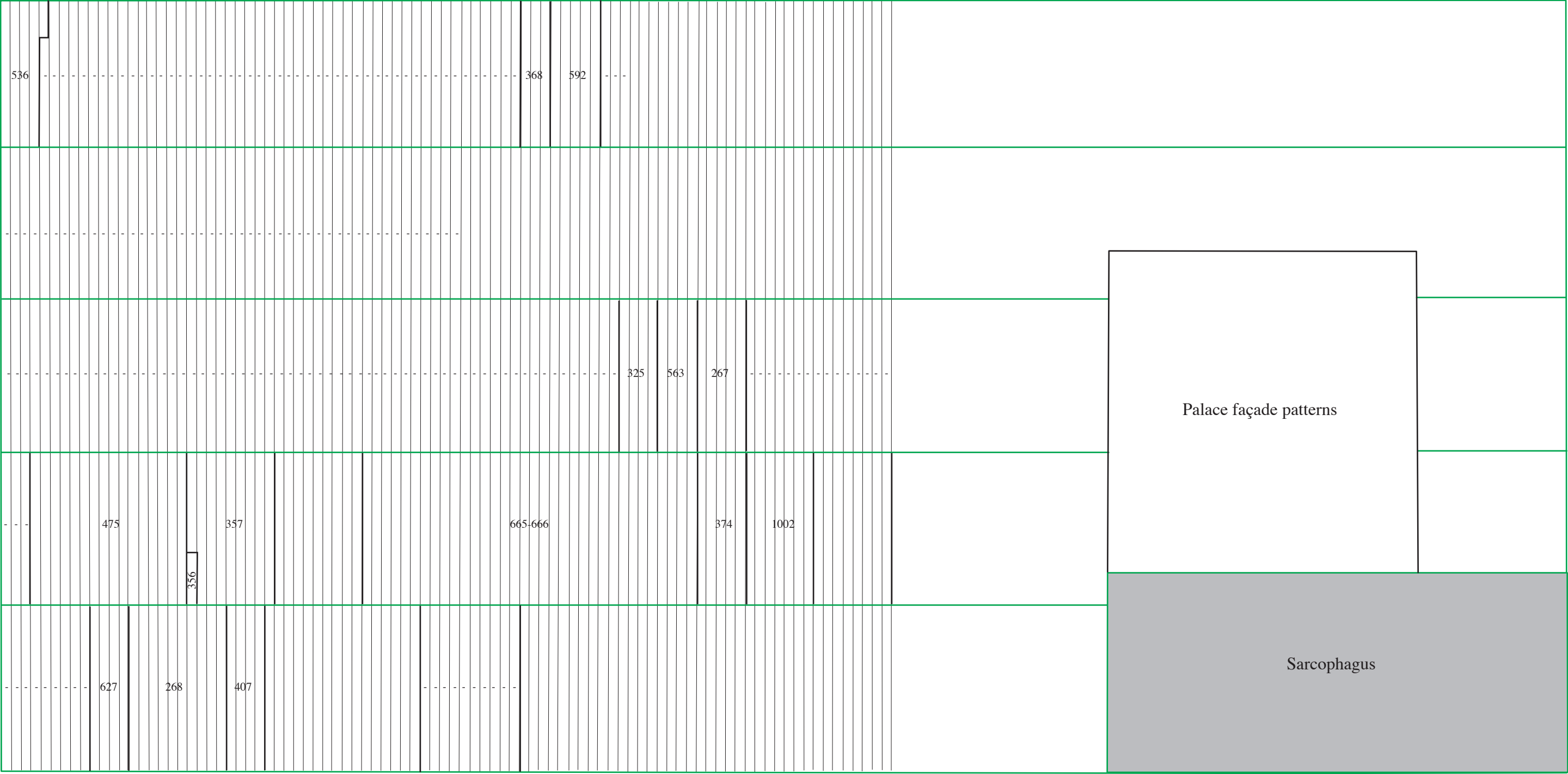
Sarcophagus

South wall – Texts

J/F/Se

J/F/Sw

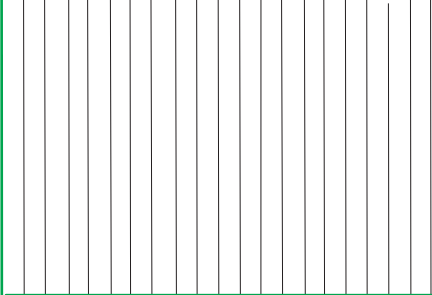
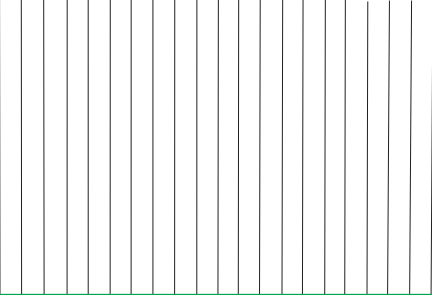
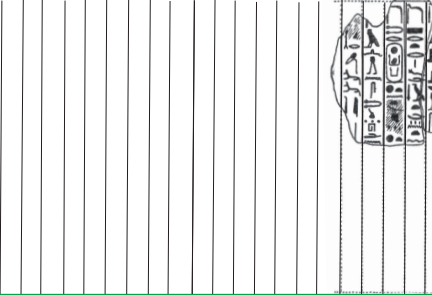
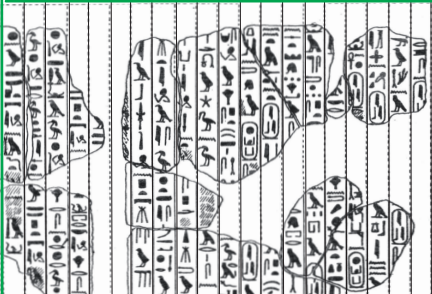
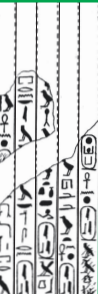
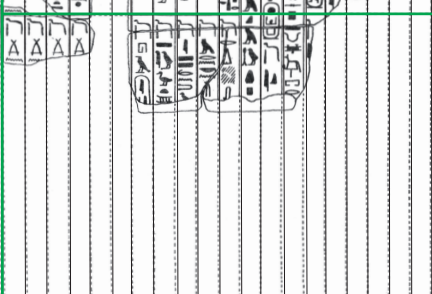
