ANCIENT EGYPTIAN

A linguistic introduction

ANTONIO LOPRIENO
Department of Near Eastern Languages and Cultures
University of California, Los Angeles

AU

CONTENTS

PREFACE

This book is neither a grammar of Ancient Egyptian for Egyptologists nor a handbook for the study of hieroglyphs. Rather, it has been written aiming at the needs of a multiplicity of audiences. To use a fashionable word, I wanted to address the interdisciplinary interests of linguists and Egyptologists. In order to achieve this result, I had to resort to sometimes quite diverse methodological frames and scholarly conventions, which have been and are at best indifferent to each other, and at times even in overt conflict. On the one hand, the main goal of the book is to provide the linguistic audience with an introduction to the historical grammar of Ancient Egyptian, one of the oldest and longest documented languages of mankind: from its oldest (Old Egyptian) to its most recent phase (Coptic), Ancient Egyptian remained in productive written use for more than four millennia – from about 3000 BCE to the Middle Ages. On the other hand, the book also tries to reach the numerically much smaller public of Egyptologists interested in linguistic issues, i.e. my own professional milieu, offering a global presentation of the language from a structural as well as historical point of view.

Traditionally, the study of Ancient Egyptian has been the monopoly of the latter group of scholars, who operate within the discipline called "Egyptology." In this field of scholarship, the study of the language is necessarily rooted in philology and has been mainly pursued with the aim of editing or translating Egyptian and Coptic texts. The handbooks for the academic and individual study of Egyptian, first and foremost Alan H. Gardiner, *Egyptian Grammar* (Oxford University Press, third edn 1957), share the assumption that potential readers are Egyptologists interested primarily in acquiring the philological tools needed for their professional encounter with Ancient Egypt: Gardiner's grammar bears the appropriate, although certainly modest subtitle *Being an Introduction to the Study of Hieroglyphs*. While much work has been done since then in Egyptian grammar and some of the theoretical foundations of Gardiner's approach to Egyptian have been shaken if not damaged, a linguist interested in the strategies adopted by Egyptian as a language will experience some distress in finding the answers to his or her queries in modern secondary literature.

This distress is not due to a lack of linguistic sophistication among Egypt-ologists; on the contrary, the presence of Egyptological linguistics as one of the most vital components of the field of Egyptology is one of the reasons for my trying to make its discoveries available to other linguists. But I doubt that the work of the more linguistically inclined Egyptologists has been or is adequately noticed by professional linguists. For one, scholars of Egyptian linguistics tend to follow the conventions of the broader field of Egyptology in terms of attitudes to transliteration (just to quote an example: for a variety of reasons, there still is no universally accepted system for the pho-netic rendition of Egyptian) and translations (which address the semantic, rather than the grammatical sphere, interlinear translations being discour-aged or unknown). Secondly, over the last decades we have preferred to engage in a dialog among ourselves rather than with the broader audience of comparative and general linguists, and we have developed conceptual and terminological conventions that often appear opaque, if not downright incomprehensible to the non-initiated. This is due in part to the specific methodological frame adopted by modern students of Egyptian, the so-called "Standard theory," in part to the ignorance of Egyptian among linguists. Only recently, thanks to a new generation of Egyptologists also trained in linguistics, has there been a shift towards an increased interest in theoretical issues. The present work is a product of this change of perspectives within my own scholarly community: although I have tried to explain unusual terms when they appear for the first time, a certain familiarity with linguistic terminology is expected from the Egyptological readership of the book; as for general linguists, while no previous Egyptological knowledge is required, I expect them to devote particular attention to the introduction and to the chapter on graphemics, where basic preliminaries on chronology, typology, and notational conventions of Egyptian are discussed at some length.

The concept of "Ancient Egyptian" is taken throughout this book in its broader scope to comprise all the stages of the language from Old Egyptian to Coptic. While focusing on Old and Middle Egyptian, i.e. on the language of classical literature, the analysis proceeds diachronically to investigate the main features of Late Egyptian and Coptic, especially when this evolution displays changes which attract the linguist's attention. In essence, I have tried to present synchronical sketches of the main properties of classical Egyptian, Late Egyptian, and Coptic and to consider the mechanisms of linguistic change inherent in the history of the Egyptian language.

Although philological and not interlinear, the translation of Egyptian and Coptic passages provides in parentheses enough information for the non-specialists to allow them to recognize all the elements of the morpho-syntactic as well as lexical structure of the sentence. Most Egyptian texts are referred to according to the Egyptological conventions as established in the *Lexikon der Ägyptologie* (Wiesbaden: Harrassowitz, 1975–1986), in short *LÄ*; only less commonly quoted texts are accompanied by a reference to their edition. Notes, bibliography and indices try to blend the expectations of the two potential readerships for which the book is intended. In the notes, whose number had to be limited to an acceptable minimum, books and articles are usually referred to in short title; the reference in full detail, however, is given both at first mention and in the bibliography at the end of the volume. While abbreviations are used in the notes, I have tried to avoid them in the final bibliography; for the most common ones, the reader is referred to the list provided in vols. I and IV of the *LÄ*. In the notes, I often mention only the more recent treatments of a particular topic, even if the interpretation offered by the authors differs from mine; this is the reason for the relative paucity of references to older secondary literature. Modern treatments, how-ever, usually contain abundant references to previous studies as well. The index of Egyptian and Coptic passages and of Egyptian grammatical words is intended mainly for the Egyptological audience, whereas the register of topics is conceived with a linguistic public in mind.

This book is dedicated to my wonderful daughter Victoria, who is more often than I can bear away from my eyes, but always closest to my heart.

MAJOR CHRONOLOGICAL DIVISIONS OF EGYPTIAN HISTORY

Greek Period	332–30 BCE
Alexander the Great	332–323
Ptolemaic Period	323–30 BCE
Roman Period	30 BCE – 395 CE
Byzantine Period	395–641
Islamic Egypt	641–present

Archaic Egypt: Dyn. I–II	ca. 3000–2650 BCE
Old Kingdom: Dyn. III–VIII	ca. 2650–2135
Dyn. III	2650–2590
Dyn. IV	2590–2470
Dyn. V	2470–2320
Dyn. VI	2320–2160
First Intermediate Period: Dyn. VII–XI	ca. 2160–2040
Middle Kingdom: Dyn. XI–XIV	ca. 2040–1650
Dyn. XI	2040–1990
Dyn. XII	1990–1785
Second Intermediate Period: Dyn. XV–XVII	ca. 1785–1550
Dyn. XIII–XIV	1785–1650
Dyn. XV–XVI (Hyksos)	1650–1550
New Kingdom: Dyn. XVII–XX	ca. 1560–1070
Dyn. XVII	1560–1552
Dyn. XVIII	1552–1306
Dyn. XIX	1306–1186
Dyn. XX	1186–1070
Third Intermediate Period: Dyn. XXI–XXV	1070–656
Dyn. XXI	1070–945
Dyn. XXII–XXIV (Libyans)	945–712
Dyn. XXV (Nubians)	712–664
Late Period: Dyn. XXVI–XXX	664–341
Dyn. XXVI	664–525
Dyn. XXVII (Persians)	525–404
Dyn. XXVIII–XXX	404–343
Dyn. XXXI (Persians)	343–332

1

The language of Ancient Egypt

1.1   The genetic frame

Ancient Egyptian represents an autonomous branch of the language phylum called Afroasiatic in the USA and in modern linguistic terminology,[1] Hamito-Semitic in Western Europe and in comparative linguistics,[2] Semito-Hamitic mainly in Eastern Europe.[3] Afroasiatic is one of the most widespread language families in the world, its geographic area comprising, from antiquity to the present time, the entire area of the eastern Mediterranean, northern Africa, and western Asia.

The most important languages of the ancient and modern Near East – with the notable exceptions of Sumerian and Hittite – belong to this family, which is characterized by the following general linguistic features:[4] a preference for the fusional (or flectional) type;[5] the presence of bi- and tri-consonantal lexical roots, capable of being variously inflected; a consonantal system displaying a series of pharyngealized or glottalized phonemes (called *emphatics*) alongside the voiced and the voiceless series; a vocalic system originally limited to the three vowels /a/ /i/ /u/; a nominal feminine suffix *-at*; a rather rudimentary case system, consisting of no more than two or three cases; a nominal prefix *m-*; an adjectival suffix *-ī* (called *nisba*, the Arabic word for "relation"); an opposition between prefix conjugation (dynamic) and suffix conjugation (stative) in the verbal system; a conjugation pattern singular first person *'a-*, second person *ta-*, third person masculine *ya-*, feminine *ta-*, plural first person *na-*, with additional suffixes in the other persons.

The individual branches of the Afroasiatic family are:

(1) ANCIENT EGYPTIAN, to which this book is devoted.

(2) SEMITIC, the largest family of the Afroasiatic phylum.[6] The term derives from the anthroponym "Sem," Noah's first son (Gen 10,21–31; 11,10–26) and has been applied since A. L. Schlözer (1781) to the languages spoken in ancient times in most of western Asia (Mesopotamia, Palestine, Syria, Arabia), and in modern times, as a consequence of invasions from the Arabian peninsula in the first millennium CE, in northern Africa and

Ethiopia as well. The traditional grouping of Semitic languages is in three subgroups:

(a) *Eastern Semitic* in Mesopotamia, represented by Akkadian (2350–500 BCE), further divided into two dialects and four typological phases: Old Akkadian (2350–2000 BCE), Old Babylonian and Old Assyrian (2000–1500 BCE), Middle Babylonian and Middle Assyrian (1500–1000 BCE), New Babylonian (1000–Hellenistic times, the phase from 600 BCE on also called "Late Babylonian") and New Assyrian (1000–600 BCE). A western variety of Old Akkadian was spoken and written in the Early Bronze Age in the kingdom of Ebla in northern Syria ("Eblaite").

(b) *Northwest Semitic* in Syria and Palestine, divided into: (1) Northwest Semitic of the second millennium BCE, which includes inscriptions from Byblos in Phoenicia and from the Sinai peninsula, Amorite (inferred from northwest Semitic proper names and expressions in Old Akkadian and Old Babylonian), Early Canaanite (glosses and linguistic peculiarities in the Akkadian international correspondence from the Late Bronze archive of el-Amarna in Egypt), and especially Ugaritic, the only northwest Semitic literary language of the second millennium BCE; (2) Canaanite in Palestine and Phoenicia during the first millennium BCE, including Hebrew (the most important language of the group, documented in a literature ranging from the Bible to modern times and resurrected as a spoken vehicle in modern Israel), Phoenician and Punic, and Moabite; (3) Aramaic in Syria and progressively in Mesopotamia as well: Old Aramaic (1000–700 BCE), Classical or Imperial – including Biblical – Aramaic (700–300 BCE); for the later phases (from the second century BCE to survivals in modern times), Aramaic is divided into Western Aramaic (Jewish, Samaritan and Christian Palestinian Aramaic, Nabatean, Palmyrene, and modern Western Aramaic in a few present-day Syrian villages) and Eastern Aramaic (Syriac, Babylonian Aramaic, Mandean, and contemporary remnants in eastern Turkey, northern Iraq, and the Caucasus).

(c) *Southwest Semitic* in the Arabian peninsula, including: (1) Arabic, often grouped with Northwest Semitic into a "Central Semitic,",[7] the most widespread Semitic language, spoken at present by 150 million people from Morocco to Iraq; contemporary written Arabic (which overlies a variety of diversified spoken dialects) represents a direct continuation of the language of the Qur'ān and of classical literature; inscriptions from northern and central Arabia in an earlier form of the language (called "pre-classical North Arabic") are known from the fourth century BCE to the fourth century CE; (2) Epigraphic South Arabian, contemporary with pre-classical North Arabic,

followed by modern South Arabian dialects; (3) Ethiopic, the result of the emigration to eastern Africa of South Arabian populations, subdivided into classical Ethiopic ("Gəʕəz") from the fourth century CE, the liturgical language of the Ethiopian church, and the modern Semitic languages of Ethiopia (Tigre, Tigriña in Eritrea; Amharic, Harari, Gurage in central Ethiopia).

Some of the most important characteristics of the Semitic languages are: in phonology, the articulation of "emphatic" phonemes as ejectives in Ethiopia and as pharyngealized stops in the Arabic world; in morphology, a tendency to the paradigmatization of the triradical root, which is inflectionally or derivationally combined with a series of consonantal and vocalic phonemes to produce regular, i.e. predictable morphological forms; a preference for the Verb-Subject-Object syntactic order in the older forms of the languages, usually replaced by a SVO (in Arabic and Hebrew) or SOV order (in the modern Semitic languages of Ethiopia, probably under the influence of the Cushitic adstratum) in the later phases.

(3) BERBER, a group of related languages and dialects[8] currently spoken (mostly in competition with Arabic) by at least five million speakers in northern Africa from the Atlantic coast to the oasis of Siwa and from the Mediterranean Sea to Mali and Niger. Although written records exist only since the nineteenth century, some scholars take Berber to represent the historical outcome of the ancient language of the more than 1000 "Libyan" inscriptions, written in autochthonous or in Latin alphabet and documented from the second century BCE onward. The linguistic territory of Berber can be divided into seven major areas: the Moroccan Atlas (Tachelhit, Tamazight), central Algeria (Zenati), the Algerian coast (Kabyle), the Gebel Nefusa in Tripolitania (Nefusi), the oasis of Siwa in western Egypt (Siwi), the Atlantic coast of Mauretania (Zenaga), and the central Sahara in Algeria and Niger (Tuareg). Isolated communities are also found in Mali, Tunisia, and Libya. The Tuareg have preserved an old autochthonous writing system (*tifinay*), ultimately related to the alphabet of the old Libyan inscriptions.

Characteristic for Berber phonology is the presence of two allophonic varieties of certain stops: a "tense" articulation, connected with consonantal length, as opposed to a "lax" one, often accompanied by spirantization. E.g., the two variants of /k/ are [kk] (tense) and [x] (lax). In nominal morphology, masculine nouns normally begin with a vowel, whereas feminine nouns both begin and end with a *t*-morpheme. In the verb, aspectual oppositions (unmarked, intensive, perfect) are conveyed by prefixes, the subject being indicated by a prefix (first person plural and third person singular), a suffix

(first person singular and third person plural), or a discontinuous affix consisting of a prefix and a suffix (second person). The unmarked order of the sentence, which can be modified in presence of pragmatic stress, is VSO.

(4) CUSHITIC, a family of languages[9] spoken by at least fifteen million people in eastern Africa, from the Egyptian border in northeast Sudan to Ethiopia, Djibouti, Somalia, Kenya, and northern Tanzania. The existence of the Cushitic languages has been known since the seventeenth century. While this family does not seem to be documented in the ancient world – Meroitic, the still imperfectly understood language used and written in the Kingdom of Napata and Meroe between the third and the sixth cataract of the Nile from the third century BCE to the fourth century CE, was a Nilo-Saharan language – one of its languages, Beja, shows close etymological and typological ties with Ancient Egyptian.[10] Cushitic languages are divided into four major groups: (a) *Northern* (Beja, in coastal Sudan); (b) *Central* (Agaw, in northern Ethiopia); (c) *Eastern*, further subdivided into Saho-Afar in southern Eritrea, Somali in Somalia, Oromo in central Ethiopia, Highland East Cushitic in central and southern Ethiopia, and various other languages in Ethiopia, such as Dullay and Western Omo-Tana, and in northern Kenya, such as Rendille; (d) *Southern* (Alagwa, Burunge, Iraqw, etc.), spoken in southern Kenya and Tanzania.

Cushitic languages are characterized by the presence of a set of glottalized consonants and in some cases, such as Somali, by vowel harmony. Although they display tonal oppositions, these are, unlike for example in Chinese, morphosyntactically determined. In the area of morphology, Cushitic languages tend to be very synthetic; there are two genders (masculine, often covering the lexical areas of "greatness" or "importance", and feminine, often used for the semantic realm of "smallness"), a complex system of plural formations, and a varying number of cases: the Proto-Cushitic binary system with nominative in *ú* or *í* and absolutive case in *a* has either been abandoned, as in southern Cushitic, or has evolved into a more complex system with numerous cases derived from the agglutination of postpositions. The verbal system tends to replace the Afroasiatic prefix conjugation (still present in Beja and Saho-Afar, with remnants in other languages as well) with a suffix conjugation based on the auxiliary verb "to be"; it is very rich in tenses, which are often derived from the grammaticalization of conjunctions and auxiliaries. Cushitic languages grammaticalize pragmatic oppositions such as topic or focus, while the preferred syntactic order is SOV.

(5) CHADIC, a family of about 140 languages and dialects[11] spoken by more than thirty million speakers in sub-Saharan Africa around Lake Chad

(Nigeria, Cameroon, Chad, and Niger). They are currently subdivided into the following groups: (a) *Western* (Hausa, Bole, Ron, Bade/Warji, Zaar, etc.); (b) *Biu-Mandara* (Tera, Bura/Higi, Mandara, Daba, Bata, etc.); (c) *Eastern* (Somrai, Nancere, Kera, Dangla, etc.); (d) *Masa*. The most important language of this family, Hausa, enjoys the status of first language in northern Nigeria and Niger and of second language and regional lingua franca in the entire West Sahara. Chadic languages have a very rich consonantal inventory: like Cushitic, they display glottalized consonants, and they are often tonal. There is no gender distinction in the plural, verbal forms are normally not conjugated for person. The unmarked word order is SVO.

(6) OMOTIC, a family of languages spoken by approximately one million speakers along both shores of the Omo River and north of Lake Turkana in southwest Ethiopia, formerly thought to represent the western branch of Cushitic.[12] It is still a matter of debate whether Omotic really belongs to the Afroasiatic language family. Characteristic features of the Omotic languages are the absence of emphatic phonemes and the almost total loss of gender oppositions.

1.2　History of the Egyptian language

Ancient Egyptian shows the closest relations to Beja (Cushitic), Semitic and Berber, more distant ones to the rest of Cushitic and Chadic. With its more than four millennia of productive history (3000 BCE – 1300 CE), Egyptian proves an ideal field for diachronic and typological investigation. The history of Egyptian[13] can be divided into two main stages, characterized by a major change from synthetic to analytic patterns in the nominal syntax and the verbal system. Each of these two stages of the language can be further subdivided into three different phases, affecting primarily the sphere of graphemics.

(1) EARLIER EGYPTIAN: the language of all written texts from 3000 to 1300 BCE, surviving in formal religious texts until the third century CE. Its main phases are:

(a) *Old Egyptian*, the language of the Old Kingdom and of the First Intermediate Period (3000–2000 BCE). The main documents of this stage of the language are the religious corpus of the "Pyramid Texts" and a sizeable number of so-called "Autobiographies," which are accounts of individual achievements inscribed on the external walls of the rock tombs of the administrative élite.

(b) *Middle Egyptian*, also termed *Classical Egyptian*, from the Middle Kingdom to the end of Dyn. XVIII (2000–1300 BCE). Middle Egyptian is

the classical language of Egyptian literature, conveyed in a variety of texts that can be classified according to four main genres: (1) Funerary texts, especially the "Coffin Texts" inscribed on the sarcophagi of the administrative élite. (2) "Instructions," i.e. wisdom texts normally addressed from a father to a son, which conveyed the educational and professional expectations of Egyptian society. The most renowned examples are the "Instructions of the Vizier Ptahhotep" and the "Instructions for Merikare." Some of these moral texts, such as the "Admonitions of Ipu-Wer," are in fact philosophical discussions *ex eventu* on the state of the country taking as a point of departure the political evolution from the Old to the Middle Kingdom, the historical phase generally referred to as First Intermediate Period. (3) "Tales," which are narratives relating adventures of a specific hero and representing the vehicle of individual, as opposed to societal concerns. The most famous specimens of this genre are the "Tale of Sinuhe" and the "Shipwrecked Sailor." (4) "Hymns," poetical texts with religious contents, written in praise of a god or of the king. Famous examples are provided by the "Hymn to the Nile" and by the cycle of "Hymns to King Sesostris III." Some texts, such as the story of Sinuhe and especially the "Eloquent Peasant," combine features and contents of all main genres. Besides literary texts, the Middle Egyptian corpus comprises administrative documents, for example the Kahun papyri, and historical records.

(c) *Late Middle Egyptian*, the language of religious texts (rituals, mythology, hymns) from the New Kingdom to the end of Egyptian civilization. Late Middle Egyptian, also called *égyptien de tradition*, coexisted with later Egyptian (see below) for more than a millennium in a situation of diglossia. From a grammatical point of view, Late Middle Egyptian maintains the linguistic structures of the classical language, but on the graphemic side, especially in the Greco-Roman period (Ptolemaic Egyptian: third century BCE to second century CE), it shows an enormous expansion of the set of hieroglyphic signs.

Linguistically, earlier Egyptian is characterized by a preference for synthetic grammatical structures: for example, it displays a full set of morphological suffixes indicating gender and number: m. s. *nt̠r.ø* "god", f. s. *nt̠r.t* "goddess", m. pl. *nt̠r.w* "gods", f. pl. *nt̠r.wt* "goddesses"; it exhibits no definite article: *rmt̠* "the man, a man"; it maintains the VSO order in verbal formations: *sd̠m=k n=f* "may you listen to him."

(2) LATER EGYPTIAN, documented from Dyn. XIX down to the Middle Ages (1300 BCE – 1300 CE):

(a) *Late Egyptian* (1300–700 BCE), the language of written records from the second part of the New Kingdom. It primarily conveys the rich entertainment literature of Dyn. XIX, consisting of wisdom and narrative texts, for example the "Tale of the Two Brothers," the "Tale of Wenamun," or the "Instructions of Ani" and the "Instructions of Amenemope," but also of some new literary genres, such as mythological tales or love poetry. Late Egyptian was also the vehicle of Ramesside bureaucracy, such as the archival documents from the Theban necropoleis or of school texts, called "Miscellanies." Late Egyptian is not a completely homogeneous linguistic reality; rather, the texts of this phase of the language show various degrees of interference with classical Middle Egyptian, with the tendency of older or more formal texts, such as historical records or literary tales, to display a higher number of borrowings from the classical language ("literary Late Egyptian"), as opposed to later or administrative texts, where Middle Egyptian forms are much rarer ("colloquial Late Egyptian").[14]

(b) *Demotic* (seventh century BCE to fifth century CE), the language of administration and literature during the Late Period. While grammatically closely akin to Late Egyptian, it differs from it radically in its graphic system. Important texts in Demotic are the narrative cycles of Setne-Khaemwase and of Petubastis and the instructions of Papyrus Insinger and of Onkh-sheshonqi.

(c) *Coptic* (fourth to fourteenth century CE),[15] the language of Christian Egypt, written in a variety of Greek alphabet with the addition of six or seven Demotic signs to indicate Egyptian phonemes absent from Greek. As a spoken, and gradually also as a written language, Coptic was superseded by Arabic from the ninth century onward, but it survives to the present time as the liturgical language of the Christian church of Egypt, which is also called the "Coptic" church.

Besides displaying a number of phonological evolutions, later Egyptian tends to develop analytic features: suffixal markers of morphological oppositions tend to be dropped and functionally replaced by prefixal indicators such as the article: Late Eg. and Dem. *pꜣ-nt̠r*, Coptic *p-noute* "the god," Late Eg. and Dem. *tꜣ-nt̠r(.t)* "the goddess," *nꜣ-nt̠r(.w)* "the gods"; the demonstrative "this" and the numeral "one" evolve into the definite and the indefinite article: Coptic *p-rôme* "the man" < "this man", *ou-rôme* "a man" < "one man"; periphrastic patterns in the order SVO supersede older verbal formations: Coptic *ma-re pe=k-ran ouop*, lit. "let-do your-name be-pure" = "your name be hallowed," as opposed to the synthetic classical Egyptian construction *wꜥb(.w) rn=k*, lit. "shall-be-purified your-name."

Due to the centralized nature of the political and cultural models under-lying the evolution of Ancient Egyptian society, there is hardly any evidence of dialect differences in pre-Coptic Egyptian.[16] However, while the writing system probably originated in the south of the country,[17] the origins of the linguistic type represented by earlier Egyptian are to be seen in Lower Egypt, around the city of Memphis, which was the capital of the country during the Old Kingdom, those of Later Egyptian in Upper Egypt, in the region of Thebes, the cultural, religious and political center of the New Kingdom. Coptic displays a variety of dialects that do not vary very profoundly: they differ mainly in graphic conventions and sporadically in morphology and lexicon, but hardly at all in syntax.

1.3   A brief look at Egyptological linguistics

Since the decipherment of the Egyptian writing systems during the last century (section 2.5), the grammatical study of Egyptian has been treated primarily within four successive approaches:[18] (a) the Berlin School and the recovery of Egyptian morphology; (b) A. H. Gardiner and the fixation of the canon for the study of the Egyptian language; (c) H. J. Polotsky and the "Standard theory" of Egyptian syntax; (d) a contemporary shift to functional linguistic models.

(a) To A. Erman and the so-called "Berlin School" modern Egyptology owes three major contributions: (a) the division of the history of Egyptian into two main phases[19] (called by Erman *[Alt]ägyptisch* and *Neuägyptisch*, roughly corresponding to "earlier" and "later" Egyptian respectively); (b) the basic identification of the morphosyntactic inventory of all the stages of the language; (c) the monumental *Wörterbuch der ägyptischen Sprache* (1926–53), as yet the most complete lexicographical tool available for Egyptian. The approach of Erman and his followers over three generations (K. Sethe, G. Steindorff, E. Edel, W. Westendorf) was in fact modeled upon a historical-philological method similar to the one adopted in contemporary Semitic linguistics, which also conditioned the choices of the Berlin School in terms of grammatical terminology or transliteration.

(b) Although very much in Erman's "neogrammatical" tradition, the contribution by scholars such as A. H. Gardiner[20] and B. Gunn[21] brought to the study of Egyptian a pragmatic approach derived from their Anglo-Saxon tradition; the characteristics of Egyptian are checked against the background of the grammar of the classical languages and of what has come to be referred to as "Standard European": if Erman and the Berlin School were method-ologically "semitocentric," Gardiner and the linguistic knowledge he

represented were "eurocentric," in the sense that the grammatical study of Egyptian was seen at the same time as the study of the differences between Egyptian and Western "mind,"[22] and its main purpose becomes the correct *translation* of Egyptian texts.

(c) The problem of the adequacy of an Egyptian grammar based on the theoretical categories of standard European languages became acute in the 1940s with the work of H. J. Polotsky,[23] whose broader reception did not begin before the late 1960s, and found its most complete treatments by Polotsky himself in 1976 for classical Egyptian and in 1987–90 for Coptic.[24] The basic feature of Polotsky's "Standard theory"[25] is the systematic applica-tion of substitutional rules for syntactic nodes such as nominal phrases (NP) or adverbial phrases (AP): most Egyptian verbal phrases (VP)[26] are analyzed as syntactic "transpositions" of a verbal predication into a NP- or an AP-node. But this syntactic conversion affects dramatically their predicative function. In case of a *nominal* transposition, they lose their predicative force altogether; for example, on the basis of the paradigmatic substitution between an initial verbal form (*jj.n=j m nʔ.t=j* "I came from my city") and a noun in initial position (*zẖ3w m nʔ.t=j* "The scribe is[27] in my city"), the structure of the former Egyptian sentence should be analyzed as "*The-fact-that-I-came (is) from-my-city." In case of an *adverbial* transposition, they acquire the value of a circumstantial predicate: in the sentence *z3-nh.t ḏd=f* "Sinuhe speaks," because of the possibility of paradigmatic substitution between the VP "speaks" and any AP (*z3-nh.t m nʔ.t=j* "Sinuhe is in my city"), the underlying structure is taken to be "*Sinuhe (is) while-he-speaks."

(d) In recent years, due to a certain extent to the increased awareness among Egyptologists of the idiosyncrasies of the Polotskyan system and of methodological developments in the field of general linguistics,[28] the Standard theory seems to have exhausted its innovative potential, being superseded by more verbalistic approaches, i.e. by interpretations of Egyptian syntax in which verbal phrases, rather than being "converted" into other parts of discourse, maintain their full "verbal" character.[29] The present writer understands himself as a member of this latter generation of Egyptological linguists. Although much of the recent production on this topic aims at clarifying the differences between the Polotskyan model and more recent trends,[30] which tend to pay more attention to discourse phenomena and to pragmatics, in this book I have tried to refrain from delving into the histor-ical debate, preferring to suggest in each individual case the solution to a linguistic problem of Egyptian grammar that I find most appealing from a general linguistic as well as diachronic standpoint. In this respect, this book is

probably best understood as a historical grammar of Egyptian within the theoretical models provided by the recent tendencies in Egyptological linguistics.

Further reading

Černý, J. and S. I. Groll. *A Late Egyptian Grammar.* Studia Pohl, Series Maior IV (Rome: Pontifical Biblical Institute, third edn 1984) [A structural grammar of "colloquial," i.e. scholastic and administrative Late Egyptian].

Crum, W. E. *A Coptic Dictionary* (Oxford: Clarendon Press, 1939) [The standard dictionary of Coptic, with very detailed philological references].

Erman, A. and H. Grapow. *Wörterbuch der ägyptischen Sprache* (Berlin: Akademie-Verlag, 1926-53) [Still the fundamental dictionary for Old, Middle, and Late Egyptian).

Faulkner, R. O. *A Concise Dictionary of Middle Egyptian* (Oxford University Press, 1962) [A lexicographical aid for the translation of Middle Kingdom texts].

Gardiner, A. *Egyptian Grammar, Being an Introduction to the Study of Hieroglyphs* (Oxford University Press, 1927; third edn 1957) [A detailed tool for the philological study of the classical language].

Graefe, E. *Mittelägyptische Grammatik für Anfänger* (Wiesbaden: Harrassowitz, fourth edn 1994) [A user-friendly manual for academic instruction in classical Egyptian].

Johnson, J. H. *Thus Wrote 'Onchsheshonqy. An Introductory Grammar of Demotic.* Studies in Ancient Oriental Civilization XLV (Chicago: Oriental Institute, second edn 1991) [A short, but comprehensive introduction to Demotic script and grammar].

Junge, F. "Sprachstufen und Sprachgeschichte," in *Zeitschrift der Deutschen Morgenländischen Gesellschaft. Supplement VI* (Stuttgart: Franz Steiner, 1985), 17-34 [The most modern presentation of the history of Egyptian].

Lambdin, Th. O. *Introduction to Sahidic Coptic* (Macon: Mercer University Press, 1983) [The standard academic handbook for teaching classical Coptic].

Polotsky, H. J. *Collected Papers* (Jerusalem: Magnes Press, 1971) [For the development of the "Standard theory" of Egyptian syntax].

Schenkel, W. *Einführung in die altägyptische Sprachwissenschaft.* Orientalistische Einführungen (Darmstadt: Wissenschaftliche Buchgesellschaft, 1990) [The essential companion for the study of the history of linguistic thinking in Egyptology].

2

Egyptian graphemics

2.1   Introduction

The basic graphic system of the Egyptian language for three fourths of its life as a productive language, i.e. from about 3000 BCE to the first centuries of our era, is known as "hieroglyphic writing."[1] This term has been used since the Ptolemaic period (323–30 BCE) as the Greek counterpart (ἱερογλυφικὰ γράμματα "sacred incised letters") to the Egyptian expression *mdw.w-nṯr* "god's words." Throughout Egyptian history, hieroglyphs were used primarily for monumental purposes, their main material support being stone or, less frequently, papyrus. For cursive uses the hieroglyphic system developed two handwriting varieties, called "Hieratic" (ἱερατικὰ γράμματα "priestly writing"), documented from the Old Kingdom through the third century CE, and "Demotic" (δημοτικὰ γράμματα "popular writing"), from the seventh century BCE to the fifth century CE. In a process beginning in Hellenistic times and concluded with the complete Christianization of the country in the fourth century CE, hieroglyphs and their manual varieties were gradually superseded by alphabetic transcriptions of words, and then of whole texts, inspired by the Greek alphabet with the addition of Demotic signs to render Egyptian phonemes unknown to Greek. The final result of this process is the emergence of "Coptic," the name given to the Egyptian language and its alphabet in its most recent form, which remained in productive use from the fourth century to the end of the first millennium CE, when it was superseded by Arabic as the common language of the country.

Unlike other writing systems of the Ancient Near East, for example Mesopotamian cuneiform, hieroglyphs were never used to write down any language other than Egyptian, except for their later adoption in Meroitic.[2] However, the so-called Protosinaitic inscriptions[3] of the second millennium BCE show that hieratic signs may have inspired the shape of Northwest Semitic alphabetic signs. As for Demotic, some of its sign-groups were adopted and phonetically reinterpreted in Nubia for the writing of Meroitic (third century BCE to fourth century CE);[4] this language is still imperfectly

understood in both its grammar and its lexicon, but it certainly did not belong to the Afroasiatic phylum.

2.2   The basic principles of hieroglyphic writing

Egyptian hieroglyphs are a variable set of graphemes, ranging from about 1000 in the Old Kingdom (third millennium BCE) down to approximately 750 in the classical language (second millennium BCE), then increasing to many thousands during the Ptolemaic and Roman rule in Egypt, from the third century BCE to the second century CE. They are *pictographic* signs representing living beings and objects, such as gods or categories of people, animals, parts of the human or animal body, plants, astronomical entities, buildings, furniture, vessels, etc.

But these pictograms are not organized within a purely ideographic system; rather, they represent a combination of phonological and semantic principles.[5] An Egyptian word usually consists of two components:

(1) A sequence of *phonograms*, each of which represents a sequence of one, two, or three consonantal phonemes; hence their label as monoconsonantal (such as $\mathbb{A}$ /m/), biconsonantal (such as $\square$ /p-r/), or triconsonantal signs (such as $\triangle$ /ḫ-t-p/). Phonograms convey a substantial portion of the phonological structure of the word: normally all the consonants, less regularly the semiconsonantal or semivocalic glides /j/ and /w/, vowels remaining for the most part unexpressed. Biconsonantal and triconsonantal signs are often accompanied by other phonograms, mostly monoconsonantal, which spell out one or two of their phonemes, allowing in this way a more immediate interpretation of the intended phonological sequence; these phonograms are called "complements." The phonological value of the phonograms is derived from the name of the represented entity by means of the *rebus principle*, i.e. by applying the same phonological sequence to other entities semantically unrelated to them. For example, from the representation of water $\overline{\underline{\underline{\sim}}}$ *maw is derived the phonological value of this sign as /m-w/. It needs to be stressed that frequently, in this process of derivation, only a segment of the original sequence of phonemes of the represented entity, usually the strong consonants (*consonantal principle*), is isolated to function as general phonogram: for example the sign for a house $\square$ *pāruw, is used for the sequence /p-r/. In later times, the consonantal principle was expanded by the so-called *acrophonic principle*, i.e. by the derivation of a phonological value from the first consonantal sound of the represented entity.

(2) The sequence of phonograms is usually followed by a *semagram*, called in the Egyptological custom "determinative," which classifies a word according to its semantic sphere: for example, a sitting man $\overset{\vartheta\vartheta}{\underline{\mathbb{H}}}$ expresses the lexical realm of "man, mankind," a sitting man touching his mouth $\overset{\ell\vartheta}{\underline{\mathbb{H}}}$ the domain of "eating, speaking, thinking, sensing," a scribe's equipment $\overset{\vartheta}{\mathbb{H}}$ the area of "writing," a stylized settlement $\otimes$ identifies the word as a toponym.

While some words of common use (pronouns, prepositions, a few nouns and verbs such as *rn* "name" or *ḏd* "to say") are written only phonologically, i.e. only with a combination of consonantal signs <r> + <n>, <ḏ> + <d> indicating the sequences /r-n/ and /ḏ-d/ respectively, many items of the basic vocabulary of Egyptian are expressed by semagrams which indicate their own semantic meaning. They do this *iconically* (by reproducing the object itself), through *rebus* (by portraying an entity whose name displays a similar phonological structure), or *symbolically* (by depicting an item metaphorically or metonymically associated with the object). These signs are called *logograms* (also labeled *ideograms* by Egyptologists): for example, the hieroglyph which represents the enclosure of a house $\square$ is used to indicate iconically the concept "house" (*pāruw); the sign representing a duck $\overset{\mathbb{A}}{\Longrightarrow}$ means "son" (*ziȝ) by virtue of the phonetic identity between the Egyptian words for "duck" and for "son"; the cloth wound on a pole $\daleth$, a sacred emblem placed on the pylons of Egyptian temples, through symbolic association means "god" (*nāṯar). In order to distinguish the logographic use ($\square$ = *pāruw = "house") from the phonological use of the same sign on the basis of the rebus principle ($\square$ = /p-r/, without any semantic connection to the word in which it appears), logographic uses are often marked by a stroke following the sign.

Egyptian writing also displays a set of twenty-four "alphabetic," i.e. monoconsonantal signs (table 2.1). Although these cover almost completely the inventory of consonantal and semiconsonantal phonemes of the language – the two exceptions being the etymological /ʔ/,[6] which remained unexpressed, and the /l/, originally conveyed by the graphemes <n>, <r>, and <n+r>, for which an autonomous sign, derived from the hieroglyph $\overset{\mathcal{L}\mathcal{L}}{\daleth}$, appears only in Demotic – hieroglyphs never developed into a genuine alphabet, but always maintained the original combination of word-signs (*logograms*) and sound-signs (*phonograms*). Also, unlike most other systems of pictographic origin, such as Mesopotamian cuneiform or Chinese ideograms, Egyptian hieroglyphs kept their original iconicity throughout their entire history without developing stylized forms. On the contrary, in later periods

(section 2.4f) the iconic potential of the system was further unfolded by the addition of new signs and of idiosyncratic phonetic values for existing signs.

This shows that, historically, the development of alphabetic writing is not, as often assumed, the predictable outcome of a non-alphabetic system,[7] but the result of an underlying difference in the "philosophy of writing":[8] with the breakthrough of the Hellenistic cultural *koinē* and, eventually, with the final victory of Christianity in Egypt during the second and third century, when a changed cultural and religious setting favored the adoption of an alphabetic system, hieroglyphs were completely superseded by the Coptic alphabet, which was written from left to right and consisted of the Greek letters and of six (in some dialects seven) Demotic signs for the indication of phonemes absent from Greek. These supplementary letters are in all dialects ɰ = /š/, ϥ = /f/, ϩ = /h/, ϫ = /c/, ϭ = /kʲ/, † = /ti/, plus Bohairic ϧ/Akhmimic ϧ = /x/. In good Coptic manuscripts in Sahidic – the dialect of classical literature – a superlinear stroke (called in German *Vokalstrich*) marks a syllable which does not display a full vowel in the Greek sense of the word (i.e. ⲁ, ⲉ, (ⲉ)ⲓ, ⲟ, (ⲟ)ⲧ, or ⲱ), but rather a *schwa* or the syllabic pronunciation of a consonant; for example ϩⲱⲧⲃ̄ = /hoːtəb/ or /hoːtb/.[9]

Beginning with the late Old Kingdom, from about 2150 BCE, Egyptian developed a subsystem of hieroglyphic orthography to express a sequence of "consonant+vowel." From its beginning, but especially in the New Kingdom, this subsystem was used for the writing of words of foreign – mostly Northwest Semitic – origin, but at times also for the graphic rendition of Egyptian words. This procedure, known as "syllabic orthography,"[10] allowed the rendering of vowels by combining Egyptian monoconsonantal or biconsonantal graphemes displaying a sequence of strong+weak consonant (such as *k+ꜣ*, *r+j*, *p+w*) in sign-groups with specific syllabic values. Thus, glides (*'aleph*, *yod* and *waw*) were used to express vowels, in a procedure similar to the use of *matres lectionis* in Northwest Semitic. While regular correspondences are still elusive and disagreements concerning the vocalic values of specific sign-groups, therefore, are doomed to persist, the general characteristics of syllabic orthography are well understood. The system combines three principles: the so-called "Devanāgari principle" (from the name of the Indian writing system), according to which the unmarked vocalic value of each basic sign is "consonant+/a/" within a word or "consonant+/ø/" at its end (for example *šꜣ* for /ša/ or /š#/), with the optional additional glide read vocalically (i.e. *j* for /i/ and *w* for /u/); the "cuneiform principle," according to which the sign-group is to be read with the vowel phoneme it has in the underlying Egyptian word from which this sign is borrowed (for example the foal ⸗ *jw* for /ʔu/ or the

Table 2.1   Monoconsonantal hieroglyphic signs

Sign	Entity depicted	Transliteration	Phonological value
	vulture	ꜣ (aleph)	earlier /ʀ/ > later /ʔ/
	flowering reed	j (yod)	earlier /j/ > later /ʔ/
(1) or (2)	(1) two reed flowers (2) two strokes	jj or y	/j/ as in English *yoke*
	human forearm	' (ayin)	/ʕ/ as in Arabic *ka'ba*
	quail chick	w (waw)	/w/
	foot	b	/b/
	stool	p	/p/
	horned viper	f	/f/
	owl	m	/m/
	water	n	/n/
	human mouth	r	/r/
	reed shelter	h	/h/ as in English *he*
	twisted wick	ḥ	/ħ/ as in Arabic *aḥmad*
	placenta	ḫ	/x/ as in German *Buch*
	animal's belly	ẖ	/ç/ as in German *ich*
	bolt	z	/z/
	folded cloth	s	/s/
	pool or lake	š	/š/ as in English *she*
	hill slope	q	/q/ as in Arabic *qur'ān*
	basket with handle	k	/k/
	stand for jar	g	/g/
	bread loaf	t	/t/
	tethering rope	ṯ	/c/ as in English *choke*
	human hand	d	/d/
	snake	ḏ	/ɟ/ as in English *joke*
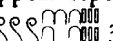
hare over the water ⟨glyph⟩ *wn* for /wan/); the "consonantal principle" of the conventional hieroglyphic system, in which the sign-group stands only for the consonantal phoneme regardless of the accompanying glide, i.e. it is a mere graphic variant of the consonantal sign (for example ⟨glyph⟩ *bw* for /b/).[11]

Table 2.1 displays the set of Egyptian monoconsonantal signs, accompanied by their pictographic content, their Egyptological transliteration, and their phonological value. The "alphabetic" signs cover the entire set of consonantal phonemes of the classical language, which will be discussed in section 3.4. The only exception is /l/, a phoneme conveyed by different combinations of signs (see above). In the conventional Egyptological "reading" of an Egyptian text, which does not pay attention to the original pronunciation of the words, a short vowel [e] is inserted between the consonants of a word (*ḥtp* = [ḥetep]); semivocalic glides are mostly read like the corresponding vowel (*jmn* = [imen], *prw* = [peru]); pharyngeal /ʕ/ and laryngeal /ʔ/ are both read as [a].

The writing system also had a set of hieroglyphic signs used to convey logographically the numbers $10^0 \ldots 10^6$ and the fractions 1/2, 1/3, and 1/4.[12] To indicate natural numbers, signs appear repeated and organized sequentially from the highest to the lowest (⟨glyphs⟩ 356 = 3x100, 5x10, 6x1).

Here follows a specimen[13] of how the hieroglyphic system worked. The same text is presented in the four ways in which a hieroglyphic text could be written. Numbers indicate the sequence of the individual signs; phonograms are indicated in *italic*, logograms in SMALL CAPITALS, determinatives in SMALL CAPITALS and "quotes"; additional phonemes necessary to complete the grammatical structure of the corresponding words are added in parentheses.
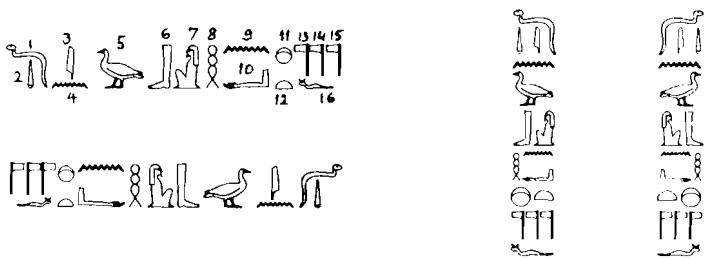
TRANSLITERATION: [1]*ḏ* [2]MDW [3]*j* - [4]*n* [5]*gb* - [6]*b* - [7]"GOD" [8]*ḥ* - [9]*n* - [10]

[11]PSḎ - [12]*t* - 13-14-15"GODS" - [16]*f*

TRANSCRIPTION: *ḏ(d)*   *mdw(.w)*   *jn* *gbb*   *ḥn*ʿ   *psḏ.t=f*

TRANSLATION: "To say   the words   by Geb   with   his Ennead"

CONVENTIONAL READING: [ḏed me'duu in 'gebeb 'ḥena peseḏe'tef]

Table 2.2   Samples of Hieratic and Demotic writing
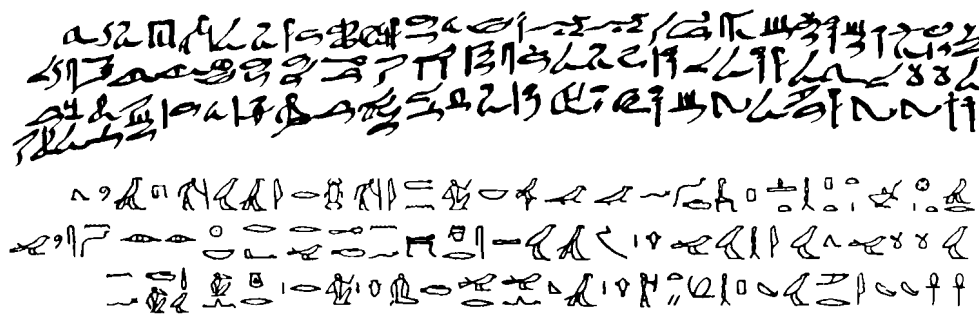
Hieratic of Dyn. XII (Pt. 4,2-4) with hieroglyphic transcription
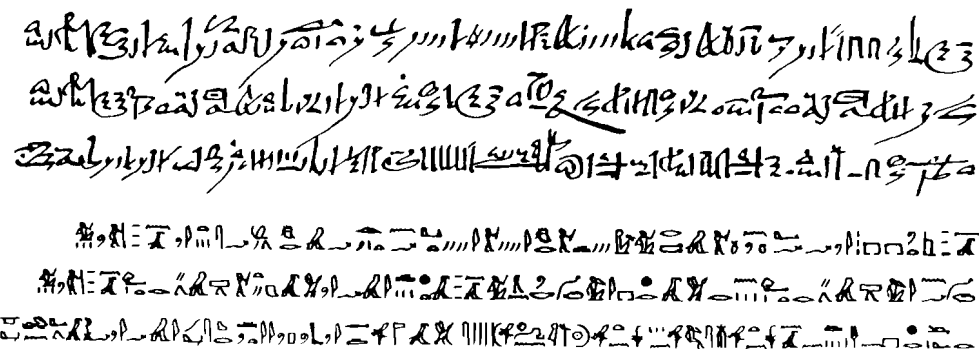
Hieratic of Dyn. XX (pAbbott 5,1-3) with hieroglyphic transcription
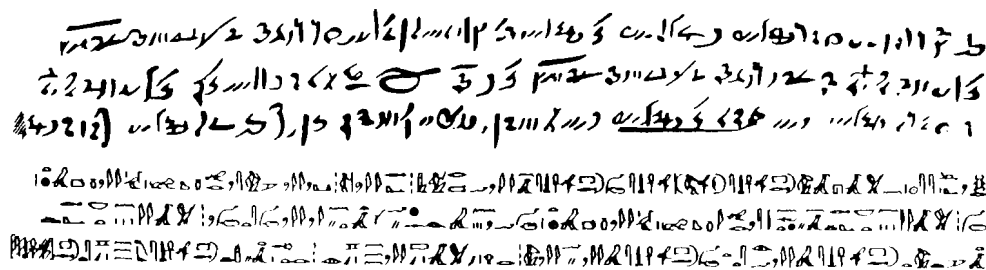
Demotic of the third century BCE (Dem. Chron. 6,1-3) with hieroglyphic transcription

The hieroglyphic system was used mainly for monumental purposes, more rarely (in a cursive form) for religious texts in the Middle and the New Kingdom. During their history, however, hieroglyphs developed two manual varieties: Hieratic (2600 BCE to third century CE) represents a direct cursive rendering, with ligatures and diacritic signs, of a sequence of hieroglyphic signs; Demotic (seventh century BCE to fifth century CE) modifies radically the writing conventions by introducing a shorthand-like simplification of Hieratic sign-groups. Table 2.2 shows a sample of Hieratic and Demotic writing followed by a hieroglyphic transcription.[14] It should be noted that the conversion from Demotic into hieroglyphs is a purely artificial exercise of modern scholars and was never practised in antiquity.

The basic orientation of the Egyptian writing system, and the only one used in the cursive varieties, is from right to left, with signs facing the right; in monumental texts, as in the example above, the order may be inverted to left to right for reasons of symmetry or artistic composition.

2.3   Connotational devices in the hieroglyphic system

One should observe that, whatever its primary function within its linguistic system, a pictogram is bound to maintain a figurative immediacy which may have an impact on its perception as a sign, i.e. on its connotative potential. Here lies, as suggested above, a major difference between Egyptian hieroglyphs and other graphic systems which made use of ideographic principles: eventually, they tend to develop stylized forms and to break, as it were, the semiotic directness of the sign, favoring its non-ideographic use. But this final divorce between represented entity and its linguistic function never took place in monumental hieroglyphs, with the consequence that the conventions described in section 2.2 could be modified to the advantage of the figurative content of the sign. This happened in Egyptian in a threefold way:

(a) First of all, the hieroglyphic sign could become the vehicle for the expression of a cultural attitude vis-à-vis the entity it represented. For example, signs referring to the divine or royal sphere usually preceded in the writing any other sign belonging to the same compound noun, independently of their actual syntactic position: the word *ḥm-nṯr* "priest," lit. "servant of the god" is written with the logogram for *nṯr* "god" preceding the phonogram *ḥm* "servant": ⁞. This device is called "honorific anticipation." Conversely, a sign referring to a negatively connotated entity (such as a dead person, an enemy, a malevolent god) could be modified by means of graphic deletion, substitution with a less loaded sign, or mutilation of one of its features, in order to neutralize apotropaically its negative potential:[15] in Pyr.

566cN ⸻ *wnm=f* "he eats," the determinative of a bodiless man who touches his mouth is apotropaically used instead of the more usual ⸻, in order to prevent the sign of a man from harming the referent of the third person pronoun, i.e. the dead King.

(b) Secondly, specific sequences of hieroglyphic signs could acquire a function as recitational instruction about the preceding phrase. This happens, for example, in the case of the expression ⊚ *zp 2* "twice," "two times," which means that the preceding phrase should be read (i.e. recited) twice: *j.gr zp 2* "be silent, be silent."

(c) Thirdly, the array of functional values of a specific sign could be expanded beyond the limits of the fixed convention: a sign could be given a different phonological value from the traditionally established one(s), especially by using it to indicate only the first consonantal phoneme of the corresponding word (*acrophonic principle*). The idiosyncratic use of the sign was bound to attract the observer's attention to the sign itself, opening the way to symbolic interpretations of its figurative content. This second type of connotational expansion of the hieroglyphic system is found sporadically from the Old Kingdom onward, with the emergence of "cryptographic" solutions,[16] but developed dramatically in Ptolemaic times, leading to a radical change in the laws regulating the use of hieroglyphs.

2.4   The historical development of Egyptian writing

The principles described in section 2.2 and the devices discussed in section 2.3 characterize the entire hieroglyphic writing and its manual derivatives in their historical development. They represent the common denominator of this system from its onset at the end of the predynastic period (about 3100 BCE) to the final disappearence of hieroglyphs and Demotic in the fourth and fifth century CE. But in these 3500 years a number of typological evolutions affected the Egyptian writing systems; they correspond to slight modifications or adjustments in the underlying "philosophy of writing." While the principles described above basically apply to each of these typological stages, innovations concern the historical emergence of changes in their *distribution*; these changes are sufficiently meaningful to justify a treatment of the resulting graphic form as a new "type" of hieroglyphic or derivative writing. What is even more significant is that these typological changes take place in concomitance with specific historical events which themselves represent major turning points in other aspects of Egypt's cultural life as well. Accordingly, one can observe a succession of six typological phases in the

history of Egyptian writing: (a) the archaic period, (b) the Old Kingdom system, (c) the classical model, (d) the Ramesside orthography, (e) Demotic, (f) the Ptolemaic system.

(a) *The archaic period.* The historical event with which the emergence of writing in Egypt is traditionally associated is the gradual development of a centralized system of government covering the entire country, or at least a large portion thereof: this is the so-called "unification" of Egypt and the parallel emergence of an Egyptian state. Although the details are by no means clear,[17] this historical phase runs simultaneously with the development of a writing system from the last kings of the predynastic period at Abydos (Scorpion, Iri-hor, Ka, Narmer) at the end of the fourth millennium to the establishment of a rather complete set of mono- and biconsonantal phonograms by the end of Dyn. III (about 2700 BCE). In these early inscriptions on seals, seal impressions, palettes, short funerary stelae and other monuments pertaining to the royal or administrative sphere,[18] phonological and semantic principles are already intertwined, with a high number of signs functioning as logograms. For example, the name of the last predynastic king Narmer (about 3000 BCE), in Egyptian *n'r-mr* "striking catfish (?)" is written with the logogram ⳥ *n'r* "catfish" followed by the biconsonantal sign ⳤ indicating the two phonemes /m-r/: this latter sign is a pictogram representing a chisel and bears no transparent etymological connection to its use as phonogram in the word *mr* "sick": the reading is derived by means of the rebus principle. In the archaic writing, the notation of each word allows a degree of flexibility and a variety of options, with more than one concomitant writing for one concept: a possible example is offered by the rosette ⳥ *hrrt* and the falcon ⳤ *hrw*, which are both used as alternative writings for the word *hrw* "Horus," i.e. "the king."

(b) *The Old Kingdom.* With the emergence of a society strongly founded upon what has been described as "the bureaucratic mind,"[19] the quantity and the complexity of written documents expands dramatically (Dyn. IV–VI, 2650–2150 BCE). From this period we have a wealth of texts exhibiting a full-fledged writing system based on a systematic, rather than random application of the principles described in section 2.2. The inventory of signs is slightly over a thousand and the possibility of substitute writings for the same word is reduced in the case of logograms, but maintained for the phonetic signs: ⳥ *s-ḏ-sḏm-m*, ⳤ *s-ḏ-m-sḏm*, ⳥ *s-ḏ-sḏm*, and ⳤ *s-sḏm* are all alternate options for *sḏm* "to hear." Frequent use is made of phonetic

complementation both preceding and following the main sign. Texts from this period are mainly documents pertaining to the administration of royal funerary domains, legends on the walls of private tombs of the élite in the necropoleis of the Memphite area, autobiographies on the external walls of the rock-cut tombs in Upper Egypt, and the theological corpus of the "Pyramid Texts" in the burial chambers of the royal tombs from the end of Dyn. V (about 2330 BCE) through the end of the Old Kingdom.

(c) *The classical system.* In the Middle Kingdom (2050–1750 BCE), the authority of the royal court is reaffirmed after about a century of centrifugal tendencies towards provincial centers of power ("First Intermediate Period," 2150–2050 BCE). A newly developed school system for the education of the bureaucratic élite fixes Egyptian orthography by reducing the number of graphic renditions conventionally allowed for any given word: while in the Old Kingdom the spectrum of scribal possibilities was relatively broad, only one or two of the potential options are now selected as the received written form(s) of the word. This conventional orthography of the word usually consists either of a logogram (for the most basic nouns of the lexicon) or of a sequence of phonograms, often complementized, followed by a determinative: for example ⳥ /sḏm/+/m/+det. "ABSTRACT" for *sḏm* "to hear." When compared with the Old Kingdom system, logograms have become less common and slightly varying hieroglyphic shapes have been reduced to one basic form, for a total of about 750 signs.[20] The classical principles remain in use for monumental hieroglyphs as well as for manual Hieratic until the end of Dyn. XVIII (ca. 1300 BCE).

(d) *Ramesside orthography.* During early Dyn. XIX (from about 1310 to 1195 BCE), major changes affected the writing conventions of hieroglyphs and especially of Hieratic. In monumental texts, the space units within which sequences of hieroglyphs are formally arranged, i.e. the so-called "ideal squares," undergo an aesthetic readjustment: while in earlier epochs signs would contain either one larger sign (such as the owl ⳥ /m/) or else two rows of flat signs (for example a snake over a human mouth ⳤ /f-r/), two columns of narrow signs (such as a seat followed by a loaf of bread and a house for the word ⳥ *s.t* "seat"), with a maximum of *four* flat narrow hieroglyphs (as in the sequence ⳤ *ptpt*), they are now reorganized within a three-way structure, each "ideal square" containing now up to *nine* smaller fields: see the following example from a private tomb from Dyn. XIX,[21] where the small numbers indicate the order in which individual signs should be read.