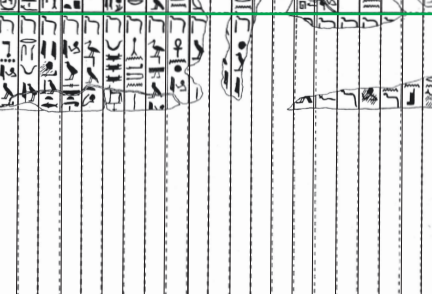
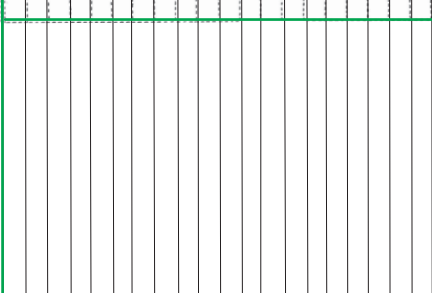
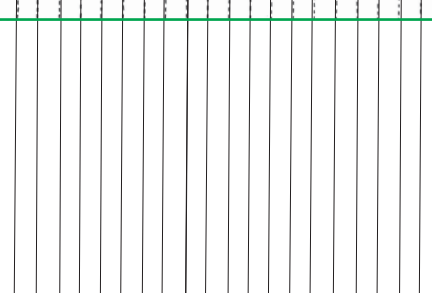
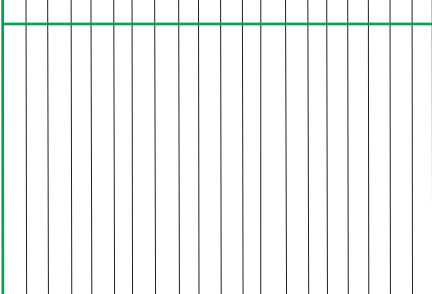
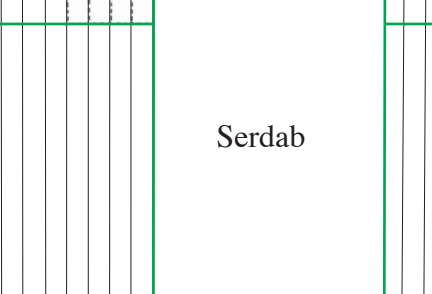
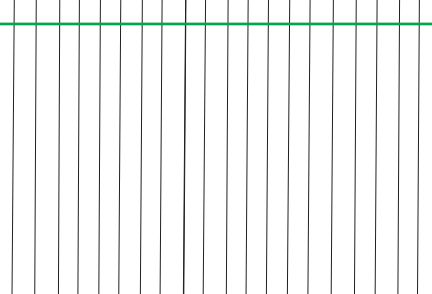
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South wall – Spells