Changes are even more significant in manual writing. Ramesside and late New Kingdom hieratic orthography is the product of two conflicting tendencies: on the one hand the need to guarantee the recognizability of words by maintaining in many instances their received orthography, on the other hand the desire to partially render in writing the conspicuous phonetic evolutions that had affected Egyptian since the fixation of classical conventions. The result is a constant interaction of the "ideographic" (i.e. historical) and the phonetic level, often within the same word: while the word $dr.t$ "hand" is still written with the logogram "HAND" followed by the phonetic complement /t/ and the stroke which usually accompanies ideograms ⌐ I, in spite of the fact that by that time the word had lost the final /t/ (as in Coptic ⲧⲱⲣⲉ), when it is followed by the third person possessive pronoun the received writing is completed by an additional /t/ (written <tw>) to indicate its permanence in the pronunciation: ⌐Iᴄᴇ "his hand" (as in Coptic ⲧⲟⲟⲧϥ). Similarly, the classical spelling of 𒀭 $ḫpr$ "to become," in which the phonetic complement /r/ accompanies the triliteral /ḫ-p-r/, is now often followed by a *new* phonetic complement /p/ (𒀭□ᶜ <ḫpr-r> + <p-w>), which mirrors more closely the contemporary pronunciation *[ḫaːpɜ] or *[ḫoːpɜ] (Coptic ϣⲱⲡⲉ); the verb 🦶⌐ʃ𝒜 $mšꜥ$ "to walk" (Coptic ⲙⲟⲟϣⲉ) is written in pAnastasi I 22,1 with a new determinative, which is in fact nothing else but the traditional writing of the verb $šm$ "to go" (now pronounced *[šeʔ], see Coptic ϣⲉ) employed in a new function: ⌐🦶⌐ <m> + <šmt> = *[maʔšɜ]. For the broader use of syllabic writing, which is now applied to the writing of Egyptian words, see section 2.2 above.
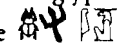
(e) *Demotic.* With the decay of a powerful centralized government in the first millennium BCE, centrifugal tendencies affect writing conventions as well. During Dyn. XXVI (seventh century BCE), a new form of cursive writing called "Demotic" (section 2.1) develops at first in the north of the country, where the royal residence was located, and is gradually extended to the southern regions, where a form of Hieratic survives for about a century ("abnormal Hieratic"). Unlike Hieratic, whose sign groups mirror the shape of the original hieroglyphs rather closely, Demotic signs break away from this tradition and adopt a relatively small set of stylized, conventional forms, in

which the connection to the hieroglyphic counterpart is hardly perceivable, and which are therefore more likely to be used in purely phonetic function. Determinatives have now lost to a large extent their function as lexical classifiers. While the demotic system was neither syllabic nor alphabetical, and precisely because the limited number of shapes it used to represent the language required a high degree of professional training on the part of the Late Period scribes, its development marks for Egypt the beginning of a divorce between monumental and cursive writing which will have a dramatic impact on the evolution of the hieroglyphic system as well.

Demotic remained in administrative and literary use until the end of the Roman period; the last dated text gives the year 452 CE.[22]

(f) *The Ptolemaic system.* The increasing consciousness of the symbolic potential inherent in the relation between the signs used to write words and the semantic meaning of the words themselves led already in the Late Period (from Dyn. XXI, ca. 1000 BCE) but particularly in Ptolemaic and Roman times (fourth century BCE to third century CE) to the development of previously unknown phonetic values and also of so-called cryptographic solutions.[23] This evolution, which originated in priestly circles and remained until the end the monopoly of a very restricted intellectual community, threatened on the one hand the accessibility of the system, favoring a dramatic increase in the number of signs, which now reaches many thousands;[24] on the other hand, it exploited the full array of potential meanings of the individual hieroglyphs, making the system more perfect as a pictorial-linguistic form (see section 2.3). And it is exactly this radical change in the nature of the writing system in the Greco-Roman period which is at the origin of the view, held in the Western world from Late Antiquity to the emergence of modern Egyptology (and still surviving to the present day in some aspects of popular culture), of the "symbolic", rather than functional character of the hieroglyphic writing: one need only think of the decorative use of Egyptian hieroglyphs during the Renaissance and the Neoclassical period in Europe.[25]

Unlike earlier conventions, the Ptolemaic system makes abundant use of orthographic, rather than phonetic puns, i.e. of associations of meaning based upon the writing of a word rather the identity of pronunciation between individual hieroglyphs: for example, the signs ⌐ and ⌐ were used in the classical system only to indicate the phonograms /g-s/ and /f/ respectively; in Ptolemaic Egyptian, they are creatively combined to represent the two verbs 'q "to enter" (with the f-snake "entering" the gs-sign) and prj "to come out"

(with the snake "coming out" of the *gs*-sign): ⌐ℛ⌐ *'q* "to enter" and ⌐⌐ *prj* "to exit." The most fundamental criterion followed in this functional expansion of the classical system is the "consonantal principle,"[26] according to which pluriconsonantal signs may acquire a new value: this new value is either based upon the phonetically strongest consonants of the sign (for example the triliteral sign ⌐ *nfr* may acquire the values /n/ or /f/) or upon the coalescence of homorganic sounds (such as the labials /p/ and /b/ in the sign ⌐ *jb*, which can be used to indicate /p/) or of neighboring consonants (for example ⌐ *jmn* for /j-m/). However, the so-called "acrophonic principle," according to which only the first consonant of a pluriconsonantal sign is kept, regardless of its phonetic strength, was applied in some religious contexts[27] and played a higher role in the development of Ptolemaic "cryptography,"[28] i.e. of a form of figurative writing in which the name of a god is written with (and at the same time his theological qualities iconically evoked by) specific hieroglyphic signs used alphabetically. Let us take for example the sequence ⌐⌐ ⌐⌐ for the name of the god Khnum.[29] Here the scarab, which is usually read *ḫpr*, is used with the acrophonic value *ḫ*, the lizard (unusual in this shape in the classical system)[30] with the value *n*, and the feather, originally *mꜣ'*, with the acrophonic value *m*; at the same time, this combination of signs evokes specific qualities of the god: his assimilation to the sun god Re through the scarab, to the funerary god Nehebkau through the reptile, and to the principle of Maat (truth, justice) through the feather. Cryptography, which had been sporadically used in religious contexts from the Old Kingdom onward,[31] is culturally similar to the "isopsephy" of classical antiquity and to the Jewish *qabbālāh*, i.e. to a numeric value attributed to alphabetic letters. With very few exceptions,[32] the Ptolemaic system was applied solely to monumental writing.

2.5 The end of the system and its rediscovery

We saw above that already in Hellenistic times there are sporadic instances of a Demotic text accompanied by Greek transcriptions; aimed at favoring a correct pronunciation, these reading helps are the sign of a divorce between Egyptian culture and its traditional writing systems. Gradually, the use of Greek transcriptions became more frequent: the first two centuries of our era saw the development of a whole corpus of mostly magical Egyptian texts in Greek letters (with the addition of Demotic signs to supplement it when phonologically required), known in the literature as "Old Coptic." To this cultural milieu we must also ascribe the only lengthy Egyptian text in Greek

Table 2.3 The Coptic alphabet

Sign	Conventional transliteration	Phon. value (section 3.6)	Coptic name of the letter (of Greek or Demotic origin)
ⲁ	*a*	/a/, /ʔ/	ⲁⲗⲫⲁ
ⲃ	*b*	/b/	ⲃⲏⲧⲁ, ⲃⲓⲇⲁ
ⲅ	*g*	/g/	ⲅⲁⲙⲙⲁ
ⲇ	*d*	/d/	ⲇⲉⲗⲇⲁ, ⲇⲁⲗⲇⲁ
ⲉ	*e*	/e/, /ʔ/	ⲉⲓ, ⲉⲓⲉ
ⲍ	*z*	/z/	ⲍⲏⲧⲁ, ⲍⲓⲧⲁ, ⲍⲁⲧⲁ
ⲏ	*ē*	/eː/, /ʔ/	ⲉⲏⲧⲁ, ⲏⲧⲁ, ⲉⲁⲧⲉ
ⲑ	*th*	/th/ /tʰ/ (Bohairic)	ⲑⲏⲧⲁ, ⲑⲓⲧⲁ, ⲑⲉⲑⲉ
ⲓ, ⲉⲓ	*i*	/i/	ⲓⲱⲧⲁ, ⲓⲟⲧⲁ, ⲓⲁⲩⲇⲁ
ⲕ	*k*	/k/, /g/	ⲕⲁⲡⲡⲁ, ⲕⲁⲡⲁ
ⲗ	*l*	/l/	ⲗⲁⲩⲇⲁ, ⲗⲁⲩⲗⲁ
ⲙ	*m*	/m/	ⲙⲏ, ⲙⲉ, ⲙⲓ
ⲛ	*n*	/n/	ⲛⲏⲛ, ⲛⲉ, ⲛⲓ
ⲝ	*ks*	/ks/	ⲝⲓ
ⲟ	*o*	/o/, /ʔ/	ⲟⲩ, ⲟ
ⲡ	*p*	/p/	ⲡⲓ
ⲣ	*r*	/r/	ⲣⲱ, ⲉⲣⲟ, ⲣⲟ
ⲥ	*s*	/s/	ⲥⲏⲙⲁ, ⲥⲓⲙⲁ
ⲧ	*t*	/t/, /d/	ⲧⲁⲩ
ⲩ, ⲟⲩ	*u*	/u/, /w/	ⲉⲉ, ⲩⲉ, ⲩⲁ
ⲫ	*ph*	/ph/ /pʰ/ (Bohairic)	ⲫⲓ
ⲭ	*kh*	/kh/ /kʰ/ (Bohairic)	ⲭⲓ
ⲯ	*ps*	/ps/	ⲯⲓ
ⲱ	*ō*	/oː/, /ʔ/	ⲱ, ⲁⲩ, ⲱⲟⲩ
ϣ	*š*	/ʃ/	ϣⲁⲓ, ϣⲉⲓ
ϥ	*f*	/f/	ϥⲁⲓ, ϥⲉⲓ
ⳉ	*x* (Bohairic)	/x/	ⳉⲁⲓ, ⳉⲉⲓ
ϧ	*x* (Akhmimic)	/x/	No name recorded
ϩ	*h*	/h/	ϩⲟⲣⲓ
ϫ	*j*	/c/, /j/	ϫⲁⲛϫⲓⲁ, ϫⲉⲛϫⲉ
ϭ	*c*	/kʲ/ /cʰ/ (Bohairic)	ϭⲓⲙⲁ
ϯ	*ti*	/ti/, /di/	ϯ

characters, namely pBM 10808,[33] in its grammatical structure a Late Middle Egyptian text, but displaying contemporary phonological outcomes. The pressure to adopt an alphabetic system increased with the christianization of the country, when religious reasons contributed to the divorce between Egyptian culture and its traditional writing system(s). In this respect, the third century CE represents the turning point: hieroglyphic texts exhibit a progressive decay both in their grammatical structure and in the formal appearance of the signs; the last dated hieroglyphic inscription is from the year 394 CE.[34] Demotic texts substantially decrease in number, Egyptian being replaced by Greek as a written language.[35] In the following century, the new convention, which we call "Coptic," appears completely established: the Egyptian language is now written in a Greek-derived alphabet, presented in table 2.3.[36] By the fifth century, the Egyptian élite had lost the knowledge of the nature of hieroglyphs: the *Hieroglyphiká* of Horapollo,[37] a hellenized Egyptian, offer a "decipherment" of the hieroglyphs fully echoing the late antique symbolic speculations.[38]

While the interest in matters Egyptian remained vivid in the West for the following centuries, it was only in modern times that the knowledge of the true nature of the writing system was recovered. In the seventeenth century Athanasius Kircher recognized the linguistic derivation of Coptic from the language of the hieroglyphs (which he still took to be a symbolic writing), and in the eighteenth century Jean Barthélemy suggested that the cartouches which surround some hieroglyphic words contain divine and royal names – an assumption which turned out to be correct. In 1799, during Napoleon's expedition to Egypt, the discovery of the so-called Rosetta Stone, a trilingual (Hieroglyphic, Demotic, and Greek) document from the Ptolemaic period found in the Egyptian town of Rosetta, provided the possibility to compare a text in two unknown writing systems (Demotic and hieroglyphs) with the same text in Greek; this event opened the way to the actual decipherment.

First methodological contributions were made by Silvestre de Sacy (1802), who laid down the criteria to be followed, and more substantial results were reached by Johan David Åkerblad for the Demotic section and especially by the English physician Thomas Young, who, however, did not progress beyond the royal names. The most decisive contribution to the decipherment of the hieroglyphs[39] was achieved by the French scholar Jean-François Champollion in his *Lettre à M. Dacier* (1822), and especially in the *Précis du système hiéroglyphique* (1824). On the basis of the writing of Greek names in the hieroglyphic text, Champollion was able to establish the presence of a pho-

netic component in the system, breaking away from the traditional symbolic approach that had prevailed in the West since the knowledge of this writing was lost in the first centuries CE. His point of departure were Ptolemaic royal names, traditionally written in hieroglyphic texts within a rope called "cartouche" ⬭ . After identifying the name of Ptolemy (Greek Πτολεμαῖος) in the sequence of signs ⬭⬭⬭⬭⬭ , he was able to establish a correspondence between the phonetic values he had ascribed to each hieroglyphic sign, namely <p-t-o-l-m-y-s>, and the values they displayed in royal names on other Ptolemaic monuments, for example Cleopatra (Greek Κλεοπάτρα), spelled <q-l-i-o-p-3-d-r-3-t>: ⬭⬭⬭⬭⬭⬭⬭. Thus, he was able to achieve the major breakthrough for a complete decipherment of the system.

With the adoption and expansion of Champollion's work by Richard Lepsius from 1837 onward[40] the decipherment can be considered completed: scholarly attention is now directed towards the study of the features of the Egyptian language. Subsequent generations of students of the language could concentrate primarily on the treatment of Egyptian grammar in terms of both its synchronic features and its historical development (section 1.3).

Further reading

Davies, W. V. *Egyptian Hieroglyphs* (London: British Museum, 1987) [An introductory presentation of the writing system with many examples and references].

Gelb, I. J. *A Study of Writing* (Chicago University Press, revised edn 1963) [An idiosyncratic, but fundamental text for the study of Egyptian writing within a comparative frame].

Iversen, E. *The Myth of Egypt and its Hieroglyphs in European Tradition* (Princeton University Press, 1961) [For the history of the decipherment].

Schenkel, W. "Schrift," in *Lexikon der Ägyptologie* V, 713–35 [A systematic presentation of the features of the hieroglyphic system].

3

Egyptian phonology

3.1 Introduction

At the present state of our knowledge, a discussion of Egyptian phonology must be addressed primarily as an issue of *diachronic*, rather than synchronic linguistics. While it is possible to recognize regular patterns of sound change in the history of the Egyptian language as a whole, including in many cases Afroasiatic antecedents, the synchronic systems of phonological oppositions at any given time in the four millennia of the productive history of this language often defy a clear analysis. Furthermore, our models of historical phonology tend to hide many uncertainties behind the regularity of the reconstructed paradigm, conveying the misleading impression that for each of the different phases of the language (Old, Middle, and Late Egyptian, Demotic, and Coptic) we are able to establish a discrete phonological system.

The actual phonetic realities underlying the abstract reconstructions are even more elusive: the traditional pronunciation and transliteration of many Egyptian phonemes rest upon hardly anything more than scholarly conventions, and even for the relatively well-known Coptic, in which Egyptian sounds are rendered in a Greek-based alphabet, it is difficult to assess reliable phonetic values for some of the Greek signs and the Demotic graphemes that were added to the Greek alphabetic set.

In fact, the main reason for the difficulties in reconstructing the phonology of Ancient Egyptian lies in the nature of the writing system: Hieroglyphs, Hieratic and Demotic represent the mere consonantal skeleton of a word (and sometimes only a portion thereof), followed by indicators of lexical classes, the so-called "determinatives." Semivocalic phonemes are rarely indicated, vowels practically never. As for Coptic, in which vowels are indeed rendered, one should not downplay the methodological difficulty inherent in the widespread assumption of a phonological or phonetic identity between a specific Coptic sign and its original value in the Greek system.

Therefore, the reconstruction of the phonological inventory and of the phonetic values in any period of the history of Egyptian is bound to remain hypothetical, which motivates the constant use of an asterisk (*) before

28

vocalized forms. The full phonological or phonetic shape of an Egyptian word can be reconstructed through a procedure in which three dimensions are checked against each other and mutually verified: the comparative Afroasiatic reconstruction,[1] the information drawn from contemporary sources in other (mostly Semitic) languages with a better investigated phonology,[2] and the laws of phonological evolution leading from earlier Egyptian to Coptic.[3]

3.2 Heuristic criteria

In spite of these difficulties, the study of Egyptian phonology has achieved significant progress since its inception in the late nineteenth century both in the assessment of sound values and in the reconstruction of prosodic rules. Scholars mainly rely on four procedures of linguistic reconstruction:[4]

Comparative Afroasiatic linguistics. Egyptian is a language of the Afroasiatic phylum, and the presence of established etymological equivalents offers a fundamental source for our reconstruction of phonological values. For example, since Eg. <q3b> corresponds to Sem. *qrb* meaning "interior part," one can confidently establish that Eg. <q> = /q/ and that <b> = /b/.

Contemporary transcriptions in foreign languages. Many Akkadian texts, especially from the archive of el-'Amarna (fifteenth–fourteenth century BCE), contain Egyptian words and phrases in cuneiform transcription. Although the phonology and the graphemics of Akkadian are themselves by no means fully decoded, these transcriptions provide a valuable insight into the contemporary pronunciation of Egyptian. For example Eg. <stpnr'> "the-one-whom-(the-god)-Re-has-chosen" (royal name of King Ramses II) appears in cuneiform as *ša-te-ep-na-ri/e-a*, a form on the basis of which one can both posit the contemporary Egyptian pronunciation as */saˌtepnaˈriʃa/ and observe the correspondence Eg. <s> // Akk. <š>, both of which were probably realized as [s] or as a sound very close to it (at least in some dialects).[5]

Egyptian renderings of foreign words, especially of Northwest Semitic origin. This criterion, the symmetrical counterpart to the preceding one, provides an insight into the phonology of contemporary Egyptian while at the same time offering the possibility to verify scholarly assumptions on Semitic phonology. For example, Northwest Sem. *sōpēr* "scribe" => Eg. <ṯu-pa-r>: on the one hand, this piece of evidence raises questions about the phonological status and the phonetic realization of Eg. /c/, which is the palatal phoneme usually transcribed ṯ by Egyptologists, while on the other, it can also be used to shed some light on the value of the phoneme /s/ (*samekh*), which originally must have been an affricate [ts] in Semitic.[6]

The evidence provided by Coptic. The latest stage of Egyptian provides the broadest basis for the study of the phonology of older linguistic periods. For example, the three Eg. words spelled uniformly <w'b>, namely "pure," "to be pure," and "priest," appear in Coptic in the lexemes oⲩⲁⲁⲃ "holy," oⲩoⲡ "to be pure," oⲩⲏⲏⲃ "priest." This enables us to reconstruct three different vocalization patterns underlying the same graphic reality of hieroglyphic Egyptian: the stative *wǎ'baw "he is pure," the infinitive *wa'áb "to become pure," and the noun *wī'ab "priest" (sections 3.4–3.6). At the same time, this piece of evidence raises questions of consonantism, i.e. the fate of the phoneme /ʕ/ and the reason for the alternation ⲃ vs. ⲡ in the Coptic forms as opposed to <b> in both cases in their Egyptian antecedents.

In the practice of Egyptian phonological reconstruction, these criteria appear constantly combined: while each of them, if considered individually, proves largely inadequate in order to determine a synchronic stage, together they convey a relatively homogeneous picture of the fundamental laws of Egyptian phonological development. What follows in sections 3.3–3.6 is a presentation of the historical phonology of Egyptian from its Afroasiatic roots to Coptic. Transcriptions from Egyptian and Semitic follow the conventions in the respective disciplines and are rendered in *italics*; transliterations of graphemes without reference to their phonological status are indicated in angle brackets (<x>); phonemes (/x/) and tentative phonetic values ([x]) are represented according to IPA conventions, exceptions being the use of /š/ for IPA /ʃ/ and of /ḫ/ for IPA /ħ/. The sign /v/ indicates a short vowel whose color cannot be reconstructed with any reasonable degree of accuracy.

At this point, a methodological warning is necessary: in the case of Ancient Egyptian and of many other "philological" languages known only through written records, the distinction between the *phoneme* as the distinctive minimal unit of the language (/x/), and the often much larger inventory of *sounds* ([x]) representing its physical realizations is less significant than in languages with a better known phonology: while scholars can strive for the reconstruction of the sound units of the language, the technical assessment of their phonological status, which would require in each case the minimal pair test, often proves a very difficult endeavor: on the one hand, our only source of information is represented by a complex writing system in which phonetic and semantic principles are combined; on the other hand, because of the restrictiveness in the use of writing in Egyptian society,[7] our knowledge of certain areas of the lexicon, and especially of their functional evolution throughout Egyptian history, is doomed to remain far from exhaustive.

3.3   The prehistory of Egyptian phonology

Before the emergence of Egyptian as a written language, a few adjustments within the stock of phonemes inherited from "Afroasiatic"[8] seem to have taken place. Three major evolutions from the original phonological stock characterize the Egyptian domain as it begins its recorded history:

(a) In the apical and interdental series, voiced *d, *z, and *ð develop into the pharyngeal phoneme /ʕ/,[9] probably going through an intermediate stage with pharyngealized lateral: *d, *z, *ð (> *ɬ >) > /ʕ/.[10] For example, Eg. 'r.t "portal," Sem. *dalt "door"; Eg. ʒ'' "to speak a foreign language," Sem. *lyz (Ar. laɣaza "to speak enigmatically," Hebr. l'z "to speak a foreign language"); Afroas. *ðupp "fly" > Eg. 'ff *ʕʕuffvj/ > Coptic ⲁϥ, see Sem. *ḏbb (Akk. dubbum, Ar. ḏubāb, Hebr. zəbūb).

(b) Among the liquids, the original opposition between nasal *n, lateral *l, and vibrant *r underwent a profound reorganization, not yet fully understood in its specific details, in which a role was also played by dialectal variants. Afroas. *n and *r were kept as Eg. /n/ and /ʀ/ – the latter being the phoneme conventionally transcribed ʒ by Egyptologists and traditionally taken to be a variety of glottal stop /ʔ/, but in earlier Egyptian probably a uvular trill;[11] Eg. jnk */ja'nak/,[12] Sem. *'anāku, first person independent pronoun, or Eg. kʒm */kaʀmvw/,[13] Sem. *karm "vineyard." On the contrary, Afroas. *l does not display consistent Egyptian correspondences nor is Eg. */l/ indicated by an independent grapheme, in spite of its almost presence in the phonological inventory of the language: Afroas. *l corresponds to Eg. <n> in Afroas. *lis "tongue" > Eg. ns */lis/, see Coptic ⲗⲁⲥ, Sem. *liš-ān; to Eg. <r> in jzr */jazrvw/ "tamarisk," see Sem. *'atl; to Eg. <ʒ> in ʒ'' "to speak foreign languages," see Sem. *lyz; and to Eg. <j> in Afroas. *lib "heart" > Eg. jb */jib/, see Sem. *libb or Afroas. *lwn "color" > Eg. jwn */ja'win/,[14] see Sem. *lawn. Presumably, proto-Eg. *l merged with other sonorants in the dialect which eventually led to the written language, while still being kept in less normative varieties of the language: in the New Kingdom, when Later Egyptian became the written form of the language for the domain of administration and literature, a specific grapheme <n>+<r> was created in order to express the phoneme /l/. In Demotic, /l/ is autonomously indicated by a grapheme <l>, a diacritic variety of <r> = /r/.

(c) The Afroas. velar plosives *k, *g and *k display two outcomes in Eg., probably motivated by the phonetic environment: either they are maintained as k /k/, g /g/ and q /q/, or they are palatalized into t /c/, j /ɟ/ and d /ɟ/: see the second person suffix pronoun masc. /k/ < *-ka/-ku vs. fem. /c/ < *-ki[15] or the opposition between the two Eg. roots wʒd (see wʒd */waːʀɪɟ/ "green"), which

displays palatalization, and jɜq (see jɜq.t */juʀqat/ "vegetables"), which does not, both derived from an identical Afroas. root *wrk̲.

(d) The phonemes corresponding to the "emphatic" series of other branches of the Afroas. phylum lost their phonological status in Egyptian, merging either with the corresponding voiceless fricative, as in the labial series, in which Afroas. *p̣ develops into Eg. /f/: Afroas. *sp̣y "seven" > Eg. sfḫw */safχaw/, see Sem. *šb', or with the corresponding voiced plosive: (1) the Afroas. emphatic dentals *ṭ and *ṣ merge into Eg. /d/: Eg. dwn "to stretch" */daːwan/, see Sem. ṭwl "to be long"; Eg. wdpw "servant," see Ar. waṣīf; (2) in specific phonetic environments, the Afroas. emphatic velars *k̲ and *x merge into the voiced palatal stop /j/, the phoneme conventionally transcribed ḏ by Egyptologists: Afroas. *wrk̲ > Eg. wɜḏ */waːʀij/ "green," see Sem. *warq "leaf"; Afroas. *nxm > Eg. nḏm */naːjim/ "sweet," see Sem. *n'm. As we saw in the preceding paragraphs, in absence of palatalization Afroas. *k̲ is kept in Eg. as /q/, which was probably articulated as ejective [q'] (see section 3.6 below for the Coptic evidence): from Afroas. *k̲rb/k̲lb > Eg. qɜb "interior" (see Akk. qerbum "inside") and Eg. ḏnb "to turn" (see Ar. qlb "to turn around"). As for Afroas. *x, when not subject to palatalization it merges into the voiceless pharyngeal fricative /ḥ/: Afroas. *xal > Eg. ḥr */ḥar/ "on," see Sem. * 'al.

3.4 The phonological system of earlier Egyptian

At the beginning of its written history, i.e. during the historical period known as the "Old Kingdom" (2800–2150 BCE), one can assume that Egyptian displayed the phonological inventory indicated in table 3.1. Here, x indicates the traditional Egyptological transcription, /x/ the posited phoneme, [x] a tentative phonetic reconstruction (if different from /x/).

3.4.1 Consonants

Many contemporary scholars, following Rössler[16] and a long tradition going back to the nineteenth century, offer a different analysis of voiced plosives: since Eg. <d> and <ḏ> represent the heirs of Afroas. "emphatics" (*t/ṣ and *k/x respectively), these phonemes, rather than as "voiced" /d/ and /j/, should be understood as "voiceless emphatic" <d> = /t/ and <ḏ> = /c/, without the possibility to determine whether the actual phonetic realization of the feature [+EMPHATIC] was one of pharyngealization or glottalization. Yet, because of the presence of two, rather than three phonemes in the respective Egyptian consonantal series, I prefer to analyze them as poles of a simpler binary opposition "voiceless" vs. "voiced."[17] But an important fact must be

Table 3.1 The consonantal phonemes of earlier Egyptian

CONSONANTS	BILABIAL	DENTAL	ALVEO-PALATAL	PALATAL	VELAR	UVULAR	PHARYN-GEAL	GLOTTAL
PLOSIVE Voiceless	p /p/ [pʰ]	t /t/ [tʰ]		t̲ /c/ [cʰ]	k /k/ [kʰ]	q /q/ [q']		<ꜣ> /ʔ/
Voiced	b /b/	d /d/ [t']		d̲ /j/ [c']	g /g/ [k']	b /χ/		
FRICATIVE Voiceless	f /f/	s /s/ [s']	š /š/	ḫ /ç/			ḥ /ḥ/	h /h/
Voiced		z /z/ [s']				ꜣ /ʀ/ᵇ	ꜥ /ʕ/	
NASAL	m /m/	n /n/						
VIBRANT		r /r/						
LATERAL		<ꜥ> /l/						
GLIDE	w /w/			j /j/ᵈ				

a. In very early Egyptian, the glottal stop [ʔ] was probably limited to few words and not expressed by an independent hieroglyphic grapheme; later on, presumably during the Middle Kingdom (2000–1750 BCE), /ʔ/ represents on the one hand the result of the evolution of /ɜ/ > /ʔ/ (see the next footnote), on the other hand the outcome of /j/ > /ʔ/ between two vowels in post-tonic position (*/baːjin/ > */baʔan/ "bad") and before an unstressed vowel in initial position (*/jaˈnak/ > */ʔaˈnak/ "I"). Kammerzell, in Gedenkschrift Peter Behrens, 186–87 and LingAeg 2 (1992), 169–75 prefers a consistent interpretation of <ꜣ> as palatal glide /j/ rather than as glottal stop /ʔ/.

b. In the later phases of early Egyptian (i.e. probably during the Middle Kingdom), the uvular trill /ʀ/, which is the Eg. heir of Afroas. *r, progressively tends to acquire the realization as glottal stop [ʔ] – an evolution which appears almost completed in the New Kingdom (1550–1050 BCE); see, however, note 11.

c. In the hieroglyphic system, the phoneme /l/ is not indicated unambiguously: it is frequently conveyed by <n> and <r>, more rarely by <ꜣ> and <j>, see above.

d. For the writing of this phoneme, the following rules apply (with exceptions): /j/ is rendered by <j> in initial position: <jt> = */jaːtvj/ "father," and immediately following a stressed vowel: <bjn> = */baːjin/ "bad"; by <jj> within a word, if /j/ immediately precedes the stressed vowel: <b̲ˌjjk> = */χaˤjak/ "you will appear"; by <ø> at the end of a word: <jt> = */jaːtvj/ "father."

borne in mind and accounted for: on the basis of both comparative evidence[18] and diachronic signals,[19] Egyptian *mediae* appear to have indeed neutralized the feature [+VOICED] and to have been realized – together with the uvular plosive /q/ – as ejective stops.[20] The feature [+EJECTIVE], whose existence can be inferred through Coptic evidence (section 3.6), brought these phonemes in the phonetic proximity of Semitic emphatics: most likely /d/ = [t'], probably also /ǧ/ = [c'], /g/ = [k'] and /q/ = /q'/. A possible explanation of this phenomenon of (especially initial) devoicing[21] is that the feature [+VOICED] must have become redundant under the competition of the optional aspiration which, at least in some varieties of the language and specific environments, characterized Egyptian voiceless stops: /p/ = [pʰ] and /t/ = [tʰ], probably also /c/ = [cʰ] and /k/ = [kʰ].[22] This is shown by the fact that Eg. /p/ and /t/ are rendered in the Greek transcriptions by φ and θ respectively: *ptḥ* */pi'taḥ/ "(the god) Ptah" > Φθα, and Eg. /c/ and /k/ often by σ and χ respectively: *ṯb-nṯr* */ˌcab'naːcar/ > */ˌcab'nuːtə/ "(the city of) Sebennytos" > Σεβεννυτος, *bȝk-n-rn=f* */ˌbaːʀak-vn-'riːnvf/ > */ˌbokko'riː(nv)/ "Bocchoris" (lit. "servant-of-his-name") > Βογχορις, Βοκχορις, Βοχορινις. This aspiration is exhibited by the Bohairic dialect of Coptic (section 3.6).

In the sibilants, Old Kingdom Egyptian displays three phonemes, usually transcribed *z* (or *s*), *s* (or *ś*), and *š*. When subject to palatalization, this last phoneme corresponds etymologically to Afroas. *x (which, as a rule, evolves to Eg. *ḫ* = /ç/): Eg. *ḫmm*, *šmm* "to become hot," see Sem. *ḫmm. This seems indeed to indicate an articulation /š/ for Eg. *š*, although both Afroas. *š and *ś are continued by Eg. *s* (*ś*), i.e. by the second phoneme in the series listed above: see Afroas. *šuʾ "he" > Eg. *sw* */suw/,[23] Sem. *šuwa; Afroas. *śapat "lip" > Eg. *sp.t* */saːpat/,[24] Sem. *śapat. It is possible, therefore, that Eg. *s* /s/ was characterized by a supplementary feature [+PALATAL], with an articulation close to [sʲ]. Eg. *z*, on the other hand, is the heir of Afroas. *θ and *s, as shown for example by *jzr* */jazrvw/ "tamarisk," see Sem. **'aṯl* or Afroas. *sulxam "locust" > Eg. *znḥmw* */zun'ḥuːmvw/,[25] see Hebr. *sol'ām*. For systematic reasons, and in order to keep the symmetry with the ejective articulation of voiced plosives, I reconstruct this phoneme as /z/ = [s'];[26] the phonological opposition between /z/ and /s/ was neutralized by the beginning of the Middle Kingdom, at which time <z> and <s> had become graphic variants of the same phoneme /s/. However, the articulation and the phonological status of sibilants in the whole phylum remains a thorny issue of Afroasiatic linguistics.

The Eg. phoneme /j/ represents the outcome of Afroas. *j (Eg. *jmn* "right side" > "west," the point of reference being represented by the sources of the Nile, i.e. the south, vs. Sem. *ymn "right side" > "south," the reference point

being the place where the sun rises, i.e. the east) and of Afroas. *l (Eg. *jwn* "color," see Sem. *lawn) when subject to palatalization. By the beginning of the Middle Kingdom, as part of the global reorganization of liquid phonemes which took place in Egyptian, with /ʀ/ > /ʔ/ and the neutralization of the opposition between /l/ and other sonorants, /j/ turned into a laryngeal glide /ʔ/ before an unstressed vowel in initial position (*jwn* */ja'win/ > */ʔa'win/ "color") and in postvocalic position following the stress (for example, *ḥjpw* */ḥujpvw/ > /ḥeʔp(vw)/ "[the god] Apis").

Among the guttural fricatives, <ḫ> = /ç/ is the heir of Afroas. *x (Afroas. *xanam > Eg. *ḫnmw* "[the ram-god] Khnum," Ar. *ɣanam* "sheep"), whereas <ḫ> = /χ/ is the outcome of Afroas. *ɣ (Afroas. *wsɣ "wide" > Eg. *wsḫ*, Ar. *wsʿ*), and <ḥ> = /ħ/ derives from Afroas. *x when not subject to palatalization (Afroas. *sulxam "locust" > Eg. *znḥmw*, Hebr. *sol'ām*). The phoneme <h> = /h/ does not display any unequivocal Afroas. cognate.

3.4.2 Vowels

The vocalic system of earlier Egyptian can be reconstructed as follows:

Table 3.2 The vocalic phonemes of earlier Egyptian

VOWELS	SHORT	LONG
FRONT	/i/	/iː/
CENTRAL	/a/	/aː/
BACK	/u/	/uː/

The three vowels posited for earlier Egyptian are inherited directly from its Afroasiatic prehistory. While never spelled out in writing, vocalic phonemes can be reconstructed with a sufficient degree of systematic reliability on the basis of the four criteria formulated in section 3.2. For the earliest phase of the development of the Egyptian phonological system we do not assume the existence of the vocalic phonemes /e/, /o/ and *schwa*, which on the contrary play an important role in the phonology of later Egyptian (sections 3.5–3.6).

Unlike stressed vocalic phonemes, unstressed vowels cannot be reconstructed with any degree of reliability. For example, in the word *nṯr* */naːcar/ "god," while the stressed vowel is derived directly from Coptic ⲛⲟⲩⲧⲉ (with */naː/ > /nuː/, see section 3.6), the quality of the unstressed vowel in */-car/ can only be inferred indirectly through the feminine form *nṯr.t* */na'caːrat/ > Coptic -ⲛⲧⲱⲣⲉ (with */caː/ > /toː/, see section 3.6). The extent to which a whole paradigmatic class should be posited on the basis of analogy is still a matter of intense scholarly debate.

3.4.3 Syllabic structures

As a general rule, the opposition between short and long vowel is not phonological, but determined by the respective syllabic structure: long vowels appear in open stressed syllables, and short vowels in closed syllables and in open unstressed syllables. Major exceptions are represented by the presence of a long vowel in a closed stressed syllable in the infinitive of biconsonantal verbal roots and the possibility of long ($'cv:c#) or doubly-closed syllables ($'cvcc#) in final position. It is known that in many languages word-final position represents an ideal environment for "licensed extrasyllabicity,"[27] i.e. for the presence of a supplementary segment in addition to the standard constitution of a syllabic skeleton: $'cv:c# and $'cvcc# are in fact analyzable as σ + c]$_\omega$, where σ indicates the syllable and]$_\omega$ the word edge. Accordingly, the following seven patterns of syllabic distribution are licensed in earlier Egyptian words (v: = stressed long vowel, v = stressed or unstressed short vowel, c = consonant, # = word boundary, $ = syllable boundary, ' = syllable affected by tonic stress):

1. $'cvc$ *jnn* */ja'nan/ "we"
2. cvc *rmṯ* */ra:mac/ "man"
3. $'cv:$ *ḥtp* */'ḥa:tip/ "pleasing"
4. #cv$ *tpj* */ta'pij/ "first"
5. $'cv:c#   *mn* */ma:n/ "to stay"
6. $'cvcc#   *mdw.w* */ma'duww/ "words"[28]
7. $cv#   *stp.k(w)* */svṯ'pa:ku/ "I chose"[29]

A type of "contingent," rather than "licensed" extrasyllabicity can be invoked in order to explain another problematic feature of the earlier Egyptian phonological system as posited by current scholarship, namely the presence of final semiconsonantal glides /j/ and /w/ in bisyllabic and trisyllabic nouns much in excess of what is even remotely documented by written hieroglyphic or hieratic sources: for example <jt> =: */ja:tvj/ "father," <hrw> =: */harwuw/ "day," etc. It is advisable to take these glides to be extrasyllabic additions to final $cv# syllables

$$(cv)_\sigma + w/j]_\omega$$

"contingent" upon specific phonetic requirements, such as the presence of a new syllabic rhyme following it, for example a suffix pronoun added to the basic form of the word: */ja:t(v)/ "father," but */jaṯjif/ "his father," or an older morphological marker of subject case: */nib/ "lord," but **/nibu/ > */ni:buw/ "the lord$_{subj}$."[30]

Table 3.3 summarizes the syllabic paradigms licensed in earlier Egyptian. Doubly-closed stressed syllables characterize only a certain number of plural forms of bisyllabic nouns; open unstressed syllables in final position are only found in the endings of specific verbal forms and personal pronouns – hence the use of parentheses to indicate these patterns.

Table 3.3 The syllabic structures of earlier Egyptian

SYLLABIC STRUCTURES	PRETONIC	TONIC	POSTTONIC
OPEN	cv	$'cv:$	($cv#)
CLOSED	cvc	$'cvc$	$cvc#
DOUBLY-CLOSED		($'cvcc#)	
LONG		$'cv:c#	

Independent of morphological patterns, the stress falls in Egyptian on either the ultimate (oxytone) or the penultimate (paroxytone) syllable of a word. The oxytone patterns[31] are #cv'cvc# (*wbḫ* */wa'baχ/ "to become white" > ⲟⲩⲃⲁϣ), #cvc'cvc# (*jfdw* */jaf'daw/ "four" > ϥⲧⲟⲟⲩ), #cv:c# (*ḏd* */ja:d/ "to say" > ϫⲱ), #cv'cvcc# (*mdw.w* */ma'duww/ "words" > ᴮ-ⲙⲧⲁⲩ). The paroxytone patterns are #'cvccvc# (*stp.w* */'satpaw/ "is chosen" > ⲥⲟⲧⲡ), #'cv:cvc# (*stp* */'sa:tap/ "to choose" > ⲥⲱⲧⲡ̄), #cv'cvc$cvc# (*ḫprw.w* */χu'pirwaw/ "transformations," Akk. transcription *(a)ḫ-pe/i-e/ir*),[32] #cv'cv:$cvc# (*psḏw* */pi'si:jvw/ "nine" > ⲯⲓⲧ), #cvc'cvc$cvc# (*wpw.tjw* */wap'wutjvw/ "messengers," Akk. transcription *ú-pu-ti/ú-pu-ut*),[33] #cvc'cv:$cvc# (*wpw.tj* */wap'wu:tij/ "messenger," borrowed in Meroitic as *apote*[33]).

Since the stress can only affect the last two syllables of an Egyptian word, the governing rule of syllabic patterns is known with the German term *Zweisilbengesetz* ("law of the two syllables"). For the prehistory of the Egyptian language, some scholars posit a situation in which, as in the related Semitic languages, the stress could also affect the antepenultimate syllable (*Dreisilbengesetz*, i.e. "law of the three syllables").[34] Following the loss of the short vowel in the open posttonic syllable, words displaying this syllabic pattern were subsequently integrated into the regular patterns with penultimate stress: **/χupiraw/ > */χupraw/ "transformation." Generally speaking, tonic stress played in the history of Egyptian a much more crucial role for the development of prosodic patterns than is the case in related Afroasiatic languages, for example Semitic, for which one could easily posit an original "free" stress. It would be preferable, therefore, to posit the "foot,"[35] rather than the individual word as the basic stress unit in Egyptian.

3.5   The phonological system of later Egyptian

By the end of the New Kingdom (1550–1000 BCE), the phonological system described in the preceding section had undergone a certain number of developments which modified all its components. The phonology of later Egyptian is known to us more precisely than the hypothetical reconstruction of earlier Egyptian thanks primarily to the cuneiform transcriptions of Egyptian words and phrases. The major changes can be delineated as follows:

3.5.1   Consonants

From the velar to the dental series, oppositions between voiced and voiceless phonemes become gradually neutralized: *tȝ.wj* */taRwvj/ > Akk. transcription *-ta-a-wa* "the Two Lands" vs. *dbn* */diːban/ > Akk. transcription *ti-ba-an* "*dbn*-weight."[36]

While palatal phonemes are regularly kept in a number of lexemes, they often move to the frontal portion of the oral cavity and acquire a dental realization: *psḏw* */piˈsiːjaw/ > Akk. transcription *pi/e-ši-iṭ* "nine."[37]

The dental phonemes /t/ and /r/ and the glides /j/ and /w/ undergo a process of lenition to /ʔ/ at the end of a stressed syllable, and eventually to /ø/ at the end of a word:[38] *pḏ.t* */piːjat/ > Akk. transcription *-pi-ta* "bow"; *hnw* */hiːnaw/ > Akk. transcription *ḫi-na* "jar"; *mrjw* */marjiw/ > Akk. transcription *ma-a'-ia-*, *ma-a-i-* "beloved."[39]

The uvular trill /R/ completes its evolution to glottal stop /ʔ/, merging with /ʔ/ < /j/ (see section 3.4): indirect evidence of this evolution can be drawn from the fact that while in the execration texts of the Middle Kingdom the writings <ʿkȝm> and <jjȝmt> render the Sem. anthroponym **ʿakram* (Hebrew *ʿokrān*) and toponym **yarmuta* (Hebrew *yarmûṭ*) respectively,[40] in the syllabic writing of the New Kingdom <ȝ> has come to indicate the a-vowel.[41]

3.5.2   Vowels

Major developments alter the vocalic system of Egyptian during the late New Kingdom, after the reign of Ramses II, i.e. from around 1200 BCE onward. Parallel to the so-called "Canaanite vowel shift" in contemporary Northwest Semitic, long stressed */aː/ becomes */oː/: *ḥrw* "(the god) Horus" */ħaːruw/ > */ħoːrə/ (Akk. transcription of the Neo-Assyrian period *-ḫuru-*).[42] This sound change provokes other adjustments within the system, notably the change of long stressed */uː/ to */eː/: *šnj* "tree" */šuːnvj/ > */šeːnə/ (Akk. transcription of the Neo-Assyrian period *-sini*).[43]

In the early New Kingdom, short stressed */i/ had become */e/: see the anthroponym *mnj* "Menes" */maˈnij/ > */maˈneʔ/ (Akk. transcription *ma-né-e*);

at a later date, probably around 1000–800 BCE, short stressed */e/ < */i/ and */u/ merged into */e/: see the toponym *ḏʿn.t* "Tanis" */juʕnat/, borrowed in Hebrew at a time when the original vocalization was still productive (**suʿn* > *ṣôʿan*), but transcribed as *ṣe-e'-nu/ṣa-a'-nu* in the Neo-Assyrian period.[44]

Unstressed vowels, especially in posttonic position, merged into the mid central */ə/ (the so-called *schwa*): *rʿw* "(the god) Re" */riːʕuw/ > */reːʕə/ (Akk. transcriptions *-ri-ia*, *-re-e*), *nfr* "good" */naːfir/ > */naːfə/ (Akk. transcription *-na-a-pa*), *mȝʿ.t* "truth" */murʕat/ > */muʔʕə/ (Akk. transcription *-mu-a*).[45]

A phonetic evolution which probably did not affect the phonological level is */iː/ > *[eː] in proximity of /ʕ/ and /j/: *wʿw* "soldier" */wiˈʕiw/ (Akk. transcription *ú-i-ú*) > *[ˈweːʕə] (later transcriptions *ú-e-eḫ*, *ú-e-e*, *ú-e-ú*); *mḥj.t* "Northwind" */maˈħiːjvt/ > *[məˈħeːʔ] (Akk. transcription *-ma-ḫe-e*).[46]

One can, therefore, posit for later Egyptian around 1000 BCE the vocalic system presented in table 3.4. While at the phonetic level the vocalic sounds have indeed evolved from the earlier system presented in section 3.4, the number of vocalic phonemes (six) remains unchanged.

Table 3.4   The vocalic phonemes of later Egyptian

VOWELS	SHORT	LONG
FRONT	/e/	/iː/
CENTRAL	/ə/	/eː/
BACK	/a/	/oː/

3.5.3   Syllabic structures

Because of the loss of the final dentals and of the semivocalic glides caused by a strong tonic stress, the prosodic system underwent a partial reorganization, with the emergence of previously unknown or poorly documented syllabic patterns.

The syllabic structure $cv:c# could now occur in plurisyllabic words (in earlier Egyptian, this pattern had a restricted functional yield, see section 3.4.3): *mḥj.t* "(the goddess) Mehit" */maˈħuːjvt/ > */məˈħuːʔ/, Akk. transcription *-ma-ḫu-ú*, Greek -μχης (with */uː/ > η); *ḫmnw* "eight" */χaˈmaːnvw/ > */χaˈmaːn/, Akk. transcription *ḫa-ma-an*.[47] The same development affects the pattern $cvcc#, previously limited to some plurals of the type **maduww: zȝjw.tj* "(the city of) Asyut" */zvRˈjawtvj/ > */səˈjawt/, Neo-Assyrian cuneiform *ši-ia-a-u-tu*.[48]

The fall of final consonants increases the presence of unstressed open syllables of the pattern $cv#, which in earlier Egyptian were limited to the endings of specific verbal forms and personal pronouns: *ḥrj-pḏ.t* "overseer of the troop" */hariˈpiːjat/ > */həriˈpiːdə/, see cuneiform *a/i/uḫ-ri-pi-ta*.[49]

Table 3.5 The syllabic structures of later Egyptian

SYLLABIC STRUCTURES	PRETONIC	TONIC	POSTTONIC
OPEN	cv	$'cv:$	$cv#$
CLOSED	cvc	$'cvc$	$cvc#$
DOUBLY-CLOSED		$'cvcc#$	
LONG		$'cv:c#$	

3.6 The phonological system of Coptic

Unlike ealier stages of the language, Coptic, written in an alphabetic system derived from Greek, is documented in a number of closely related dialects.[50] These dialects, however, do not necessarily reproduce local varieties of the language: they represent, to a large extent, discrete sets of mainly graphic conventions for rendering Egyptian in an inadequate foreign script.[51]

Table 3.6 The consonantal phonemes of Coptic

CONSONANTS	LABIAL	DENTAL	PALATAL	VELAR	GLOTTAL
PLOSIVE					
Palatalized				ϭ /kʲ/	
Voiceless[52]	ⲡ /p/ [p(ʰ)]	ⲧ /t/ [t(ʰ)]	ϫ /c/ [c(ʰ)]	ⲕ /k/ [k(ʰ)]	<53> /ʔ/
Ejective		ⲧ /d/ [t']	ϫ /ɉ/ [c']	ⲕ /g/ [k']	
[Voiced]	ⲃ /b/ [β]	ⲇ /d/ [d]		ⲅ /g/ [g]	
FRICATIVE					
Voiceless	ϥ /f/	ⲥ /s/	ϣ /š/	<54> /x/	ϩ /h/
[Voiced]		ϫ /z/			<55> /ɣ/
NASAL	ⲙ /m/	ⲛ /n/			
VIBRANT		ⲣ /r/[56]			
LATERAL		ⲗ /l/			
GLIDE	(ⲟ)ⲩ /w/		(ⲉ)ⲓ /j/		

The two major Coptic dialects are *Sahidic*, normally considered to reflect the Theban, upper Egyptian variety of the language, documented from the fourth century CE and representing the language of classical Coptic literature, and *Bohairic*, the dialect of the Nile delta, documented from the fifth century CE and progressively established as the dialect of the liturgy of the Coptic church. For the basic presentation of Coptic phonology I have chosen Sahidic, which is the dialect of classical literature. However, I shall refer to other dialects, especially Bohairic, whenever such references become necessary for the purpose of an historical or a typological analysis. Dialects are indicated by small capitals in superscript preceding the Coptic word: S = Sahidic, B = Bohairic, A = Akhmimic, L = Lycopolitan (alternatively called Subakhmimic and abbreviated A₂), F = Fayyumic. Where no indication is given, the dialect is Sahidic.

3.6.1 Consonants

During the first millennium BCE and the first centuries CE, Egyptian continued to undergo a number of phonological changes.[57] In the consonantal system, the tendencies described in section 3.5.1 led to a neutralization of voiced plosives in the dental, palatal, and velar series: the phonemes /d/, /g/ and /z/ are present only in Greek borrowings, the rare exceptions to this rule being the result of sonorization in proximity of /n/ (for example, ⲁⲛⲧ vs. ⲁⲛⲟⲕ < *jnk* "I," ⲁⲛϫⲏⲃⲉ vs. ⲁⲛⲥⲏⲃⲉ < *'.t n.t sb3.w* "school").

In the labial series, the situation is more complex: the voiced phoneme /b/, which by this time was probably articulated as a fricative [β],[58] is kept in all initial and medial positions (ᴮϥⲃⲱⲕ "servant," ϩⲓⲃⲱⲓ "ibis," ⲧⲃⲁ "ten thousand"), and in final position whenever it did not immediately follow the tonic vowel of a closed syllable in the earlier stages of the language, although this may indeed be synchronically the case in Coptic: ⲛⲟⲩⲃ < */na:baw/ "gold." If /b/ followed the tonic vowel of an etymological closed syllable, whether in monosyllabic or plurisyllabic words, it became in Coptic voiceless /p/: ⲟⲩⲟⲡ < */waʕab/ "to be pure," ⲧⲁⲡ < */dib/ "horn."

Guttural fricatives of earlier Egyptian (especially /χ/) merge in Sahidic either into ϣ /š/ (for example */χaʀ/ > */χaʔ/ > ϣⲟ) or into ϩ /h/ (mostly /ḫ/ and /ç/, sometimes also /χ/: for example *ḫ3.t* "beginning" */ḫu:ʀit/ > ϩⲏ, *ḫ(w).t* "body" */çu:wat/ > ϩⲏ, *ḫrw* "voice" */χïraw/ > ϩⲣⲟⲟⲩ). But other dialects appear more conservative: Bohairic and Akhmimic keep a velar fricative /x/ (written ⲝ in Bohairic and ϧ in Akhmimic, for example ᴮϧⲣⲱⲟⲩ, ᴬϧⲣⲁⲩ "voice"). Finally, the glottal stop /ʔ/, which represents on the one hand the regular development of */ʔ/ and */ʔ/, and on the other hand the result of the fall of final /t/, /r/, /j/ and /w/ after stressed vowel, is not expressed by an independent grapheme, but rather rendered by <ø> at the beginning and at the end of a word (for example ⲁⲛⲟⲕ /ʔa'nok/ "I" < */ja'nak/, ⲧⲟ /to?/ "land" < */taʔ/) and, except in Bohairic, by the reduplication of the vocalic grapheme when immediately following the stressed vowel of a word (for example ᴬϩⲟⲟⲛ /xo?p/, ˢᴵϣⲟⲟⲛ, ᴮϣⲟⲛ /šo?p/ "to be" < *ḫpr.w* */χapraw/ "has become").[59]

Bohairic spelling conveys a traditional feature of Egyptian phonetics, namely the aspirated realization of stops, which are expressed by the corresponding *aspiratae* of the Greek alphabet: voiceless stops become aspirated when immediately preceding a tonic vowel, semivowels, and sonorant consonants (including ß):

/p/, /t/, /c/, /k/ → ⲫ [pʰ], ⲑ [tʰ], ⲍ [cʰ], ⲭ [kʰ] / ___'v, /b/, /m/, /n/, /l/, /r/, /w/, /j/

Examples: ⁵ⲡⲣⲏ vs. ᴮⲫⲣⲏ "the sun," ⁵ⲧⲁⲓ vs. ᴮⲑⲁⲓ "this (fem.)," ⁵ⲍⲟⲉⲓⲥ vs. ᴮⲟ̄ⲱⲓⲥ "lord," ⁵ⲕⲟⲩⲁⲁⲃ vs. ᴮⲭⲟⲩⲁⲃ "you are holy." This phonetic rule proves that ⲍ [cʰ] represents in Bohairic the aspirated variety of the palatal plosive ⲍ /c/; the value of the sign ⲟ̄ in this dialect, therefore, differs from all other Coptic conventions, where it indicates the palatalized velar /kʲ/.

The Bohairic rule of aspiration, however, exhibits an interesting property: when /t/, /c/ and /k/ represent the outcome of voiced *d* /d/, *ḏ* /ɟ/, *g* /g/ and of uvular *q* /q/, no aspiration immediately preceding the tonic vowel takes place:[60] ⁵ᴮⲧⲁⲡ "horn" < Eg. *db* */dib/, ᴮⲧⲱⲡⲓ ~ ⁵ⲧⲱⲡⲉ "hand" < Eg. *dr.t* */ja:rat/, ᴮⲍⲓⲙⲓ ~ ⁵ⲟ̄ⲓⲛⲉ "to find" < Eg. *gmj.t* */gi:mit/, ᴮᴮⲕⲁⲥ "bone" < Eg. *qs* */qes/; in pre-sonorant environments, on the other hand, the rule is upheld: ᴮⲟ̄ⲣⲉϥ- < *dj-jrj-f-*, ᴮⲟ̄ⲃⲁ "ten thousand" < *ḏb'* /ja'baʕ/, ᴮⲟ̄ⲣⲏⲍⲓ "dowry" < *grg.t*, /ga'ru:gvt/, ᴮⲭⲃⲟⲃ "to become cool" < *qbb* /qa'bab/.[61]

This phenomenon can be interpreted by assuming that in spite of the forward movement of their point of articulation which took place in later Egyptian (section 3.5) from the palatal to the dental (*ḏ* > /d/), from the velar to the palatal (*g* > /ɟ/), and from the uvular to the velar region (*q* > /g/), these three phonemes of earlier Egyptian preserved in fact in prevocalic position their ejective articulation down to Coptic: <ḏ> =: /ɟ/ = [c'] > /d/ = [t']; <g> =: /g/ = [k'] > /ɟ/ = [c']; <q> =: /q/ = [q'] > /g/ = [k']. This justifies the use of <ⲍ> and of the Greek *tenues*, rather than of the Greek *mediae* to indicate them in the writing: ⲧ for /d/ = [t'], ⲍ for /ɟ/ = [c'], ⲕ for /g/ = [k']. On the contrary, etymological *t* /t/, *ṯ* /c/ and *k* /k/, which were not ejective but aspirated stops ([tʰ], [cʰ] and [kʰ] respectively), maintained the aspiration in the environments described above. Once again, we can consider this aspiration graphically rendered only in Bohairic, but phonetically present in Coptic as a whole:[62] ⁵ⲧⲁϥ vs. ᴮⲑⲁϥ "spittle" /taf/ = [tʰaf] < Eg. *tf* */tif/ = [tʰif], ⁵ⲧⲱⲡⲉ vs. ᴮⲑⲱⲡⲓ "willow" /to:rə/ = [tʰo:rə] < Eg. *tr.t* */ca:rvt/ = [cʰa:rvt], ⁵ⲍⲓ vs. ᴮⲟ̄ⲓ "to take" /ci:ʔ/ = [cʰi:ʔ] < Eg. *ṯj.t* /cirjit/ > ['cʰi:ʔ(ət)], ⁵ⲕⲏⲙⲉ vs. ᴮⲭⲏⲙⲓ "Egypt" /ke:mə/ = [kʰe:mə] < Eg. *km.t* */ku:mat/ = ['kʰu:mat]. This points to a phonological, rather than merely allophonic status of the underlying opposition "voiceless vs. ejective,"[63] an opposition graphically conveyed only by Bohairic and displayed

by the presence of minimal pairs such as ᴮⲧⲱⲣⲓ /do:rə/ [t'o:rə] "hand" < *dr.t* vs. ᴮⲟ̄ⲱⲡⲓ "willow" /to:rə/ = [tʰo:rə] < *tr.t* or ᴮⲍⲏ "dish" /je:ʔ/ [c'e:ʔ] < *dꜣ.t* ~ ᴮⲟ̄ⲏ /ce:ʔ/ [cʰe:ʔ] "quince."