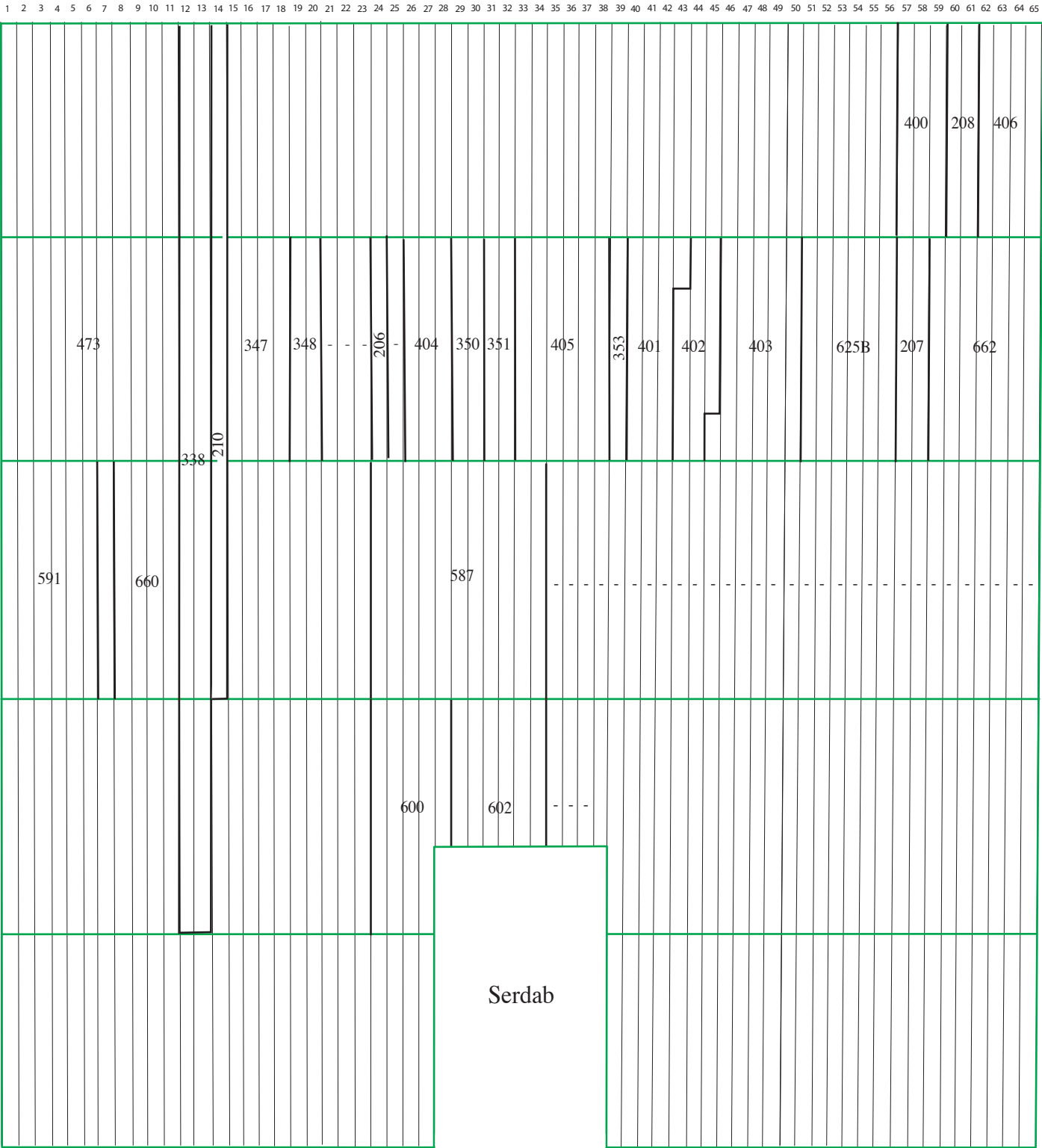
J/F/E

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65

Serdab

J/F/E



East wall – Spells