An indirect, but very cogent proof of their actual phonetic articulation as ejectives is offered by the fact that these phonemes behave phonologically as a sequence of "plosive + glottal stop" such as ᴮⲡⲱⲡ "the account" (consisting of the definite article ⲡ followed by the lexeme ⲱⲡ), in which no aspiration of the plosive labial is displayed (*ⲫⲱⲡ) because /p/ here does not immediately precede the stressed *vowel* /o:/, but rather the first *consonant* of the lexeme, i.e. the glottal stop /ʔ/: ⲡⲱⲡ =: /p'o:p/.[64] Indirect evidence of the ejective character of voiceless stops in Bohairic is also provided by a late medieval Arabic version of the *Apophthegmata Patrum* in Coptic script.[65] While in Arabic transcriptions of Coptic words voiced /d/ and pharyngealized voiced /ḍ/ are used as a rule to indicate <ⲧ>, as in Copt. ⲧⲉⲛⲧⲱⲣⲉ > Ar. *dandara* "(the city of) Dendera" – meaning that <ⲧ> was neither articulated like Ar. /t/, which was aspirated, nor like Ar. /ṭ/, which was pharyngealized – <ⲧ> and <ⲕ> are used in this text to render Ar. /ṭ/ and /q/, and also <ⲑ> and <ⲭ> for Ar. /t/ and /k/ respectively. Since the feature [+ASPIRATED] is neutralized in final position (for example Eg. *zꜣjw.tj* */zvr'jawtvj/ > */sə'jawt/ > Copt. ⲥⲓⲟⲟⲩⲧ > Ar. 'asyūṭ "(the city of) Asyut"),[66] it is not surprising that at the end of a word Ar. /t/ is sometimes rendered by Copt. <ⲧ> and Ar. /k/ as a rule by Copt. <ⲕ>. On the other hand, the letter <ⲇ> =: /d/ = [d], which in standard Coptic appears only in lexical items borrowed from Greek, is used in this text to transliterate Ar. /d/. This asymmetric state of affairs seems to point to the fact that the letter <ⲧ>, at least in a number of cases, stood for a phoneme exhibiting a specific phonetic feature in addition to voicelessness and lack of aspiration: both diachronically (section 3.4) and synchronically (see above), glottalization appears here to be the most likely candidate.

Therefore, as in the case of its Egyptian antecedent, the phonology of Coptic may actually exhibit a higher degree of complexity than is betrayed by a superficial graphemic analysis:[67] in our concrete example, we probably have to posit for the entire Coptic domain (although graphemically mirrored only in Bohairic) the presence of *three* stops in the dental, prepalatal, and velar region: (a) a voiceless series /p/ /t/ /c/ /k/, characterized by an optional aspiration; (b) a voiced series /b/ /d/ /g/, limited to Greek borrowings – with the exception of /b/ and of secondary sonorization due to the proximity on /n/; (c) an ejective series /d/ = [t'], /ɟ/ = [c'] and /g/ = [k'], which never exhibited aspiration and therefore resisted a merging with the corresponding voiceless phonemes. Graphemically, the voiceless series is conveyed by the Greek *tenues*

<ii> <т> <к> and Coptic <ϫ> (or by the *aspiratae* <ϥ> <θ> <x> and <ϭ> in Bohairic in stressed prevocalic or presonorant environment),[68] the voiced series by the Greek *mediae* <ß> <ⲇ> <г>, and the ejective series – limited to the Egyptian vocabulary – again by the *tenues* <т> <ϫ> <к>, but this time without the Bohairic change to the corresponding *aspirata* in stressed prevocalic or pre-sonorant environment.

The treatment of the glottal stop /ʔ/ also deserves attention. As was pointed out in section 3.5, later Egyptian /t/, /r/, /j/ and /w/ are dropped in final unstressed position, but become /ʔ/ when closing a syllable, often representing the only remnant of an unstressed final syllable of earlier Egyptian dropped in the later phase of the language. However, especially in final position after stressed vowels, glottal stops deriving from the development of final /t/, /r/, /j/ and /w/ are not treated exactly like etymological /ʔ/; one also finds slight differences in the treatment of /eʔ/ < */uʔ/ as opposed to /eʔ/ < */iʔ/.[69]

Different graphic solutions for /ʔ/ are adopted in the dialects. All of them display /ʔ/ = <ø> in initial position (see SBⲀⲚⲞⲔ /ʔaˈnok/, ALFⲀⲚⲀⲔ /ʔaˈnak/ < */jaˈnak/ "I"). To express a glottal stop following the tonic vowel in plurisyllabic words, all dialects except Bohairic exhibit the reduplication of the vowel's grapheme, whether the glottal stop belongs to the same syllable – the vowel being in this case short: /ˈcvʔ/ = <cvv>, for example SⲦⲞⲞⲦϤ, BⲦⲟⲦϤ /doˈtəf/, FⲦⲀⲀⲦϤ /daˈʔtəf/ < */ˈjartvf/ "his hand," SⲘⲞⲞⲨⲈ, BⲘⲟⲩⲓ /moˈʔʃə/ < */maʃˈʕvj/ "to walk" – or to the following syllable – the tonic vowel being here long: /ˈcvːʔ/ = <cⲰⲰ>, see ⲞⲨⲎⲎⲂ /weˈʔəb/ < */wiːˈʕab/ "priest." In this last case, i.e. if /ʔ/ is the first phoneme of a final syllable of the type $ʔvc# following a stressed syllable of the type #ˈcvː$, this phoneme is conveyed in most dialects by the reduplication of the tonic vowel, and in Bohairic by <ø>: SⲤⲰⲰⲘⲈ, BϪⲰⲘ /joˈʔəm/ < */jaːˈmiʕ/ "book." But the presence of a glottal stop in this pattern must be assumed for Bohairic as well, since there seems to be a rule in this dialect that the phoneme /ʔ/ is always rendered by <ø>, regardless of its syllabic surroundings: examples such as SBϨⲞⲞⲨ (rather than B*ϧⲱⲟⲩ) /hoʔw/ "day" show that the phoneme /ʔ/ determines here the appearance of the vowel <o> rather than <ⲱ>, as would be expected in the presence of a diphthong /ow/, see Eg. */maw/ "water" > SⲘⲞⲞⲨ, AⲘⲀⲨ, but BⲘⲱⲟⲩ.[70]

In most words displaying the phonological sequence /ʔc#/, the glottal stop /ʔ/ derives from an etymological /ʕ/ or /j/ through metathesis: SⲦⲰⲱⲂⲈ, BⲦⲱⲂ/Ⲧⲱⲡ /doˈʔəb/ < ḏbˈ */jaːˈbaʕ/ "to seal," SϪⲟⲟⲡ, BϪⲟⲣ /joˈʔr/ "to be strong" < ḏrj.w */ˈjarjaw/ "he is strong." The reason for this metathesis in bisyllabic words ending in /ʕ/ or /j/ is found in the "contact law,"[71] which provides that a syllable contact A$B is the more preferred, the less the consonantal strength

of the offset A and the greater the consonantal strength of the onset B; voiceless plosives display the strongest, low vowels the weakest consonantal strength.[72] Since Eg. /ʕ/ was originally an ejective plosive /d̫/ = [t̫] (section 3.3), its degree of sonority, which is the reverse of the consonantal strength, was lower than that of a preceding fricative or sonorant phoneme; by turning into a voiced fricative /ʕ/ in mʃˈj, it acquired, like the glide /j/ in ḏrj.w, a higher degree of sonority, favoring in this way the metathesis by virtue of the contact law. Let us consider the examples mʃˈj **/maʃ$dvj/ and ḏrj.w */jarjaw/. The syllable contact ʃ$d is rather stable, since the consonantal strength of /d/ is greater than that of /ʃ/. When the sound change /d/ > /ʕ/ took place, **/maʃdvj/ became */maʃʕvj/, which is the form we posit for classical Egyptian. The syllable contacts ʃ$ʕ and r$j, however, are rather unstable, because the degree of sonority of B (the voiced pharyngeal fricative /ʕ/ and the glide /j/) is higher than that of A (the voiceless fricative /ʃ/ and the sonorant /r/ respectively). As a consequence, an adjustment of the phonetic environment through metathesis occurred, leading to the Coptic forms /moˈʔʃə/ and /joˈʔr/. An evidence in this sense is offered by the presence of a Demotic verb mʃd "to wander," regularly kept in Coptic as ⲘⲞⲨⲱⲦ "to examine," most probably a Late Egyptian etymological doublet[73] of mʃˈj in which the original Afroas. phoneme is maintained: at least in a few instances ⲘⲞⲨⲱⲦ occurs with the same meaning of ⲘⲞⲟⲩⲈ,[74] a fact which strengthens the hypothesis that the metathesis was caused in similar cases by the "contact law" of phonological environments.

The phonetic contact law can be invoked to explain other cases of metathesis which affected the development of Egyptian and Coptic phonology: one of the plural forms of nṯr */naːcar/ "god" was */naˈcurw/.[75] A syllable such as $curw$, however, in which the consonant of the nucleus (/r/ = A) has a lower degree of sonority than the semiconsonantal coda (/w/ = B), is unstable. This instability favored the metathesis of the two phonemes -rw- > -wr- > -jr-, documented by the Coptic forms ⲚⲦⲀⲓⲣ /ntajr/ or ⲚⲀⲈⲣⲈ /nteʔrə/ "gods" < */naˈtejrv/. In this way, we can posit a relative date for the sound changes involved in this evolution: the metathesis must have occurred *before* the sound change from the glide /w/ or /j/ to the glottal stop /ʔ/ took place.

This analysis of the phonological status of /ʔ/ in Coptic is confirmed by two facts: (a) The interesting graphemic opposition found in Bohairic between the writing <-cj> to express a final syllable /-cə/, as in BⲣⲱⲘⲓ /roːmə/ "man" or Bⲙⲟⲩⲓ /moˈʔʃə/ "to walk," as opposed to the writing <-øc> to express /-ʔəc/, as in Bⲙⲏⲱ /meˈʔəʃ/ "crowd," whereas in Sahidic both environments are graphically rendered by <-cc>: SⲣⲱⲘⲈ, SⲙⲟⲟⲩⲈ, SⲙⲏⲏⲱⲈ. (b) The two graphic

renditions exhibited by the unstressed syllabic structure $?ɔc#$ in Sahidic, namely <-v̄v̄ce> as in ϫⲱⲱⲙⲉ /joːʔəm/, but also <-v̄v̄c> as in ⲃⲱⲱⲛ /boːʔən/. There can be no doubt that these two patterns are phonologically identical: see on the one hand the Sahidic variant with final -ⲉ (Sᲁⲃⲱⲱⲛⲉ), on the other hand the identical treatment of the two structures in the other dialects: see Aϫⲟⲧⲟⲧⲙⲉ, ⲃⲟⲧⲟⲧⲛⲉ, Bϫⲱⲙ, ⲃⲱⲛ /joːʔəm/, /boːʔən/.

A last problem is represented by the fate of the phoneme /ʕ/. Its existence, although not excluded, is in fact very doubtful. The graphic distribution of etymological /ʕ/ is identical with that of etymological /ʔ/, including /ʔ/ < /j/, /w/, /r/, and /t/, and scholars generally maintain[76] that it had merged with the glottal stop in later pre-Coptic Egyptian, leaving traces in Coptic vocalism, especially in the anteriorization of its vocalic surrounding: unstressed ⲁ instead of ⲉ or <ø> (as in ⲁϣⲁⲓ < 'ẑꜣ */ʕiꜣir/ > */ʕɔꜣiʔ/ "to become many" vs. ⲥϩⲁⲓ < zẖꜣ */ziꜣir/ > */sɔ'çiʔ/ "to write"), stressed ⲁ instead of o (as in ⲧⲃⲁ < db' */ʕa'baʕ/ > */tɔ'baʔ/ "10000" vs. ⲕⲣⲟϥ < qrf */qa'raf/ > */qɔ'raf/ "ambush").[77]

3.6.2 Vowels

Table 3.7 captures the vocalic system of Sahidic Coptic around 400 CE:

Table 3.7　The vocalic phonemes of Sahidic Coptic

VOWELS	UNSTRESSED	STRESSED	
		SHORT	LONG
FRONT			<(ⲉ)ⲓ> /iː/
		<ⲉ>, <ø> /e/[78]	
	<ⲉ>, <ø> /ə/		<ⲏ> /eː/
CENTRAL		<ⲁ> /a/	
	<ⲁ> /a/		<ⲱ> /oː/
		<ⲟ> /o/	
BACK			<ⲟⲧ> /uː/

When compared with the preceding phases in the history of Egyptian, the vocalic system of Coptic exhibits the further consequences of the Late Egyptian sound change. Late Eg. stressed */a/ becomes /o/ in the two major dialects: Eg. sn */san/ "brother" > SBⲥⲟⲛ, ALFⲥⲁⲛ, following the pattern of */aː/ > /oː/: Eg. rmṯ */ramac/ "man" > */roːmə/ > ⲣⲱⲙⲉ, which had already taken place around 1000 BCE (section 3.5). Moreover, Late Eg. */e/, whether from original */i/ (as in rn */rin/ > */ren/ "name") or from original */u/ (as in ẖrw */χurraw/ "Hurrian" > */χel/ "servant"), becomes /a/ in Sahidic and Bohairic, but is kept as /e/ in the other dialects: SBⲣⲁⲛ, ALⲣⲉⲛ, Fϫⲉⲛ; SIϩⲁⲗ, Aϩⲉⲗ, Fϩⲉⲗ.

These two developments in the quality of the short stressed vowels display a number of exceptions of phonetic (sometimes purely graphemic) character, generally motivated by specific consonantal surroundings. Thus, */a/ is kept as /a/ in the two major dialects and is rendered as <ⲉ> in Fayyumic before etymological guttural fricatives (SALⲧⲃⲁ, Bⲑⲃⲁ, Fⲧⲃⲉ < db' */ja'baʕ/ "10000"); conversely, */a/ becomes /o/ also in Akhmimic and Lycopolitan before etymological /ʔ/ and /ʕ/ (Sⲉⲓⲟⲟⲡ(ⲉ), Bⲓⲟⲣ, Aⲓⲟⲟⲣⲉ, ⲓⲱⲱⲣⲉ, Fⲓⲁⲁⲗ, ⲓⲁⲁⲣ < jtrw */jatraw/ > */jaʔr(ə)/ "river"). Also, the diphthongs */aj/ and */aw/, which regularly yield /oj/, /ow/ in Sahidic and /aj/, /aw/ in the other dialects, appear written in Bohairic as <ⲱⲓ> (except in final position) and <ⲱⲟⲧ> (in all positions) respectively: Sⲉⲣⲟⲓ, ⲉⲣⲟⲟⲧ, ALⲁⲣⲁⲓ, ⲁⲣⲁⲧ, Fⲉⲗⲁⲓ, ⲉⲗⲁⲧ, Bⲉⲣⲟⲓ, ⲉⲣⲱⲟⲧ "to me, to them."

As for */e/, which, as we saw, regularly turns into SBⲁ and ALFⲉ, the main exceptions are: (a) it is kept also in Sahidic and Bohairic as ⲉ before /ʔ/, whether derived from an etymological /ʔ/ or from the lenition of a /t/, /t/, /j/ and /w/ in the coda of a tonic syllable: Sⲙⲉ, Bⲙⲉⲓ /meʔ/ "truth" < */meʔʕə/ < */muʕʕat/, SBⲛⲉ /neʔ/ "to you (fem.)" < */net/ < */nic/, SBϣⲛⲉ /šneʔ/ "net" < */šaneʔ/ < */šv'nuw/; (b) it is written before sonorant phonemes (including ⲃ) as <ø>[79] in Sahidic, Akhmimic and Lycopolitan, as <ⲉ> in Bohairic, and as <ⲏ> or <ⲟⲧ> in Fayyumic: šmsj */šimsij/ > SALϣⲙϣⲉ, Bϣⲉⲙϣⲓ, Fϣⲏⲙϣⲓ /šemšə/ "to worship." If the following sonorant is not followed by another consonant, it undergoes reduplication in all dialects except Bohairic: qnj.t */qinjit/ > Sⲕⲛ̄ⲛⲉ, Aⲕⲛ̄ⲛⲓⲉ, Bⲕⲉⲛⲓ, Fⲕⲏⲛⲛⲓ "to become fat." Also, in proximity of sibilants one often finds the outcome */e/ > SBⲉ or SBAFⲓ: for example, wsḫ.t */wisχat/ > Sⲟⲧⲉϣⲥⲉ, Sⲟⲧⲟⲩϣⲥⲉ, Bⲟⲧⲉ/ⲏϣⲥⲓ "breadth," pšs.t */puššat/ > Sⲡⲓϣⲉ, ⲡⲁϣⲉ "half." Diphthongs display slight irregularities as well: instead of the paradigmatic form <ⲁⲧ> (as in snwj */si'newwvj/ > Sⲥⲛⲁⲧ "two," ḥnw */ḥv'new/ > Sϩⲛⲁⲧ "jar"), */ew/ occasionally yields <ⲟⲧ>, and <o> in Akhmimic in final position: Sⲥⲛⲟⲧ, ϩⲛⲟⲧ, Aⲥⲛⲟ. The outcome of */ej/ is even more complex: it develops as expected into SLⲁ(ⲉ)ⲓ, but it keeps a vocalization closer to the original in Aⲉ(ⲉ)ⲓ, Fⲏⲓ; Bohairic exhibits a difference in treatment, depending on whether the original vowel was *u (i.e., */ej/ < */uj/), in which case it goes with Sahidic ⲁⲓ, or *i (i.e. */ej/ < */ij/), in which case it goes with Fayyumic ⲏⲓ: for example zjnw */zijnvw/ > Sⲥⲁⲉⲓⲛ, Aⲥⲉ(ⲉ)ⲓⲛⲉ, BFⲥⲏⲓⲛⲓ "physician," 'jqj */ʕujqvj/ > SLⲁⲉⲓⲕ, Bⲁⲓⲕ "consecration."

Coptic long vowels display no major phonological development from Late Egyptian. But at the phonetic level, the following phenomena take place: (a) All dialects exhibit the evolution */aː/ > <ⲟⲧ> [uː] (instead of */aː/ > /oː/) after nasal consonants, and occasionally following other consonants as

well: nt̠r */na:car/ > ноүтє /nu:te/ "god."[80] Akhmimic displays <оү> in final position or when followed by the glottal stop, i.e. by a reduplication of the vocalic grapheme: Sхωωмє, Aхоүоүмє. We shall see below that these two phonological contexts are in fact identical, final stressed vowels being regularly followed in Coptic by an extrasyllabic /ʔ/. That /u:/, however, has acquired phonemic character in Coptic is shown by the presence of minimal pairs such as ҁωн /ho:n/ < ḫnn */ça:nan/ "to approach" vs. ҁоүн /hu:n/ < ḫnw */ça:naw/ "inside." (b) The outcome <(є)ι> [i:] instead of /e:/ from etymological */u:/ > */e:/ (3.5) is frequent in proximity of /r/ and after etymological pharyngeals: SLҁιρ, Bꙋιρ, Aҁιρ, Fҁιⲗ < */χu:r/ "street," a loanword from Semitic. As in the case of */a:/ > <оү> [u:], Akhmimic displays here <єι> in final position or if the vowel is followed by /ʔ/: Sтннвє, Aⲧєιвє "finger." This same */u:/ > */e:/ occasionally appears as <є> before pharyngeal phonemes: Sхⲁⲛ̈єҁ < */tap'pu:ḥ/ "apple," also a Semitic loanword. (c) We had already observed in Late Egyptian (section 3.5) the phonetic outcome */i:/ > */e:] in proximity of /ḫ/ or /j/.

Most Coptic dialects have two unstressed vocalic phonemes,[81] depending on the phonetic context of the original structure of the word: as a general rule, pretonic and posttonic vowels have developed into /ə/,[82] graphically rendered by <є> or <ø> (<ι> in Bohairic and Fayyumic in final position); pretonic unstressed /a/ owes its origin to an earlier Egyptian unstressed */a/, either etymological or resulting from assimilation of */e/ < */i/ or */u/ in proximity of an etymological pharyngeal or velar phoneme: ⲁϣⲁι "to become many" < 'šꜣ */ḳi'šir/, or to an unstressed sonorant phonetic surrounding: ⲁⲙⲣⲏҁє "asphalt" < */mv'riḥjat/. An apparent pretonic unstressed /i/ derives from a pretonic unstressed syllable of the type cvj and is in fact to be analyzed as /j/: Sҁιвωι /həjbo:j/ "ibis" < h(j)bj.w */hij'ba:jvw/, originally the plural of h(j)bw */hijbaw/ > */hi:b/, see Bҁιⲛ.

3.6.3 Syllabic structures

Coptic syllabic patterns[83] are similar to those of Late Egyptian, the only major difference being represented by the emergence of new patterns from the reduction to schwa (and eventually to zero) of the short vowel of pretonic open syllables and the development of biconsonantal onsets: *#cv$cv(c)$ > #ccv(c)$. As in the earlier stages of the language, long and doubly-closed syllables are documented only in stressed final position. These rules of syllabic distribution and the ensuing comments apply to the vocabulary of Egyptian stock, not to the Greek words which entered the language especially in the religious sphere.

Table 3.8 The syllabic structures of Sahidic Coptic

SYLLABIC STRUCTURES	PRETONIC	TONIC	POSTTONIC
OPEN	cv	$'cv:$	$cv#$
	#ccv$	#ccv:$	
CLOSED	cvc	$'cvc$	$cvc#$
	#ccvc$	#ccvc$	
DOUBLY-CLOSED		$'cvcc$	
		#ccvcc$	
LONG		$'cv:c#$	
		#ccv:c#	

At first sight, a pattern of tonic open syllable with short vowel $'cv$ is documented in words such as пє "heaven" < p.t */pit/, то "land" < t꜒ */taR/, ϣⲁхє "to tell" < sḏd.t */sijdit/, or єιопє "occupation" < wpw.t */wapwat/. In these patterns, however, one has to assume the presence of a final /-ʔ#/[84] deriving from the lenition of /t/, /r/, /j/ and /w/ in a stressed syllable in later Egyptian (section 3.5). Within an autosegmental approach to Coptic phonology, these syllables can be analyzed as closed $'cvc$ or doubly-closed $'cvcc$, by positing the insertion of an extrasegmental glottal stop /ʔ/ as "default consonant" in the final position on the skeletal tier $cv(c)$: thus пє = /peʔ/, то = /toʔ/, ϣⲁхє = /šajʔ/, and єιопє = /jopʔ/, parallel to the cvc-pattern ⲣⲁн = /ran/ and to the cvcc-pattern соⲧп = /sotp/ "chosen."[85] When this final /ʔ/ appears in closed syllables, it is mostly indicated in the writing by <ø>; in doubly-closed syllables, it is represented graphemically by <-є> in the dialects of Upper Egypt and by <-ι> in those of Lower Egypt: Sєιоⲧє, Bιоⲧ /jotʔ/, ALєιⲁⲧє, ALFєιⲁⲧ /jatʔ/ < */jatjaw/ "fathers," Sҁιоⲙє, Bҁιоⲙι /hjomʔ/, ALҁιⲁⲙє, Fҁιⲁⲙι /hjamʔ/ < */hi'jamwvt/ "women."[86]

Two important elements in favor of this analysis are: (a) the graphic rendering of this glottal phoneme in dialects other than Sahidic as final <-є> (in Akhmimic and Lycopolitan) or <-ι> (in Bohairic and Fayyumic), and occasionally in Sahidic itself: see Sⲙє, ⲙєє, SALⲙⲏє, Aⲙιє, Bⲙⲏι, ⲙєι, Fⲙєι, ⲙєєι, ⲙⲏι "truth," to be analyzed in all cases as /mvʔ/; (b) the Akhmimic (and partially Lycopolitan) raising of etymological */a/ to <o> or sometimes <є> (instead of the regular outcome <ⲁ>), of etymological */a:/ to <оү> (instead of the usual <ω>), and of etymological */i:$/ to <ι> (instead of <ⲏ>) in final position and before reduplication of the vowel:[87] SALⲧооⲧ̄ϥ, Bⲧоⲧϥ, Fⲧⲁⲁⲧ̄ϥ "his hand"; SBALⲏ̄ⲧо, Fⲏ̄ⲧⲁ "you (fem.)," SFкω, Bхω, Lкω(є), ALкоү "to lay"; Sхωωмє, Aхоүоүмє "book." It is evident that these two environments were perceived as sharing a common feature, which is precisely the presence of a /ʔ/

after the tonic vowel: in Akhmimic /daʔɔf/ = [ˈtʼoʔtɔf], /nta?/ = [nt(ʰ)oʔ], /ko:?/ = [k(ʰ)uːʔ], /ʄoːʔɔm/ = [ˈcʼuːʔɔm]. That this final glottal stop is not expressed in the writing should hardly be surprising, since this is the regular fate of /ʔ/ in Coptic in all initial and final positions, unless it represents the last phoneme of a doubly-closed syllable of the type we considered above (ειοπε = /jopʔ/). Accordingly, a structure such as τοε "part" < *dnj.t* */danjut/[88] should probably be analyzed as /doʔʔ/, the sequence of two glottal stops at the end of the doubly-closed syllable being the reason for the variety of spellings of this word: τοιε, τα(ε), το, just to mention the Sahidic forms.

Conversely, the apparent and utterly un-Egyptian presence of patterns with long unstressed vowel (pretonic as in ουταϩ "fruit" or posttonic as in ⲁⲥⲟⲩ "price") is easily removed from the phonological system of Coptic by interpreting <ου> in these cases not as syllabic /uː/, but rather as semiconsonantal /w/: ουταϩ /wdah/, pattern #ccvc# < *wdḥ* */wiˈdaḥ/, pattern #cv$cvc# and ⲁⲥⲟⲩ /ʔasw/, pattern #cvcc# < *jsw.t* */jiswat/, pattern #cvc$cvc#. In both cases, the hypothetical [uː] (*[uˈtʼah] or *[ˈasuː]) would represent the phonetic realization of /w-/ and /-ɔw/ in those specific environments.

Further reading

Fecht, G. *Wortakzent und Silbenstruktur*. Ägyptologische Forschungen XXI (Glück-stadt: Verlag J. J. Augustin, 1960) [The standard analysis of the syllabic patterns of Egyptian].

Hintze, F. "Zur koptischen Phonologie," *Enchoria* 10 (1980), 23-91 [A generative analysis of Coptic phonology].

Hoch, J. E. *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period* (Princeton University Press, 1994) [A companion for issues of comparative Egyptian-Semitic phonology].

Osing, J. *Die Nominalbildung des Ägyptischen*, 2 vols. (Mainz: Philipp von Zabern, 1976) [The fundamental reference work on the vocalic patterns of the language from Middle Egyptian through Coptic].

Schenkel, W. *Zur Rekonstruktion der deverbalen Nominalbildung des Ägyptischen*. Göttinger Orientforschungen IV/13 (Wiesbaden: Harrassowitz, 1983) [Expands and discusses the methodology of Osing, *Nominalbildung*].

Schenkel, W. *Einführung in die altägyptische Sprachwissenschaft*. Orientalistische Einführungen (Darmstadt: Wissenschaftliche Buchgesellschaft, 1990) [Indispensable tool for the study of the prehistory of Egyptian phonology and its comparative aspects].

4

Elements of historical morphology

4.1   Introduction

Ancient Egyptian is a language of the flectional or *fusional* type,[1] with a diachronic tendency to replace VSO-synthetic structures by SVO-analytic constructions and to move toward the *polysynthetic* type which characterizes Coptic, its more recent phase. Egyptian morphemes are unsegmentable units combining grammatical functions. Morphological forms exhibit a number of correspondences with the patterns of word formation and of flection in other Afroasiatic languages. But although Egyptian is the oldest language of the phylum documented in written form (at least seven centuries before Akkadian), its morphological repertoire differs to a great extent from that of Semitic and of other Afroasiatic languages.[2] This morphological variety can be accounted for in many ways:[3] (a) by suggesting that, in spite of its archaic date, Egyptian had undergone already before its emergence as a written language a considerable number of changes which modified the genetic inventory inherited from Afroasiatic;[4] (b) by considering Afroasiatic a relatively loose language continuum, whose individual branches came to share linguistic features through intensive contact, but were not necessarily derived from a common ancestor;[5] (c) by rejecting the prevailing "semitocentric" approach to Afroasiatic linguistics, proposing that the regular patterns displayed by Semitic, and above all by Arabic, represent a typologically late result of a series of grammaticalizations which created its rich phonology and morphology, rather than the original situation inherited from the *Ursprache*.[6]

In fact, all these approaches have their strong points and contribute to explaining in part the emergence of historical forms. To give one example for each of them: (aa) Egyptian developed already in prehistoric times rigid syntactic forms which favored the neutralization of the function of the original case endings and the loss of vocalic endings. In this respect, Egyptian is typologically more recent than classical Semitic languages such as Akkadian or Arabic, where case endings are kept and productive, although not to the extent in which they played a role in classical Indo-European languages. This

is an interpretation according to the first approach. (bb) Conjugational patterns vary considerably within Afroasiatic, displaying prefixal or suffixal forms, but with few regularities beyond the boundaries of a language family. Thus, the presence of two types of suffix conjugation in Egyptian can hardly be regarded as the result of a development following an original state in which prefix and suffix conjugations coexisted, since the Afroasiatic prefix conjugation forms are themselves a fusion of a pronominal clitic anticipating a coreferential NP to a verbal stem.[7] This is an interpretation according to the second model. (cc) Egyptian exhibits a high number of biradical (and possibly monoradical) roots, in contrast to the quasi-universal, although over-estimated[8] Semitic triradicalism. Egyptian probably represents the original state preceding the regularizations which took place at a typologically later stage in Semitic. This interpretation follows the third approach.

In spite of the underlying theoretical problems, Egyptian morphology is nonetheless conveniently described within the Afroasiatic frame, which is capable of clarifying both the synchronic structures of the language and the remnants of earlier stages.[9] In addition to the Afroasiatic background, attention must be paid to the patterns of evolution from Egyptian to Coptic. As we saw, the general trend in the history of Egyptian is to replace *synthetic* structures, such as the morphemes of gender and number in the noun and the suffixal deictic markers in the verb, by *analytic* constructions:[10] nominal suffixes are superseded by the definite and the indefinite article, grammatical indicators of specialized semantic functions are replaced by lexicalized expressions, synthetic verbal forms give place to juxtapositions of a conjugational head followed by a verbal lexeme.

4.2   Root, stem, word

The basic structure of an Egyptian word is a lexical *root*, an abstract phonological entity consisting of a sequence of consonants or semiconsonants which vary in number from one (for example 1-rad. *j* "to say") to four (4-rad. *znhm* "locust"), with an overwhelming majority of biconsonantal (2-rad. *dd* "to say"), triconsonantal (3-rad. *rmt* "man"), and so-called weak roots, which display a semivocalic ("infirm") last radical (II-inf. *zj* "to go away," III-inf. *mrj* "to love," IV-inf. *hmsj* "to sit") or a gemination of the second radical (II-gem. *m33* "to see," III-gem. *s333* "to land").

Superimposed on the root as a separate morphological tier is a vocalic or semivocalic pattern, which together with the root forms the so-called *stem*, the surface form acquired by the root; the stem determines the functional class to which the word belongs. It is transformed into an actual *word* of the

language by means of inflectional affixes (in Egyptian for the most part suffixes), which convey deictic markers and other grammatical functions such as gender, number, tense and aspect, and voice.[11] Table 4.1 offers common examples of derivational patterns of Egyptian words from roots and stems.

Table 4.1 The derivation of Egyptian words

ROOT	STEM	AFFIX	FUNCTION	WORD
sn "brother"	**san-*	.ø	m.s	**san* "brother"
		.at	f.s.	**sānat* "sister"
	*sanu-	.aw	m.pl.	**sanūwaw* "brothers"
	*sansan-	.ø	Infinitive	**sansan* "to be friendly with"
ɜbd "month"	**ɜabad-*	.ø	sing.	**ɜabád* "month"
	*ɜabud-	.aw	pl.	**ɜabūdaw* "months"
ntr "god"	**natar-*	.ø	sing.	**nátar* "god"
	*natur-	.aw	pl.	**natūraw* "gods"
	*nutr-	.ij	masc. adjective	**nutrij* "divine" (masc.)
		.it	fem. adjective	**nutrit* "divine" (fem.)
sdm "to hear"	**sadam-*	.ø	Infinitive	**sādam* "to hear"
		.s	3 p.f.s.	**sadāmas* "that she hears"
	*sadma-	.ø	Subject = NP	**sadma-NP* "may NP hear"
		.f	3 p.m.s.	**sadmáf* "may he hear"
	*sadim-	.na+f	Past + 3 p.m.s.	**sadimnaf* "he heard"
		.ø	Active participle	**sādim* "the one who hears"
		.iw	Passive participle	**sádmiw* "the one who is heard" < ***sadimiw*
dd "to say"	**dad-*	.ø	Infinitive	**dād* "to say"
	*dvdvd-	.at	Passive part. + f.s.	**dvdvdat* "what has been said"
	*did-	.nu+k	Past rel. + 2 p.m.s.	**dídnuk* "which you said"
	*sidid-	.it	Causative infinitive	**sidḏit* "to tell"
'h' "to stand"	**ma'hi'-*	.wat	f.pl.	**ma'hi'wat* "tomb(s)"
mn "(to be) stable"	**man-*	.ø	Infinitive	**mān* "to be stable"
	*simin-	.t	Causative infinitive	**simīnit* "to establish"
	*jamin-	.ij	Nominal ending	**jamīnij* "(type of) vessel"
'q "to enter"	**'aqw-*	.uw	Nominal ending	**'aqwuw* "income" (> "food")
wsh "(to be) broad"	**sah-*	.at	f.s.	**sáhat* "field" (< "breadth")

Vocalic skeletons generally determine the structure of nominal patterns and of basic conjugational forms, whereas semivocalic suffixes convey the expression of the plural, of adjectival forms of the verb (participles and relative forms), and of some conjugational patterns. The feminine marker is a *t*-suffix added to the basic masculine noun (*sn* "brother" vs. *sn.t* "sister"); the most common derivational pattern of adjectives is a *j*-suffix (*nṯrj* "divine" from *nṯr* "god"). A *j*- or *w*-prefix can be added to biconsonantal roots to form triradical nominal stems;[12] conversely, a triconsonantal root may lose a semi-vocalic glide and be reduced to a biradical stem.[13] Examples of consonantal additions to a root are *s*- for causative stems,[14] *n*- for singulative nouns and reflexive verbs,[15] and *m*- for nouns of instrument, place, or agent.[16] While many of these morphological features are indeed shared by other Afroasiatic languages, Egyptian stems resulting from the addition of a consonantal phoneme to a root tend to be lexicalized as new autonomous roots rather than treated as grammatical forms of the basic root: Egyptian, therefore, does not possess a full-fledged paradigm of verbal stems conveying semantic nuances of a verbal root similar to the ones we know from Semitic.

The most common modifications of the root are: (1) the *reduplication* of the entire root or of a segment thereof. This pattern affects the semantic sphere, creating new lexemes: from *sn* "brother" *snsn* "to be friendly with," from *gmj* "to find" *ngmgm* "to be gathered" (with the *n*-prefix of reflexivity), from *snb* "to be healthy" *snbb* "to greet"; (2) the *gemination* of the last radical, which affects the grammatical sphere: 2-rad. *ḏd* "to say" > *ḏdd.t* "what has been said," III-inf. *mrj* "to love" > *mrr=j* "that I love," II-gem. *m33* "to see" > *m33=f* "while he sees," 3-rad. *sḏm* "to hear" > *sḏmm=f* "he will be heard."[17]

Table 4.2 From synthetic to analytic patterns

	EARLIER EGYPTIAN	LATER EGYPTIAN
NOUN	*sn* "(a, the) brother"	*ou-son* "a brother," *p-son* "the brother"
	sn.t "(a, the) sister"	*ou-sône* "a sister," *t-sône* "the sister"
	nfr "good"	*p-et-nanou=f* "good"
		< *"that-which it is good"
VERB	*sḏm.n=f* "he heard"	*a=f-sôtm* "he heard"
		< *"he did the hearing"
	mrj.w=f "may he be loved"	*ma-r=ou-merit=f* "may he be loved"
		< *"let them do the loving of him"

The presence of a strong expiratory stress led in late prehistoric times to a change of the inherited syllabic patterns from the prehistoric *Dreisilbengesetz*

to the historical *Zweisilbengesetz* (section 3.4.3) and to the reorganization of nominal stems. Following its analytic tendency, later Egyptian morphology displays a variety of inflectional prefixes deriving from the grammaticalization of earlier Egyptian patterns,[18] which have been phonologically reduced and are now followed by the lexeme, as shown in table 4.2.

4.3   Nominal morphology

4.3.1   General features

In our discussion of phonology (section 3.4.3), we saw that one of the major features of Egyptian in its early stages was the presence of a strong expiratory stress, which eventually caused a reduction to /ø/ of short vowels in open syllables in posttonic position, with the resulting change from the *Dreisilbengesetz* to the *Zweisilbengesetz* (**saḏimat* > *saḏmat* "she who hears"). A very important effect of this reduction of short posttonic vowels was the loss of the old Afroasiatic case markers (nominative *-u*, accusative *-a*, genitive-possessive *-i*, possibly locative *-is*):[19] thus, a prehistoric **san-u* became the form we posit for earlier Egyptian: *san* "brother."

The case markers, however, left traces in the morphological behavior of the corresponding nouns. An example was already given in table 4.1 s.v. *san*: the old case marker *u*, which was dropped in the singular form, reappears in the formation of the plural, attracting stress and vocalic length, developing a glide before the morpheme *-aw*, and generating the form *sanūwaw*. Also, the ending *-u* is still preserved, although functionally reinterpreted, in the forms of some singular patterns as well: when the original stem ended in a vowel, for example *-u* in *hāruw* "(the god) Horus," *-a* in *hupraw* "form," or *-i* in *masḏiw* "enemy," the ending was maintained as a glide, often written in good orthography as <-w> in the case of *-aw* as opposed to <-ø> in the case of *-iw* or *-uw*:[20] <hprw> =: *hupraw* "form," <hf3w> =: *haf3aw* "snake." Further evidence of survival of the nominative ending was discussed in section 3.4.3 as a form of "contingent extrasyllabicity": there are instances of two variants of the same word, one with consonantal nominal stem (for example Proto-Eg. **nib-u* > Upper Eg. *nib* > ⲗⲛⲉⲛ "lord," *nībif* > Greek -νηφις "his lord") and one in which the old ending *-u* develops an extrasyllabic *w*-glide and keeps the original bisyllabic structure (for example **nib-u* > Lower Eg. *nībuw* > ⲃⲛⲏⲃ "lord," *nibwif* "his lord" > Greek -ναβ-).[21]

Remnants of the accusative (or "absolutive") case in *-a* will be mentioned in sections 4.6.3.2 and 4.7. As for the genitive and possessive *-i*, a survival in historical times is offered by the *i*-pattern before pronominal suffixes (for

example Proto-Eg. nominative **ḫar-u > ḫr */ḫar/ > ϩο /ho?/ "face," genitive + f-suffix **ḫar-i-f > ḫr=f */ḫa'rif/ > ϩραϥ /ḥraf/ "his face"), and by the vocalization of the adjectives derived from nouns by means of the pattern known as *nisbation*, from the Arabic noun *nisba* "relation": a morpheme -j is affixed to the genitive of a noun in order to derive the corresponding adjective: nominative **ḫar-u > ḫr */ḫar/ > ϩο /ho?/ "face," genitive + j-suffix **ḫar-i-j > *ḫarij > ϩραι /ḥraj/ *"related to the face" > "upper part"; nominative *taʒaš-u > t3š */ta'raš/ > τοϣ /toš/ "border," genitive + j-suffix **taʒaš-i-j > t3šj */taR'šij/ > τεϣε /tə'še?/ *"related to the border" > "neighbor"; *jamin-u "the right side" > **jamin-at > jmn.t */jamnat/ "the right side" > jmn.tj */ja'mintij/ > ελΝΤ /ʔə'ment/ "West."[22]

Egyptian adjectives are syntactically treated as substantives. Nouns can function as appositions to a preceding noun: z3=j ḥrw */ziːRaj ḥaːRuw/ "my son Horus"; when used attributively, adjectives follow the modified noun: z3=j nfr */ziːRij naːfir/ "my beautiful son."

The main innovation in the phonology of later Egyptian nouns is the lenition and the progressive loss of final vocalic and semivocalic endings (section 3.5), which at times provoked the disappearance of the entire final syllable of the word: consonantal stem nṯr */naːcar/ > νοϫτε /nuːtə/ "god"; u-stem hrww */harwuw/ > ϩοοϫ /hoʔw/ "day"; a-stem ḫf3w */ḫafRaw/ > ϩοϥ /hof/ "snake"; i-stem k3mw */kaRmiw/ > ϭμε /kʲme?/ "gardener." On the syntactic level, this phenomenon is paired by the development of an overt marker of determination represented by the definite and indefinite article p3 > π-, πε- and w' > οϫλ- respectively: Late Egyptian p3-nṯr > Coptic π-νοϫτε "the god," w'-h3w > οϫ-ϩοοϫ "a day," p3-k3m > πε-ϭμε "the gardener," w'-ḥf > οϫ-ϩοϥ "a snake." But unlike what happens in the Semitic languages which possess a definite article, where the determined modifier is introduced by a determinative pronoun (for example Hebrew hā-'îš hag-gādôl "the great man"), later Egyptian displays no such morpheme: Late Egyptian p3-rmt '3 "the great man."[23] In later Demotic and Coptic, however, the determinative pronoun n (Coptic Ñ-) acquires this function: Coptic πρωμε Ñνοϭ "the great man." The morpheme n is also used in all stages of the language to express the indirect genitive (section 4.4): earlier Egyptian rmt n(j) km.t, Late Egyptian p3-rmt n km.t, Coptic πρñκμε "the Egyptian man" < "the man of Egypt."

4.3.2 Compound nouns

Like many other Afroasiatic languages, earlier Egyptian exhibits a pattern of nominal determination characterized by the direct juxtaposition of a *regens* and a *rectum*, originally in the genitive case; this form of direct genitive is

called "construct state" (*status constructus*): nb jm3ḫ "possessor of veneration" > "venerable." The direct genitive was a productive device in classical Egyptian, although not as frequent as in Akkadian, Hebrew or Arabic, and tended to be replaced by the analytic construction with the determinative pronoun n(j): rmt nj km.t "man that-of Egypt" > "Egyptian." However, the structure of a set of Egyptian words known as "compound nouns" shows that already in early historical times these compounds were lexicalized and treated as a single lexical item:[24] while in the genitival construction and in the pattern "noun + adjective" the stress falls on the *rectum* (md.t rmt */madat'raːmac/ "the 'thing' of man" > μÑτρωμε /mən'troːmə/ "mankind"; rmt '3 */ramac'ʕaR/ "great man" > ρμμλο /rəmma'ʔo?/ "rich"), in the compound nouns it falls on the *regens*: ḥm-nṯr */ḥam'nacar/ > ϩοντ /hont/ "servant-of-god" > "priest"; z3-t3 */ziRtaR/ ("son of the earth" >) "snake" > cιτε /siːtə/ "basilisk." The same pattern is shared by a few instances of adjectival or participial constructions, such as mn-nfr */minnafvr/ "stable of beauty" (the reference is to King Pepi I) > Μεμϕις, μÑϥε /menfə/, originally the name of the king's pyramid, metonymically extended to the whole city of "Memphis," the first capital of Egypt.[25]

Compound nouns are rare and their etymology often unclear; however, they point back to a phase in the history of Egyptian, which probably lasted until the end of the Old Kingdom, in which the old tonic pattern with antepenultimate stress (*Dreisilbengesetz*, section 3.4.3) was still productive.

4.3.3 The feminine

The feminine singular ending of earlier Egyptian was marked by a suffix -t preceded by a vowel, frequently *-at, also *-it for the i-stem and *-ut for the u-stem. The vowel can be reconstructed with a degree of certitude only if it was stressed or – less reliably – if it can be inferred on the basis of Akkadian transcriptions or derivational patterns. A stressed feminine ending is documented by examples such as ḫtt.t */ḥac'cat/ > Βλϭο /ʔa'co?/ "armpit," p.t */pit/ > πε /pe?/ "heaven," pr.t */pu'rut/ > (ε)Βρλ /(ə)bra?/ "seed"; transcriptions and derivational patterns show the ending *at in pd.t */piː'jat/ > πιτε /piːtə/ "bow," see Akk. transcription -pi-ta, the feminine adjectival nisba ending *-it as in jmn.tt */ja'mintit/ "West" > λμÑτε /ʔa'mentə/ "Afterlife," see masc. jmn.tj */ja'mintij/, or the ending *-ut in wpw.t */wapwut/ > */wap?/ > ειοπε /jop?/ "occupation," see wpw.tj */wap'wuːtij/ "messenger," Meroitic apote.[26] In general, posttonic vowels were dropped in later Egyptian (section 3.3); in most cases, therefore, the vocalic color of the feminine endings is retrievable only on systematic grounds. Parallel to the masculine forms discussed above, Egyptian morphology shows cases of feminine words derived from a stem originally ending in

*-u in which the thematic vowel reappears as a semiconsonantal glide before pronominal suffixes: dp.t "boat" (stem *dvpu-), probably */dv:put/, with pronominal suffix dp.wt=f "his boat," probably */dvpwv:tif/.[27]

The feminine ending corresponding to the nisba *-ij is *-it: from the preposition ẖr */çur/ "beneath" one derives the adjective ẖrj */çu'rij/ "which is beneath" > ϩⲣⲁⲓ "lower part," whose feminine form is ẖr.t */çu'rit/ (*what is beneath" > *"what is needed" >) "food offerings" > ϩⲣⲉ /hreʔ/ "food."[28]

4.3.4 Plural and dual

The formation of the plural is more complex. A semivocalic morpheme *-w or *-aw, possibly derived, like the corresponding Semitic plural in *-ū, [29] from a longer form of the singular ending *-u,[30] was added to most singular forms, although a few nouns may have possessed a plural or collective form without external suffixes.[31] An important morphological alternation connected with plural suffixes relates to what is usually called the "broken plural": while in the singular form triradical nouns often display the vocalic pattern *cacac-, their plural stem is *cacuc-, which originally indicated collectiveness, followed by the plural suffix *-w or *-aw.[32] The morphological alternation between singular and plural is known from other Afroasiatic languages,[33] for example Arabic qalb "heart," pl. qulūb. But Egyptian broken plurals differ from their Semitic equivalents – being in this respect closer to the African branches of the phylum – in that internal morphological alternation was rarely the only marker of the plural form, but rather coexisted with other morphological devices, such as the affixation of *-w or *-aw.

Examples of *-w are: (a) cons. stem **'anaḫ-u > 'nḫ */ʕa'naχ/ > ⲁⲛⲁϣ /ʔa'naš/ "oath," pl. **'anaḫu-u > 'nḫ.w */ʕa'naχw/ > */ʕa'nawχ/ > ⲁⲛⲁⲧⲩ /ʔa'nawš/;[34] (b) u-stem **haru-u > hrww */harwuw/ "day" > ϩⲟⲟⲧ /ho?w/, pl. **haruu-u > hrw.w */ha'ruww/ > Ⳉⲣⲉⲧ /hrew/; **madu-u > mdw "word," pl. **maduu-u > md.w */ma'duww/ > ᴮ-ⲙⲧⲁⲧ /mdaw/; (c) a-stem **ḫupira-u > ḫprw */χupraw/ "form," Akk. transcription -ḫu-u'-ru[35] (corresponding to a later Egyptian *ḫuprɔ), pl. **ḫupirau-u > ḫpr.w */χu'pirw/, Akk. transcription (a)ḫ-pe/i-e/ir (for a later Egyptian form *ḫpeʔɔ);[36] (d) i-stem **jaḫi-u > jḫj */ja'hij/ "ox" > ⲉϩⲉ /ʔa'heʔ/, pl. **jaḫiu-u > jḫ.w */ja'hiww/ > ⲉϩⲉⲧ /ʔa'hew/.

Examples of *-aw: (a) cons. stem **raɜ-u > rɜ */raʀ/ > ⲣⲟ /roʔ/ "mouth," pl. **raɜ-aw > rɜ.w */ra:ʀaw/ > ⲣⲱⲟⲧ /ro:w/;[37] (b) u-stem **radu-u > rdw */ra:duw/ > ⲣⲱⲧ /ro:t/ "plant," pl. **raduu-aw > rdw.w */radwaw/ > ᴮⲣⲟϯ /rot?/; (c) a-stem **zaḫɜa-u > zḫɜw */zaçʀaw/ > ᴮⲥⲁϧ /sax/ "scribe," pl. **zaḫɜau-aw > zḫɜ.w */zaçʀa:waw/ > zḫy.w */zɔçʔaij(vw)/ > ᴮⲥϧⲟⲧⲓ /sxu:j/; (d) i-stem **tasašij-u > tɜšj

*/taʀ'šij/ > ⲧⲉⳣⲉ /tɔ'šeʔ/ "neighbor," pl. **tasašiju-aw > tɜšj.w */taʀ'šijwaw/ > */tɔʔšejwɔ/ > ⲧⲉⳣⲉⲉⲧ /tɔ'šeʔw/.[38]

The plural suffix, therefore, caused considerable changes in the syllabic structure of the corresponding singular forms. In many cases these changes affected only the phonological level and the word stress: tɜš */ta'ʀaš/ > ⲧⲟⳣ /toš/ "province," pl. tɜš.w **tasaš-aw > */taʀšaw/ > ⲧⲟⲟⳣ /toʔš/, jtj */ja:tij/ > ⲉⲓⲱⲧ /jo:t/ "father," pl. jtj.w **jatij-aw > */jatjaw/ > ⲉⲓⲟⲧⲉ /jot?/ or hɜbw */haʀbuw/ > */ha?b(vw)/ > ϩⲱⲃ /ho:b/ "event," pl. hɜbw.w */haʀ'bu:waw/ > ϩⲃⲏⲧⲉ /hbe:wɔ/. In other cases they also involved the morphological level, with the original case markers reinterpreted as thematic vowels with the developement of a w-glide: sing. **haru-u > hrww */harwuw/ > ϩⲟⲟⲧ /ho?w/ "day," pl. **haru-w > hrw.w */ha'ruww/ > Ⳉⲣⲉⲧ /hrew/; sing. **san-u > sn */san/ > ⲥⲟⲛ "brother," pl. **sanu-aw > sn.ww */sa'nu:waw/ > ⲥⲛⲏⲧ.[39]

Feminine plurals are of two types.[40] While many feminine words do not show a specific plural ending different from the corresponding singular in -t, both hieroglyphic and Coptic evidence indicates the existence of a feminine plural morpheme .wt (*-wat) affixed to the basic stem: for example from the consonantal stem **ḥijam- sing. ḥjm.t */ḥijmat/ > (ⲥ)ϩⲓⲙⲉ /(s)hi:mɔ/ "woman" vs. pl. ḥjm.wt */ḥi'jamwat/ > ϩⲓⲟⲙⲉ /hjom?/; from the a-stem **ranpa- sing. rnp.t */ranpat/ > ⲣⲟⲙⲡⲉ /rompɔ/ "year" vs. pl. rnp.wt */ran'pawwat/ > ⲣⲁ̄ⲡⲟⲟⲧⲉ /rɔm'powwɔ/; from the i-stem **pi- sing. p.t */pit/ > ⲡⲉ /pe?/ "heaven" vs. pl. p.wt */pi:wat/ > ⲡⲏⲧⲉ /pe:wɔ/. A few feminine plurals, especially those belonging to the a-pattern *-awwat > -ⲟⲟⲧⲉ /-owwɔ/,[41] survive down to Coptic.

Table 4.3 Earlier Egyptian nominal morphology

		STEM			
		CONS.	U-STEM	A-STEM	I-STEM
MASCULINE	SINGULAR	*ra? *'anaḫ *ɜabáḏ *sáḥam	*hárwu-w *hásbu-w	*ḫúpra-w *háfɜa-w	*jaḥi-w *ḥúmwi-w
	PLURAL	*rá?-aw *'anaḫ-w *ɜabúḏ-w/ *ɜabúḏ-aw *sáḥm-aw	*harúw-w *hɜɔbúw-aw	*ḫupír-w *hafɜáw-aw	*jaḥíw-w *ḥumwíw-aw
FEMININE	SINGULAR	*ḥijm-at	*purú-t	*ránpa-t *subɜá-wat	*pi-t *tapí-t
	PLURAL	*ḥijám-wat		*rɔnpáw-wat *subɜáw-wat	*pí-wat *tapí-wat

Another suffix *.wt*, morphologically feminine but applied to masculine nouns, is often used in the formation of collectives: from *rd* */raːduw/ "plant" the collective noun *rd.wt* */ridwat/ "flora," from *sbȝ* "star" the collective *sbȝ.wt* "constellation."[42]

The main features of earlier Egyptian nominal morphology are captured in table 4.3. The reconstructions refer to the formal ("prehistoric") structure of the words, and not necessarily to their actual phonological realization in historical Egyptian.

Earlier Egyptian possessed a recessive morphological category "dual," in classical times limited to natural duals such as the numeral "2," parts of the human body occurring in pairs (eyes, ears, feet, legs, etc.) and semantically related lexemes: the two sandals, the Two Gods. Masculine duals display a semivocalic addition *.j* to the plural form: *sn.wj* */siˈnuwwvj/ > ᴄⲚⲀⲨ /snaw/ "two (masc.)," *ph.wj* */paħwvj/ > ⲚⲀϧⲞⲨ /pahw/ "buttocks." Feminine duals also exhibit the ending *.j*, but it is not clear whether this ending was affixed to the singular (as generally assumed), or rather to the plural (as required by the symmetry with the masculine paradigm), since, as we saw, it is difficult to assess in which nominal classes the plural feminine morpheme *.wt* was used:[43] *sn.tj* */sintvj/ > ᴄⲎⲦⲈ /sentə/ "two (fem.)," *sp.tj* */saptvj/ "lips," Old Coptic <spat> < /saˈpatjaj/ "my lips." Coptic ᴄⲠⲞⲦⲞⲨ /spotw/ "lips" < */saˈpatjvw/ "their lips,"[44] *w'r.tj* */wuˈʕruːtvj/ "legs" > ⲞⲨⲈⲢⲎⲦⲈ /wəˈreːtə/ "foot."[45]

4.3.5 *Feminine and plural in later Egyptian*

The fall of final vocalic and semivocalic phonemes in later Egyptian (section 3.5) led to a synchronic state in which feminine nouns maintain their syntactic gender, being determined by the feminine article (definite *tȝ* > Ⲧ-, ⲦⲈ-; indefinite *w'.t* > ⲞⲨ-) and agreeing with feminine pronouns, but are hardly recognizable on purely morphological grounds: a pattern ᴄⲱᴄⲁ < *cắcac, for example, is shared by feminine nouns like ᴄⲱⲚⲈ /soːnə/ "sister" < *sắn.at, by masculine nouns like ⲢⲱⲘⲈ /roːmə/ "man" < *rắmat, and by verbal infinitives like ⲔⲱⲦⲈ /goːtə/ "to turn" < *qắdaj. In rare instances, the feminine of a noun or of an adjective is retained in Coptic as an autonomous lexeme together with its masculine counterpart: ᴄⲞⲚ "brother" vs. ᴄⲱⲚⲈ "sister," ϣⲎⲢⲈ /ˈʃeːrə/ (< *ʃĩrij) "son" vs. ϣⲈⲈⲢⲈ /ˈʃeːrə/ (< *ʃĩrjit) "daughter," ϩⲞϥ /hof/ (< *ħafȝaw) vs. ϩϥⲱ /hfoː/ (< *ħafȝắwat) "snake," ⲂⲱⲱⲚ /boːʔən/ (< *bȝȝin) vs. ⲂⲞⲞⲚⲈ /boːʔnə/ (< *bȝȝnat) "bad," ᴄⲀⲂⲈ /saˈbeʔ/ (< *sabȝĩw) vs. ᴄⲀⲂⲎ /saˈbeːʔ/ (< *sabȝĩwat) "wise."

A similar phonological outcome affected dual and plural forms as well. As in the case of the feminine, the development of the definite article *nȝ* > Coptic Ⲛ-, ⲚⲈ- is paralleled by a progressive fall of the plural endings. In

general, while only a limited number of identifiable feminines and an even smaller number of duals (usually reinterpreted as singulars or plurals)[46] is kept in later Egyptian, the number of plural patterns is much higher, with the loss of final vowels and semiconsonants favoring the emergence of new oppositions based on internal apophonic alternations between singular and plural forms: Late Middle Egyptian sing. <soxm> vs. pl. <saxm> "power";[47] Coptic ⲈⲂⲞⲦ /ʔəˈbot/ vs. ⲈⲂⲎⲦ /ʔəˈbeːt/ "month," ⲔⲀᴄ /gas/ vs. ⲔⲈⲈᴄ /geʔs/ "bone," ⳻ⲘⲈ /diːmə/ vs. ⲦⲘⲈ /dmeʔ/ "town," ⲀⲚⲀϢ /ʔaˈnaʃ/ vs. ⲀⲚⲀⲨϢ /ʔaˈnawʃ/ "oath."

The state of affairs in later Egyptian raises questions about the features of the earlier Egyptian system. While justified within the conjectural Afro-asiatic comparative frame and supported to a certain degree by the scanty Coptic evidence, the reconstruction of the nominal system faces nonetheless two methodological difficulties. On the one hand, earlier Egyptian morphological oppositions often appear redundant: for example, if the system did have apophonic alternations between singular and plural forms (as in *ȝabad-* vs. *ȝabud-* in the word for "month"), and if, moreover, this is often the only opposition surviving in the corresponding Coptic forms (ⲈⲂⲞⲦ vs. ⲈⲂⲎⲦ), do we always have to posit the concomitant presence of an external plural suffix in earlier Egyptian? On the other hand, the presence of these morphemes is not always supported by the actual evidence of hieroglyphic texts: the plural *ȝbd.w* "months" is regularly written like the singular *ȝbd* "month," with an ideographic (the three strokes for "ᴘʟᴜʀᴀʟ"), rather than phonetic indication (<w>) of the presence of the plural morpheme.

This divorce between methodological requirements and philological evidence has urged modern scholars to draw a distinction between two realities underlying our historical study of Egyptian: (1) the linguistic system resulting from a regular application of the morphophonological rules of derivation of Coptic forms from Egyptian antecedents, conventionally called "pre-Coptic Egyptian"; (2) the forms which emerge from the actual reality of Egyptian texts, i.e. "hieroglyphic Egyptian."[48]

The reasons for the fact that "hieroglyphic Egyptian" appears much less regular than "pre-Coptic" are twofold. First and foremost, as recognized by all students of the field, the Egyptian graphic system, while not as irregular or inconsistent as suggested by traditional Egyptology, prevents us from acquiring a reliable insight into the underlying morphological patterns (sections 2.2, 3.2). There is also another aspect to this issue: to follow Hjelmslev's terminology, no linguistic code displays a total identity between underlying *system* and historical *norm*.[49] The reconstructed "pre-Coptic Egyptian" is an *idealized* linguistic system: even if the rules for its recon-

struction were all correct, which is in itself very doubtful, this redundant system would still not be the mirror of an actual historical reality. Nor can the hieroglyphic evidence be trusted to provide access to the synchronic norms of Egyptian: the use of hieroglyphs, Hieratic and Demotic is highly controlled by social conventions,[30] therefore doomed to convey a constant dialectics between traditional orthography and underlying phonology (section 2.3). Thus, actual historical manifestations of Egyptian were probably less regular than reconstructed "pre-Coptic," but more diversified than is betrayed by "hieroglyphic Egyptian."

To give just some examples of how these methodological concerns may modify the paradigms of nominal morphology given above, I would like to argue that the "systematic" singular and plural ending *-w (in the singular patterns *-vw and in the plural patterns *-w and *-aw respectively) may have been actually realized as /ø/ in words in which the presence of *-w was redundant, i.e. where there was no opposition between two homophonic realities: for example r'(w) "sun" */riʃv/ rather than the commonly assumed *rī'uw. The historical shape of hrw(w) was probably from the very beginning */harwv/ rather than */harwuw/;[51] this would fit better both the traditional hieroglyphic writing of this word as <hrw> and its Coptic outcome ϩⲟⲟⲩ /hoʔw/. This hypothesis implies, however, that the apophonic alternation may have sufficed in some cases to mark the opposition between a singular and a plural form already in earlier Egyptian: sing. hrw */harw(v)/ vs. pl. hr.w */ha'ruw(w)/, which again suits perfectly the hieroglyphic writing of the plural as <hrw> and the Coptic form ϩⲣⲉⲩ /hrew/. Similarly, there is no need to suppose that one of the two plural forms of ꜣbd */ra'bad/ "month" ever displayed a semiconsonantal ending: while a w-plural *ꜣabūdw is documented by Coptic ⲉⲃⲁⲧⲉ /rə'batʔ/, the aw-plural *ꜣabūdaw was probably always */ra'buːdv/, from which both the hieroglyphic writing with <ø> and the Coptic form ⲉⲃⲏⲧ /rə'beːt/ are readily derivable. In the word ḥfꜣw */ḥafraw/ and generally in the a-stem, on the other hand, the presence of a semiconsonantal ending is supported not only by the orthographic frequency of <-w>,[52] but also by the fact that the w-glide was eventually palatalized to j in the plural pattern, i.e. in an environment in which /w/ was intervocalic: */ḥafraːwaw/ > */ḥafʔaːjv/, as suggested by the presence of the two spellings <ḥfꜣw> (the older form) and <ḥfꜣjj> (the recent form)[53] and by the Coptic outcome ϩⲃⲟⲟⲩⲓ /hbuːj/. What seems less probable is that this word had in fact two plural forms, one ending in -w and one ending in -aw,[54] or that the realized form ever included the second w, i.e. the actual ending of the plural aw-morpheme: the hieroglyphic evidence does not support it,[55] and its

presence also appears functionally redundant. If this hypothesis is correct, the Egyptian *norm* will be found to display a significantly lower number of semi-consonantal endings than the *system* posited by contemporary research.[56]

The evolution of nominal morphology is presented in table 4.4, which captures the later Egyptian counterparts – reconstructed on the basis of Akkadian transcriptions, Late Middle Egyptian evidence, and Coptic – of the lexemes treated in table 4.3.

Table 4.4 Later Egyptian nominal morphology

		STEM			
		CONS.	U-STEM	A-STEM	I-STEM
MASCULINE	SINGULAR	/roʔ/ /ʔanaʃ/ /ʔəbot/ /soːχəm/	/hoʔw/ /hoːb/	/χuprə/[57] /hof/	/ʔəheʔ/ /ham/
	PLURAL	/roːw/ /ʔanawʃ/ /ʔəbatʔ/, /ʔəbeːt/ /saχm/	/hrew/ /hbeːwə/	/χpeʔr/[58] /hbuːj/	/ʔəhew/ /hmeːw/
FEMININE	SINGULAR	/hiːmə/	/braʔ/	/rompə/ /sboːʔ/	/peʔ/ /ʔapeʔ/[59]
	PLURAL	/hjomʔ/		/rəmpowwə/ /sbowwə/	/peːwə/ /ʔapeːwə/

4.4   Pronouns

4.4.1   Personal pronouns

Earlier Egyptian exhibits four sets of personal pronouns, which share many elements with the pronouns of other Afroasiatic languages:[60]

(1) *Suffix pronouns.* They are used to indicate the possessor in a direct genitival construction (prw=j "my house"), the prepositional complement (jm=f "in him"), the subject of a verbal form, whether active (sḏm=k "you hear") or passive (sḏm.n.tw=f "it was heard"), including participles and relative forms (mrjj=f "his beloved"), and the highest argument of an infinitive, mostly the agent, but in the case of a transitive verb often the patient (ḏd=k "your saying," rḏj.t=f "to put him").

The morphological structure of the suffix pronouns is similar to that of their Semitic equivalents:[61] (1) first person =j (probably *-aj); (2) second person

masc. =k (Proto-Eg. **-ku; the final vowel does not appear in historical Egyptian: *-k), fem. =ṯ (Proto-Eg. **-ki; the final vowel was also dropped, but left a trace of its earlier presence in the resulting palatalization of the plosive velar: */-ki/ > */-kʲi/ > *-ṯ, i.e. the palatal plosive /-c/); (3) third person masc. =f (Proto-Eg. **-su; the back vowel /u/ led to a labialization of /s/: */-su/ > */-sʷ/ > */-ɸ/ > *-f), fem. =s (Proto-Eg. **-si, with the dropping of the front vowel /i/: */-si/ > */-sʲi/ > *-s).[62] The plural forms, common to masculine and feminine, show the addition of an element n (in the dual nj) to the singular: (1) first person plural =n (**-ina > *-in), dual =nj (*-inij); (2) second person plural =ṯn (from **-kina; the front vowel led to a palatalization of the velar stop: *-ṯin), dual =ṯnj (*-ṯinij); (3) third person plural =sn (**-sina > *-sin), dual =snj (*-sinij).

(2) *Enclitic pronouns*, called by Egyptologists "dependent pronouns." They are used as object of transitive verbal phrases (mꜣꜣ=j sw "I see him"), as subject of adjectival sentences (nfr sw "he is good"), and as object of initial particles in verbal and adverbial sentences (mk wj m-bꜣḥ=k "behold, I am in front of you").

Morphologically, these pronouns show the addition of a morpheme w (in the first, second and third person masculine), j (third person feminine), or m/n (second person feminine) to the original form of the suffix pronoun, whereas plurals and duals show no difference between suffix and enclitic pronouns: first person -wj */wvj/, second person masc. -kw */kuw/ (in Old Egyptian) > -ṯw (in the classical language), fem. **-km > -ṯm */cim/ > -ṯn, third person masc. -sw */suw/, fem. -sj */sij/ (from the classical language onward also -st, the use of which is soon extended to the third person plural). The forms sw and sj prove that /s/ must have been the original consonantal element in the third person suffix pronouns as well. Enclitic pronouns always occupy the syntactic position after the first prosodic unit of the clause.[63]

(3) *Stressed pronouns*, often called "independent pronouns." They function as subject (or better "topic") of a nominal sentence in the first and second person (jnk jtj=k "I am your father," section 4.2), as focalized subject of a cleft sentence (ntf mdw "It is he who speaks," jnk jnj=j sw "it is I who shall bring it," section 4.4),[64] and in the earliest texts also as subject of an adverbial sentence (Pyr. 1114bᴾ jnk jr p.t "I am toward the heaven").[65]

In their structure, stressed pronouns contains three morphs:[66]

(a) An initial element (j)n, probably connected with the marker jn, which in historical Egyptian is a particle introducing the focalized nominal subject of a cleft sentence, the agent, i.e. the logical subject of a passive predicate,[67] and an interrogative sentence. It has been argued that jn, originally a marker

of "ergativity," points back to the prehistoric phase still characterized by the presence of cases in the nominal morphology of Egyptian.[68] Traces of ergativity, together with other remnants of a full-fledged case system (section 4.3.1), can be found in Egyptian not only in the variety of uses of the particle jn, but also in the identical morphological treatment of the pronominal objects of transitive verbal phrases – whether of finite forms (sḏm=j sw "I hear him") or of infinitives (sḏm=f "hearing him") – and of the pronominal subjects of intransitive or adjectival verbs – once again in finite forms (nfr sw "he is good") as well as in infinitives (prj.t=f "his coming"). These remnants of an earlier ergativity appear integrated into the nominative-accusative coding (section 4.6.3.3) of historical Egyptian.

(b) A deictic element k (in the first persons) or t (in the second and third persons), etymologically connected with the pronominal endings of the stative, see (4) below.

(c) A partially modified form of the corresponding suffix pronoun.

The first person pronoun is jnk */ja'nak/, see Akkadian 'anāku, Hebrew 'ānōkī.[69] In the second and third person singular there are two sets of independent pronouns, an Old Kingdom form displaying an element t following the corresponding form of the enclitic pronoun (second person masc. ṯwt, fem. ṯmt, third person masc. swt, fem. stt), and a more recent one, from the late Old Kingdom onward, build according to the pattern described in (a)–(c): second person masc. ntk */(ja)n'tak/, fem. ntṯ */(ja)n'tac/, third person masc. ntf */(ja)n'taf/, fem. nts */(ja)n'tas/. The plural forms are common to masculine and feminine: first person jnn */ja'nan/ (documented only in postclassical times), second person ntṯn */(ja)n'taːcin/, third person ntsn */(ja)n'taːsin/. The third person form has a dual variant ntsnj.

(4) *Stative endings*. The pronominal paradigm of personal endings added to the conjugation pattern called stative (or *old perfective*, or *pseudoparticiple*)[70] exhibits close kinship to the suffix conjugation of Semitic and Berber, with the addition of a suffix .j/.w to the consonantal endings:[71] first person .kj > .kw (Akk. -āku, Berber -ɣ), second person .tj (Akk. masc. -āta, fem. -āti), third person masc. .j > .w, mostly written <ø> (Akk. -a), fem. .tj (Akk. -at); the plural forms show the addition of a morph n, which is also found in the independent pronouns and in the Semitic counterparts: first person .w(j)n (Akk. -ānu), second person .tw(j)n (Akk. masc. -ātunu, fem. -ātina), third person masc. .wj (Akk. -ū), fem. .tj (Akk. -ā). A dual form with the addition of an ending j to the plural is documented for the second and third person.

The functional array of the Egyptian stative matches the corresponding forms in Semitic and Berber.[72] Although Egyptian stative endings, unlike

the Akkadian permansive, cannot be applied to nouns (šarrāku "I am a king"),[73] the stative finds its semantic origin in a nominal construction with a conjugated "middle" participle following its subject: zḫзw jj.w "the scribe has gone." The later evolution is characterized by two features: on the one hand, the form maintained its original function with intransitive verbs but was reinterpreted as passive when used with transitive verbs, passive being a semantic subset of the aspectual category of "perfectivity" (zḫзw sdm.w "the scribe was heard");[74] on the other hand, the stative was integrated into non-stative paradigms such as the narrative use of the first person perfect (jrj.kj "I did"), the optative use of the second person prospective (snb.tj "may you be healthy" > "Farewell!," CT VI 76c ḫrj.twn r bз=j pn "Keep yourselves removed from my soul"), or the use of the third person jussive in eulogies (nzw-bjt X 'nḫ.w wdз.w snb.w "the King X – may he be alive, prosperous, and healthy").

All these uses represent a typologically predictable evolution from the original semantic spectrum of the stative as a conjugated nominal form, with a close historical and typological kinship to the grammaticalization of the suffix conjugation form qatal-a in Northwest Semitic.[75] Syntactically, the stative is found in classical Egyptian in paradigmatic alternation with the construction "subject + preposition ḥr + infinitive" in the so-called pseudo-verbal sentence (zḫзw ḥr sdm *"the scribe is on hearing" > "the scribe is hearing" vs. zḫзw sdm.w "the scribe has been heard").

4.4.2 Personal pronouns in later Egyptian

In principle, forms and functions of personal pronouns do not change in later Egyptian, the only exception being represented by the form of the third person plural suffix and of the corresponding independent pronoun, which are now =w instead of =sn and ntw instead of ntsn. However, because of phonological evolutions and of modified syntactic patterns in adverbial and verbal sentences, four simultaneous phenomena take place:

(a) Vocalic and semivocalic suffixes tend to be dropped. This is particularly the case for the first person suffix *-aj: dr.t=j */jartaj/ > Coptic тоот /doʔt/ "my hand."

(b) The use of enclitic pronouns becomes restricted, until they gradually disappear;[76] while Late Egyptian and Demotic develop a new set of object pronouns (section 4.6.6.5),[77] Coptic exhibits the grammaticalization of a new pattern for the pronominal object, consisting of a prepositional phrase with m "in," followed by the direct nominal object or by the suffix pronoun: a=f-sбtm mmo=i "he heard me" < jr=f-sdm jm=j *"he did the hearing in me."[78]

(c) While third person enclitic pronouns are kept as subject of adverbial sentences,[79] the grammaticalization of the conjunction tj < st "while" (section 4.7) followed by the suffix pronoun creates for this use a new set of proclitic pronouns in the first and second person: *tj-wj > twj > ϯ-; *tj-ṯw, *tj-ṯn > twk, ṯwt > к-, те-; *tj-n > twn > тñ-; *tj-ṯn > twtn > тетñ- :twtn jm "you are there."

(d) Finally, the pattern "preposition+infinitive" and the stative are grammaticalized as adverbial constructions, so that they too can be preceded by the new proclitic pronouns twj, twk etc.; already in Late Egyptian, therefore, stative endings become redundant and are dropped.[80] In Coptic, only the third person stative (either masculine or feminine, depending on the morphological class) is kept for each verbal lexeme and used for all persons and numbers: ϯ-ꝑкз еіт "I am hungry" < twj ḥqr.tj (feminine form), с-оꝑoз "she is whole" < st wdз.w (masculine form).[81]

Table 4.5 captures the main morphological features of personal pronouns in both phases of Egyptian.

Table 4.5 Egyptian personal pronouns and their Coptic outcome

NUMBER	PERSON	SUFFIX	ENCLITIC/ PROCLITIC	STRESSED	STATIVE ENDINGS
SINGULAR	1	=j > =ɪ	OEg: -wj LEg: twj- > ϯ-	jnk */ja'nak/ > анок	.kj > .kw
	2 masc.	=k > =к	OEg: -kw > -ṯw LEg: twk- > к-	OK: ṯwt MK: ntk */ntak/ > ñток	.tj
	2 fem.	=ṯ > =е	OEg: -ṯm > -ṯn LEg: twt- > те-	OK: ṯmt MK: nṯ */ntac/ > ñто	.tj
	3 masc.	=f > =ʼ	OEg: -sw LEg: sw- > ef- > ʼ-	OK: swt MK: ntf */ntaf/ > ñтоʼ	.j > .w
	3 fem.	=s > =с	OEg: -sj/-st LEg: st- > es- > с-	OK: stt MK: nts */ntas/ > ñтос	.tj
DUAL	1	=nj			.twnj
	2	=ṯnj	-ṯnj		
	3	=snj	-snj	ntsnj	.wj
PLURAL	1	=n > =н	OEg: -n LEg: twn- > тñ-	jnn */ja'nan/ > анон	.wjn
	2	=ṯn > =тñ	OEg: -ṯn LEg: twtn->тетñ-	nṯn */nta:cin/ > ñтотñ	.twjn
	3 OEg	=sn	-sn/-st > -соꝑ, -се	ntsn */nta:sin/	masc. .wj
	LEg	=w > =oꝑ	st- > се-	ntw */ntaw/ > ñтooꝑ	fem. .tj

4.4.3 Deictic, interrogative and relative pronouns

Earlier Egyptian displays four morphological series for the formation of adjectives with deictic function. In these series, each of which conveys a different demonstrative meaning, morphemes consist of a pronominal base (generally *p* for the masculine, *t* for the feminine, *jp* and *jpt* for the plural patterns), followed by a deictic indicator: *n* for closeness (*rmt pn* "this man"), *f* for distance (*ḫjm.t tf* "that woman"), *w* (originally *j*) also for closeness (*nṯr.w jpw* "those gods"), *ꜣ* for vocative reference (*pꜣ mrjj* "O beloved one"). The development in Middle Egyptian displays a tendency for the *pw*-series to be superseded by the *pn*-series in the demonstrative use and to be restricted to the function as copula in nominal sentences (*rmt pw* "this is a man," see chapter 4) , and for the *pꜣ*-series to acquire anaphoric function and to become the definite article in later Egyptian (*pꜣ rmt* "the man").

Parallel to the adjectival series, earlier Egyptian also exhibits a set of demonstrative pronouns, in which a demonstrative base *n* is followed by the same deictic indicators used in the adjectival paradigm (*n, f, w, ꜣ*). While these pronouns were originally unmarked in gender and number (*nn, nf, nw, nꜣ* "this," "these things") and were treated syntactically in earlier Egyptian as masculine plurals when accompanied by participles and relative forms, but as feminine singulars when referred to by a resumptive pronoun,[82] they replace in Middle Egyptian the old plural adjectival forms and appear in pronominal constructions with the determinative pronoun *n(j)*: *nn n(j) sjrw.w* (*"this of officials" >*) "these officials." As in the case of the singular adjectives *pꜣ* and *tꜣ*, the anaphoric pronoun *nꜣ* eventually becomes the plural definite article in later Egyptian: Middle Egyptian *nꜣ n(j) '.wt* "the aforementioned rooms," Late Egyptian *nꜣ-rmt.w*, Coptic *n-rôme* "the men."

Table 4.6 Deictics in earlier Egyptian

ADJECTIVES				PRONOUNS	ADVERBS
SINGULAR		PLURAL			
MASC.	FEM.	MASC.	FEM.	NEUTER	
pn "this"	*tn*	*jpn*	*jptn*	*nn*	*'n*
pf "that"	*tf*	*jpf*	*jptf*	*nf*	*'f*
pj > pw "this"	*tj > tw*	*jpw*	*jptw*	*nw*	
pꜣ "the said"	*tꜣ*			*nꜣ*	*'ꜣ*

The paradigm of demonstrative elements is completed by a set of adverbs characterized by the formant ' (*'ayin*) followed by the deictic marker: the most common is *'ꜣ* "here." Post-classical Middle Egyptian of Dyn. XVIII also

---

documents the adverbs *'n* and *'f*, which can be pronominalized by means of the derivational morpheme *tj*: *'n.tj* "the one here," *'f.tj* "the one there."[83]

Table 4.6 visualizes the paradigms of earlier Egyptian demonstratives; the most common morphemes or those which play a role in the later diachronic development are underlined.

In later Egyptian, the picture changes considerably. While the *pn*-series is kept in Late Egyptian only in a few bound expressions (*hꜣw pn* "this day"), the deictic paradigm is reorganized on the basis of the *pꜣ*-series. The bare morphemes *pꜣ- */pi?/, tꜣ-, nꜣ-* acquire the function of definite articles,[84] whereas a derived form with suffix *j* (*pꜣj, tꜣj, nꜣj*) is used as adjective when it precedes the noun it qualifies (*pꜣj rmt, пеі-рѡмє* "this man"), as pronoun in independent use (*pꜣj > паі, пн* "this one") or as copula, in which case it follows a predicate introduced in Coptic by a definite or indefinite article (*rmt pꜣj, оу-рѡмє пе* "this is a man," *ḥm.t tꜣj, оу-сгімє те* "this is a woman"). Unlike in earlier Egyptian, where the masculine copula *pw* is used regardless of the gender and number of the antecedent, in later Egyptian the copula *pꜣj > пе, tꜣj > те, nꜣj > не* agrees in gender and number with its antecedent. In Coptic bipartite cleft sentences, however (section 4.9), the copula is assimilated to a definite article *pꜣ* preceding the second nominal phrase; in the Bohairic dialect, it is invariably the masculine *пе*. The deictic adverb is now *dy > таі*, most probably an Upper Egyptian doublette of the earlier Egyptian form *'ꜣ*, in which the outcome of Afroasiatic **d* is /d/ rather than /ꜣ/ (section 3.6.1).[85]

Table 4.7 Deictics in later Egyptian

ARTICLES			ADJECTIVES AND PRONOUNS		
M.	F.	PL.	MASCULINE	FEMININE	PLURAL
pꜣ- >	*tꜣ- >*	*nꜣ- >*	*pꜣj* > паі, пн	*tꜣj* > таі, тн	*nꜣj* > паі, пн
п(є)-	т(є)-	н(є)-	"this" (pron.)	"this" (pron.)	"these" (pron.)
			пеі- "this" (adj.)	теі- "this" (adj.)	неі- "these" (adj.)
			пе "is" (copula)	те "is" (copula)	не "are" (copula)
			pꜣ-n > pꜣ- > па-	*tꜣ-nt > tꜣ- >* та-	*nꜣ-n > nꜣ- >* на-
			"that-of"	"that-of"	"those-of"
			pꜣj=j > па-, пѡ=і	*tꜣj=j >* та-, тѡ=і	*nꜣj=j >* на-, нѡ=і
			"my, mine"	"my, mine"	"my, mine"
			pꜣj=k > пек-, пѡ=к	*tꜣj=k >* тек-, тѡ=к	*nꜣj=k >* нек-, нѡ=к
			"your(s)" (m)	"your(s)" (m)	"your(s)" (m)
			etc.		

In accordance with the analytic tendency discussed in section 4.1, later Egyptian demonstratives may also control pronominal possessive suffixes to form complete adjectival and pronominal paradigms: *t3j=k-jp.t* > ⲧⲉ=ⲕ-ⲉⲓⲟⲡⲉ "your mission," *p3j=k p3j* > ⲡⲱ=ⲕ ⲡⲉ "this is yours." In the same pattern, the p3-series followed by the determinative pronoun *n(j)* is used with a nominal, rather than pronominal possessor: *p3-n s nb* "what belongs to every man" (sections 4.5, 4.10). Structures and functions of deictic morphemes in later Egyptian are summarized in table 4.7.

The most common morpheme for the formation of interrogatives is *m* (Arabic *man* "who," *mā* "what"), originally a pronoun "who?," "what?" (CT VI 314b *jwt tr m* "who are you then?"), but used most frequently in prepositional compounds (*ḥr-m* "why?," *mj-m* "how?") or with the "ergative" particle *jn* (section 4.4.1) which indicates a focalized subject (*jn-m* > *nm*, ⲛⲓⲙ): Sh.S. 69 *(j)n-m jnj ṭw* "who brought you?" Other interrogative pronouns are *jḥ* > ⲁⲩ "what," in earlier Egyptian also *pw, p(w)-tr, zj, jśst*, and in Late Egyptian the interrogative adjective *jṭ* "which?" as focalized subject of a cleft sentence: *jṭ śms p3-jj n=k* "which messenger is the one who came to you?"

Determinative and relative pronouns are formed by means of a base *n*, which builds the determinative series masc. sing. *n(j)*, fem. *n.t*, pl. *n.w*, used as genitival marker: *nzw n(j) km.t* "the king of Egypt," *n?.t n.t nḥḥ* "the city of eternity." A morph *t(j)* is affixed to the pronominal base *n* to form the relative pronouns *ntj, ntt, ntj.w*, used in adverbial and verbal sentences and resumed by a resumptive element in the oblique cases: *bw ntj nṭr.w jm* "the place in which the gods are," lit. "that the gods are there"; *jr.wj=kj ntj m33=k jm=sn(j)* "your eyes with which you see," lit. "that you see with them." The relative pronoun is used only when the antecedent is either morphologically determined or semantically specific; non-specific antecedents are modified by asyndetic constructions without overt expression of the relative pronoun, labeled in Egyptological literature "virtual relative clauses" (section 6.3.3).

Parallel to the positive relative pronoun *ntj, ntt, ntj.w*, Egyptian also possesses a negative series *jwtj, jwtt, jwtj.w* "who not, which not." These relative pronouns are functionally equivalent to a positive relative pronoun *ntj* controlling a negative predication: Pt. 235[86] *jwtj sḏm=f n ḏd ḥ.t=f* "who does not listen to what his belly says," semantically equivalent to a clause **ntj nj sḏm.n=f n ḏd ḥ.t=f*;[87] Urk. I 192,14 *jwtj z3=f* "who does not have a son," equivalent to **ntj nn z3=f.*

Save for the expected phonological developments, determinative and relative pronouns survive unchanged in later Egyptian; the use of the genitival pronoun *n(j)* is gradually expanded, the old construct state being

---

limited in Coptic to few bound constructions. Also, in the later stages of the language a new genitival marker ⲛⲧⲉ-, originally a prepositional construction (later Eg. *m-dj* = earlier Eg. *m-'w* "at, by"),[88] is used in presence of an indefinite, possessive, or compound antecedent: ⲡⲙⲟⲟⲩ ⲉⲧⲟⲛ̄ϩ ⲛ̄ⲧⲉ-ⲡⲟⲩⲟⲓⲛ "the living (*et-onh*) water (*moou*) of the light (*nte-p-ouoin*)."

4.5 Numerals

Numerals have often – although by no means always – been considered to be a conservative part of speech:[89] it is not surprising, therefore, that Egyptian words for numbers[90] show a wide array of correspondences with other Afroasiatic languages, most notably with Semitic and Berber. The following table shows the basic forms of Egyptian numerals, each of them accompanied by its fullest hieroglyphic writing, by a phonological reconstruction, and by a comparative reference.

Table 4.8 Egyptian and Coptic numerals

1	*w'w* */'wuṯṯuw/* > ⲟⲩⲁ Sem. *wḥd*	10	*mḏw* */'muːjaw/* > ⲙⲏⲧ Berb. *mraw*[91]	100	**ś(n)t* */'śi(nju)t/*[92] > ϣⲉ
2	*sn.wj* */'siːnuwwaj/*[93] > ⲥⲛⲁⲩ Sem. *ṯny*	20	**ḏwtj* */'jaːwaːtaj/*[94] > ϫⲟⲩⲱⲧ	200	**ś(n).tj* */'śinjuːtaj/*[95] > ϣⲏⲧ
3	*ḥmtw* */'χamtaw/* > ϣⲟⲙⲛ̄ⲧ	30	*m'b3* */'maṯbvʀ/*[96] > ⲙⲁⲁⲃ	300–900	**ḥmt-ś(n.w)t* etc.[97]
4	*jfdw* */'jifdaw/* > ϥⲧⲟⲟⲩ Hausa *fuɗu*	40	**ḥm.w* */'ḥvmew/*[98] > ϩⲙⲉ	1,000	*ḫ3* */'χaʀ/* > ϣⲟ
5	*djw* */'diːjaw/*[99] > ϯⲟⲩ	50	**dj.w* */'diːjaw/*[100] > ⲧⲁⲓⲟⲩ	10,000	*ḏb'* */'jvbaṯ/*[101] > ⲧⲃⲁ
6	*sjsw* */'saʔsaw/* > ⲥⲟⲟⲩ Sem. *śdś*	60	**sjs.w* */'saʔsew/* > ⲥⲉ	100,000	*ḥfn* see Sem. *ʔlp* "1,000"
7	*sfḫw* */'safχaw/* > ⲥⲁϣϥ Sem. *śb'*	70	**sfḫ.w* */'safχew/* > ϣϥⲉ	1,000,000	*ḥḥ* */'hah/*[102]
8	*ḥmnw* */'χa'maːnaw/* > ϣⲙⲟⲩⲛ Sem. *ṯmny*	80	**ḥmn.w* */'χam'new/* > ϩⲙⲉⲛⲉ		
9	*psḏw* */'pi'siːjaw/*[103] > ⲯⲓⲧ Sem. *tś'*	90	**psḏj.w* */'pis'jijjaw/* > ⲡⲉⲥⲧⲁⲓⲟⲩ		

The study of the syntactic behavior of numerals is complicated by the early tendency to write them ideographically, using for that purpose a set of hieroglyphic signs expressing the numbers $10^0...10^6$ (section 2.2). It is clear, however, that "1" and "2" were adjectives following the noun they modify (in the singular or the dual), whereas the other numerals represented an autonomous part of speech. The numbers "3" through "10" were originally treated as singular substantives, agreeing in gender with the plural noun they refer to, which followed them appositionally: *psḏw zp.w* "nine times," *sfḫ.t=f j'r.wt* "his seven snakes." When written ideographically, which becomes the rule in Middle and Late Egyptian, numbers are written after the noun they refer to; this may appear in the plural form (*p3 ḫrd.w 3* "the three children," probably **p3-ḫmtw n(j) ḫrd.w* in the underlying segment of speech), but from Middle Egyptian onwards more often in the singular.

In later Egyptian, the appositional noun is regularly in the singular and it is often introduced by the genitival marker *n* (Coptic ⲛ̄-): *p3 77 n ntr* "the seventy-seven gods," ⲡⲥⲁϣϥ ⲏⲅ̄ⲟⲟⲩ "the seven days."

In earlier Egyptian, ordinals from 2 to 9 are formed by means of a suffix *.nw* added to the corresponding cardinal, which may be written as an ideogram: *ḫmt.nw zp* "the third time," *m zp=f 3.nw ḥ3b-sd* "in his third jubilaeum," probably **m ḫmt.nw zp=f (nj) ḥ3b-sd* in the underlying segment of speech. The word for "first" is the *nisba* adjective *tpj* */taˈpij/* from *tp* */tap/* "head." In later Egyptian, the derivational pattern for ordinals is a construction with the active participle of the verb *mḥ* "to fill": *p3j=w zp mḥ-5* "their fifth time" ("*their filling-five time"), ⲡⲙⲟⲩ ⲙ̄ⲙⲉϩⲥⲛⲁⲩ "the second death." In later Egyptian the adjective "first" is usually *ḥ3.tj* */ḫuˈriːtij/* (Coptic ϩⲟⲩⲉⲓⲧ) from *ḥ3.t* */ˈḫuːrit/* "front," in Coptic also ϣⲟⲣⲡ from the root *ḫrp* "to lead."

Distributive numbers are formed through a reduplication of the basic cardinal: *w'w w'w* "one each," ⲥⲛⲁⲩ ⲥⲛⲁⲩ "two each."

4.6   The verb

4.6.1 Introduction
The verbal morphology of earlier Egyptian is one of the most intricate chapters of Egyptian linguistics.

(a) First of all, the vocalic patterns for verbal stems are less easily inferred than their nominal counterparts, mainly because the verbal morphology of later Egyptian, which replaces the synthetic verbal forms of earlier phases through periphrastic constructions with a verbal prefix followed by the infinitive, fails to provide a reliable basis for the understanding of vocalic

alternations. Akkadian transcriptions, Late Middle Egyptian texts in Greek alphabet and Coptic do provide valuable information, but their paradigmatic value, i.e. the likelihood for individual witnesses to be extended to other verbal classes, remains debatable.

(b) The second difficulty is posed by the relevance of semivocalic affixes and their paradigmatic representativeness. Many verbal forms exhibit a suffix *j* or *w* in some verbal classes, especially those with final weak radical, but not in others. Whether one takes this to be a purely graphic phenomenon or the sign of morphological oppositions affects the general interpretation of verbal morphology.

(c) A third difficulty is that while in the nominal morphology the differences within the main stages of the history of the language (Old Egyptian, Middle Egyptian and Late Middle Egyptian for earlier Egyptian vs. Late Egyptian, Demotic and Coptic for later Egyptian) are marginal, in the morphology and syntax of verbal forms a major evolution takes place between Old and Middle Egyptian on the one hand and between Late Egyptian and Coptic on the other hand. The picture is, therefore, rather complex.

(d) Finally, work on verbal morphology (as opposed to syntax) has been partially neglected in modern approaches to Egyptian grammar (section 1.3), due to a certain extent to the difficulties discussed above, but also to the impression that, because of the rigid syntax of Egyptian, little contribution to our understanding of the language as a whole could be expected from the study of morphological alternations in the verbal system. Only in recent times one can observe a new wave of interest in verbal morphology.[104]

4.6.2 General features of verbal morphology
Egyptian verbal forms[105] can be classified according to whether they convey the indication of the subject, in which case they are *finite* (the basic conjugation *sḏm=f* "he hears" and a variety of affixal forms), or they represent subjectless nominal phrases, in which case they are *non-finite* (the participle *sḏm* "the hearer," the infinitive *sḏm* "to hear" and the so-called negatival complement NEG-*sḏm.w* "not-to-hear"). Finite verbal forms, which can be treated as predicative VP, as NP (after prepositions), as AdjP (relative forms), or as AP (in clauses of circumstance), are composed of a verbal stem, derived from the lexical root with the addition of suffixes (including *.ø*), followed by the subject, which can be nominal (*sḏm rmṯ* "the man hears") or pronominal (*sḏm=f* "he hears"). Thus, unlike verbal formations in other Afroasiatic languages (Arabic *yasma'u* "he hears," *yasma'u 'l-raǧulu* "the man hears"),

the Egyptian suffix conjugation does not display the pronominal affix of the third person in the presence of nominal subjects, a feature which is relevant for our understanding of the origin of this morphological pattern.[106] Non-finite verbal forms are also built on the basis of a verbal stem; they convey the indication of gender and number, and in the case of the participles[107] also markers of tense, aspect, mood, and voice.

Table 4.9 The basic patterns of Egyptian verbal morphology

NUMBER	PERSON	SUFFIX CONJ.	STATIVE	NON-FINITE FORMS
SINGULAR	1	sḏm=j "I hear"	(jw=j) sḏm.kw "I was heard"	INFINITIVE: sḏm "to hear"
	2 m.	sḏm=k	(jw=k) sḏm.tj	
	2 f.	sḏm=ṯ	(jw=ṯ) sḏm.tj	
	3 m. pron.	sḏm=f	(jw=f) sḏm.w	NEG. COMPLEMENT:
	3 m. nom.	sḏm rmṯ	(NP) sḏm.w	sḏm.w "(not) to hear"
	3 f. pron.	sḏm=s	(jw=s) sḏm.tj	
	3 f. nom.	sḏm ḥjm.t	(NP) sḏm.tj	PARTICIPLES:
DUAL	1	sḏm=nj		sḏm "hearer"/"heard" (m.)
	2	sḏm=ṯnj		sḏm.t fem. s.
	3	sḏm=snj	(jw=snj/NP) sḏm.wj, fem. sḏm.tj	sḏm.w masc. pl. sḏm.t fem. pl.
PLURAL	1	sḏm=n	(jw=n) sḏm.wjn	
	2	sḏm=ṯn	(jw=ṯn) sḏm.twjn	
	3 pron.	sḏm=sn	(jw=sn) sḏm.w/sḏm.tj	
	3 nomin.	sḏm rmṯ.w	(NP) sḏm.w/sḏm.tj	

In addition to these two categories of forms, Egyptian displays a suffix conjugation pattern which follows the subject and is marked by a different set of pronominal endings, called *stative* on the basis of its primary semantic function, *old perfective* since it displays similarities with the Semitic suffix conjugation, or *pseudoparticiple* because of its syntactic behavior, which to a certain extent is analogous to that of the participles.[108]

Table 4.9 shows the morphological structure of Egyptian verbal morphology, using as an example, as is the custom in Egyptology, the conjugation of the verbal root *sḏm* "to hear" in the unmarked stem with suffix *.ø*, usually called *sḏm=f* and conventionally pronounced [seʒeˈmef], together with the stative and the non-finite patterns (participles and infinitive).

In general, finite Egyptian verbal forms display a morphologically overt indication of (a) tense and/or aspect, (b) mood and (c) voice.[109]

(a) As far as the first category is concerned, while the traditional assumption, largely derived from the "semitocentric" interpretation of the Egyptian verbal system shared by the Berlin School and its followers (section 1.3), has been that the fundamental reference of Egyptian verbal forms is aspectual, i.e. that they present a predication according to its contextual completeness (*perfective aspect*), or lack thereof (*imperfective aspect*), regardless of the temporal location vis-à-vis the speaker,[110] the trend is now to take them as temporal forms[111] which assess whether the verbal predication takes place before (*past tense* or *preterite*), in concomitance (*present* or *unmarked tense*), or after (*future tense*) the time reference of the speech act.[112]

Apart from terminological quarrels which often overshadow the issue, it seems that Egyptian, like many other languages, combined in its verbal morphology these two temporal dimensions, i.e. the internal composition (*aspect*) and the external location (*tense*) of a verbal predication.[113] Egyptian verbal forms are "relative tenses" or "aspects":[114] their semantic reference can be determined only within the syntactic context of their appearance: while in initial position they tend to be primarily temporal, fixing the time location of the verbal predicate in reference to the moment of the speech act (*jj.n=j* "I came" vs. *jj=j* "I come"), in non-intial position, i.e. within a string of discourse, they derive their temporal reference from the initial form and are more likely to convey aspectual features: *mk wj m jj.t* "look, I am coming" vs. *mk wj jj.kj* "look, I have come."

(b) A similar analysis applies to the category of *mood*:[115] in general, the speaker's attitude to a verbal predication – whether neutral ("indicative") or marked ("epistemic" or "deontic" mood) – applies to events which have not yet taken place;[116] mood will, therefore, apply most frequently to future events. Besides the imperative, modal oppositions affect in Egyptian the temporal/aspectual category usually called "prospective."

Since these verbal categories overlap in actual strings of discourse, where they are combined with semantic references provided by the context and by the lexical choices of the speaker, it is more predictable – obviously not on the theoretical level, but rather in terms of the likelihood for a form to actually occur in spoken or written discourse[117] – for a preterite predication to be perfective, i.e. presented as completed, for a temporally unmarked form to be imperfective, i.e. not (yet) completed, and for an action expected to take place in the future to convey the attitude of the speaker to this expected predication, i.e. to exhibit modal features.

(c) A true passive voice with overt expression of the agent is relatively rare in Egyptian, and, according to a cross-linguistic tendency,[118] develops grad-

ually out of the paradigm of perfective forms: for example, from an original *sḏm.t=f* "he has/has been heard," two forms *sḏm.t=f* "he has heard" vs. *sḏm.tw=f* "he is heard" were eventually grammaticalized (section 4.6.3.3).[119] Much more frequent is the "middle," intransitive use of transitive verbal lexemes in the perfect (*jw=f sḏm.w* "it has been heard")[120] or in the prospective (*sḏm.w=f* "it will be heard") to indicate the actual or expected result of an action in reference to its subject.

The three semantic categories of tense and aspect, mood, and voice were conveyed by morphological oppositions and superimposed on the lexical structure of the verbal lexeme, which in its turn provides a further temporal dimension, called *Aktionsart*, treated in some linguistic schools as a form of aspect.[121] This is the temporal structure inherent to the verbal lexeme; it specifies, for example, whether a verbal predication consists of a single act (*wpj* "to open," punctual *Aktionsart*), or is extended over time (*sḏr* "to sleep," durative *Aktionsart*), whether the existence of the argument(s) is affected by the predication (*qd* "to build," a *transformative* verb) or not (*sḏm* "to hear," a *non-transformative* verb), whether the predication presents the result of a process (*gmj* "to find," an *achievement*), or entails a phase preceding the goal itself (*jnj* "to fetch," an *accomplishment*), whether it conveys an action by a subject (*mš'* "to walk," an *activity*), or a state (*nḏm* "to be pleasant").[122] Rather than on the grammatical form, these temporal features depend on the ontology of the described situation, i.e. on the internal semantic structure of the lexeme, and remain constant in all its forms; they do, however, bear heavily on the spectrum of semantically acceptable combinations for each verbal root, restricting the number of choices by the speaker. Accordingly, punctual verbs will appear more frequently in the perfective aspect (*wpj.n=j* "I opened") focusing on the verbal action, whereas durative verbs will be more frequent in the imperfective (*sḏr=f* "while he sleeps") and less salient within the flow of discourse;[123] transformative verbs will be more likely than non-transformative verbs to be found in passive constructions (*jw prw qd.w* "the house was built"); verbs of achievement are unlikely candidates for imperfective uses (*gmj=j* *"I am finding"), which on the contrary are frequent with verbs of accomplishment (*zḫз=j* "I am writing"); verbs of activity will display a much larger inventory of temporal or aspectual references than stative verbs, which in turn are preferably used as adjectives, etc. No verbal root, therefore, will exhibit a complete paradigm of verbal forms: rather, the morphological patterns discussed in the next sections and conventionally applied to the verb *sḏm* "to hear" and *jrj* "to do" represent a purely grammatical inventory of the Egyptian verb.

4.6.3 *Verbal morphology in earlier Egyptian*

4.6.3.1 *Tense and aspect.* The main temporal and aspectual opposition is between (a) "past" (perfect and perfective) and (b) "temporally unmarked" (imperfective and aorist) forms.

(a) The basic preterital form exhibits a suffix *.n* after the verbal stem, followed by the nominal or pronominal subject: *sḏm.n=f* "he heard." The stem was vocalized *(ca)cic- in biradical (2-rad.) and triradical roots (3-rad.), and *cac- (< *cacij-) in weak verbal classes (III-inf.):[124] *sḏm.n=f* */sa'ʒimnaf/ "he heard," *sḏm.n rmṯ* */saʒimna'raːmac/ "the man heard"; *ḏd.n=n* */ʒidnan/ "we said," *ḏd.n ḥjm.t* */ʒidna'ḥijmat/ "the woman said"; *jrj.n=k* */jamak/ < */jarijnak/ "you made," *jrj.n jtj=j* */jama'jatjaj/ < */jarijnajatjaj/ "my father made." The *sḏm.n=f* form appears in a variety of syntactic patterns: as the main predicate of a verbal sentence (Urk. I 2,8 *jnj.n=f r jsw зḥ.t 200 sṯз.t* "he has bought a field of 200 arouras"),[125] as topicalized VP in initial position (always with verbs of motion: Urk. I 103,7 *jj.n mš' pn m ḥtp...* "this army has returned in peace..."), or in subordinate use as circumstantial VP (Urk. I 103,8 ...*ḥbз.n=f tз ḥrj.w-š'* "...after it had ravaged the sand-dwellers' land").

Originally, the temporal and aspectual reference of the *sḏm.n=f* may have been the present perfect rather than the past perfective:[126] in the early texts it does not appear as a narrative tense, but belongs to the paradigm of the present. Accordingly, the *sḏm.n=f* can also display other functions within the range of the present, especially the gnomic use, i.e. the general present in performative expressions (*dj.n=j n=k tз.w nb* "herewith I give you all lands") or in the negative construction *nj sḏm.n=f* "he does not / cannot hear."[127]

In addition to the present perfect *sḏm.n=f*, Old Egyptian possessed two real preterites. The first one is a form in which the verbal stem is followed directly by the nominal or pronominal subject: it is called *indicative sḏm=f* and is well attested in the texts of the Old Kingdom (Urk. I 124,17 *hзb wj ḥm=f* "his Majesty sent me"). The stem was probably vocalized *cvc(c)i-: *hзb=f* */ḥvʀ'bif/ "he sent."[128] In classical Egyptian, this form is functionally replaced by the *sḏm.n=f* and is limited to archaic uses and bound constructions, such as the negative form *nj sḏm=f* "he did not hear."

The second form, the *stative*, originally a conjugated verbal adjective,[129] is used in Old Egyptian as first person counterpart to the indicative *sḏm=f* (Urk. I 100, 7–9 *rdj wj ḥm=f m smr w'.tj...jrj.kj r ḥzj.t (wj) ḥm=f* "His Majesty appointed me Sole Companion...I acted so that His Majesty would praise [me]"), as main predicate in the so-called pseudoverbal sentences (always with verbs of motion: Urk. I 126,2 *jw=j prj.kj m-sз=f* "I went after him"), and as

subordinate perfective VP following its subject as predicative complement (Urk. I 125,15–16 gmj.n=j ḥq3 j3m šm.w rf r t3-ṯmḥ "I found that the ruler of Yam had gone off to the land of Tjemeh" < *"I found the ruler of Yam having gone off to the land of Tjemeh").[130]

The stem was *(ca)cvc- in the strong classes and *cacij- in the III-inf.:[131] first person stp.kj "I was chosen" (**/satvpakvj/ >) */saťpaːkvj/,[132] second person masc. spd.tj "you are sharp" */saʼpidtvj/ > */sǝpedtǝ/ > Late Middle Eg. <spet>, fem. bz.tj "you have been introduced" */buztvj/ > Late Middle Eg. <best>;[133] third person masc. qd.w "it was built" */quːdaw/ > ⲕⲏⲧ /geːt/ "to be built," stp.w "it was chosen" */satpaw/ > ⲥⲟⲧⲡ /sotp/ "to be chosen," msj.w "he was born" */masjaw/ > ⲙⲟⲥⲉ /mosʔ/ "to be born," fem. jwr.tj "she is pregnant" */jaʼwirtvj/ > */ʔaʔeʔtǝ/ > ⲉⲉⲧ /ʔeʔt/ "to be pregnant," špj.tj "she is ashamed" */šapijtvj/ > */šǝpiːtǝ/ > ⳛⲓ̈ⲡⲓⲧ /špiːt/ "to be ashamed."[134]

The development from Old Egyptian past forms to the Middle Egyptian paradigm is marked by an increasing preference for textually bound oppositions between predicative forms (sḏm.n=f and stative) introduced by a particle or by a topicalized VP and topicalized verbal forms in initial position (only sḏm.n=f). The indicative sḏm=f and the narrative use of the first person stative become sporadic, the only licensed syntactic position of the stative being now the non-initial position, either as main predicate or as subordinate form in pseudoverbal sentences. Periphrastic constructions referring to the past, such as 'ḥ'.n sḏm.n=f "then he heard" and 'ḥ'.n=j prj.kw "then I came," appear already in the First Intermediate Period, superseding the indicative sḏm=f and the first person stative and joining as preterital forms the predicative sḏm.n=f introduced by a particle: Sh.S. 67 jw wpj.n=f r3=f r=j "he opened his mouth toward me"; Sh.S. 2–3 mk pḥ.n=n ẖnw "look, we have reached the residence." The difference between the perfective use in the former sentence and the present perfect in the latter is an example of lexical constrictions: wpj "to open" indicates an accomplishment, pḥ "to reach" an achievement.

The perfective paradigm also exhibits a pattern with affix .t, the so-called sḏm.t=f. This form is in earlier Egyptian a linguistic remnant with a restricted range of uses: as subordinate negative perfective form after the particle nj (Sh.S. 97–98 sr=sn ḏ' nj jj.t=f "they foretold a storm before it had come") and after prepositions implying completion, such as r "until" or ḏr "since" (Sin. B 247 r pḥ.t=j dmj n(j) jṯw "until I reached the town of Itju"). In spite of its occurrence only in bound constructions, this form shows a surprising stability, surviving until Coptic.

A contingent form sḏm.jn=f "then he heard," built with the particle jn, was used in earlier Egyptian to refer to preterital events whose occurrence was

directly dependent on the situation described in the preceding context: Peas. R 1.5[135] ḏd.jn sḥ.tj pn n ḥjm.t=f tn "then this peasant said to his wife."[136]

(b) Unmarked forms indicate the general present or aorist and derive their temporal or aspectual reference from the syntactic context in which they appear. To this category belongs the basic pattern of the Egyptian conjugation system, the sḏm=f. This form, however, is morphologically ambiguous, consisting of at least two distinct patterns. The first one shows a reduplication of the second radical in the III-inf. (jrr=f from jrj "to do") and of II-gem. verbs (m33=f from m33 "to see"), and in Old Egyptian a j-prefix in the 2-rad. (j.ḏd=f from ḏd "to say") and in a few weak classes;[137] it is used as topicalized VP in initial position (Sin. B 263 jrr ḥm=k m mrj.t=f "your Majesty acts according to his wish"), as nominalized VP in nominal environments (Pyr. 1223a jr wdfj ḏ33=ṯn mẖn.t n N pn... "if it is delayed that you ferry the ferry-boat to this King..."), or in headings or titles (CT V 28c ḥ'' jmn.t nfr.t m ḥsfw zj pn "this is how the Beautiful West rejoices in welcoming this man"). Because of its formal connection to similar Afroasiatic forms (see Akk. iparras), this form was traditionally called "imperfective sḏm=f," although its use in Egyptian, rather than by aspectual features, is determined primarily by its syntactic function as topicalized or nominalized VP; hence its modern label "emphatic or nominal sḏm=f." Like its Semitic equivalent iparras, the nominal sḏm=f is based on a nominal stem and was probably vocalized *cacam-: sḏm z3=j */saʒamʼziːʀaj/ "my son listens," jrr=s */jaʼraːrvs/ "she does."[138]

The second sḏm=f pattern is used in non-initial position, i.e. when preceded by a particle or a topicalized element. In this case, the temporally unmarked aorist form is the non-reduplicating sḏm=f-form, for example jrj=f "he does" from the verb jrj "to do." When following the initial particle jw, with or without topicalized subject, the aorist indicates a general or gnomic present (Sh.S. 17–18 jw r3 n(j) zj nḥm=f sw "a man's speech can save him"). This form was previously called "perfective sḏm=f," a label encompassing not only this type of sḏm=f, but also the indicative sḏm=f discussed in (a) above and the prospective (section 4.6.3.2). But the Standard theory, in its tendency to generalize the role of substitutional equivalents in similar syntactic environments, adopted the term "circumstantial sḏm=f," interpreting all non-initial VP as functionally adverbial. While this form, like the sḏm.n=f and the stative, can indeed be used adverbially as a subordinate clause when controlled by a higher syntactic node, such as the main verbal phrase (Hatnub 4,3–4[139] jw rmṯ.w 80 ḥd.w prj=sn ḥr w3.t "Eighty men returned north, going forth on the road"), it functions nonetheless as true verbal predicate in many patterns, for example when it is introduced by particles (Sh.S. 18–19 jw mdw=f ḏj=f j3m

n=f ḥr "his speech *causes* that one be clement toward him")[140] or when it functions as non-initial main clause in paratactic sequences (Sh.S. 67–69 *jw wpj.n=f r3=f r=j...dd=f n=j* "he opened his mouth towards me...*and he said* to me"). The morphological relation between "indicative" and "aorist" *sdm=f*, however, remains opaque.

Periphrastic constructions for the expression of the imperfective and prospective aspect emerge in the late Old Kingdom: in these pseudoverbal patterns, which follow the syntax of adverbial sentences, the prepositions *ḥr* "on" (or *m* "in" with verbs of motion) and *r* "toward" are followed by the infinitive: *jw=f ḥr sdm* "he hears," lit. *"he is on hearing," *jw=f r sdm* "he will hear," lit. *"he is toward hearing." These constructions indicate a "progressive present," i.e. the modally unmarked *objective future*.[141]

The stative is also used with temporally unmarked, i.e. relative present reference with adjective verbs when it follows the subject of pseudoverbal sentences: see the adjectival pattern *nfr sw* (section 4.4.1) vs. the pseudoverbal pattern with stative *jw=f nfr.w* (section 5.2), both with the meaning "he is good."

Corresponding to the *sdm.jn=f* for past events, a *contingent* form *sdm.ḥr=f*, built with the preposition *ḥr*, is used in explicative or diagnostic discourse to refer to general events whose occurrence depends on a condition defined in the preceding context: "if the condition X is fulfilled, the event Y occurs": pSmith 9,19–20 *jr swrj=f mw stp.ḥr=f* "if he drinks water, he chokes."[142]

Table 4.10 Tense and aspect in earlier Egyptian

TENSE	ASPECT	RELATION TO THE CO(N)TEXT		
		ABSOLUTE/ INITIAL	RELATIVE/ NON-INITIAL	CONTINGENT
PAST	PERFECT	*sdm.n=f*		
	PERFECTIVE	1 pers. Stative 3 pers. *sdm=f*	*sdm.t=f*	*sdm.jn=f*
NON-PAST	AORIST	*sdm=f/jn=f*	*sdm=f/jrj=f*	*sdm.ḥr=f*
	IMPERFECTIVE	*jw=f ḥr/m sdm*		
	PROSPECTIVE	*jw=f r sdm*		

Table 4.10 presents the verbal forms of earlier Egyptian according to their temporal or aspectual distribution. In Old Egyptian, the "relation to the co(n)text" depends primarily on semantic choices (*context*), whereas in the classical language it is largely dictated by the syntactic environment (*cotext*).

Also, the categories of "perfect" and "perfective" merge in Middle Egyptian into a single *sdm.n=f*-paradigm (initial and non-initial), first person stative and third person indicative *sdm=f* being reduced to rare historical remnants.

4.6.3.2 Mood. The verbal category of "mood" defines the attitude of the speaker vis-à-vis the event described in the predication and is conveyed in earlier Egyptian by three forms: (a) the imperative *sdm*, (b) the prospective *sdm=f*, (c) the subjunctive *sdm=f*. Prospective and subjunctive are formally different verbal forms in Old Egyptian but merge into a unitary paradigm in the language of classical literature.[143]

(a) The *imperative* has a singular *sdm/jrj* and a plural *sdm(.w)/jry* with an ending *.w/.y*, mostly indicated only by the plural strokes in the hieroglyphic writing. In Old Egyptian, the weak classes display a *j*-prefix. The imperative had a stressed **i* between the prefinal and the final radical: **cv(c)cic, **ja.cic: shtp **/saḥ'tip/ "pacify!" > Late Middle Egyptian <shtep>,[144] *j.jnj* **/ja'nij/ "fetch!" > Old Coptic ⲉ/ⲁⲛⲁⲓ, *j.dd* **/ja'jid/ "say!" > ⲁϫⲓ-, and probably an opposition between a masculine *-a* and a feminine *-i* form in irregular imperatives consisting of only one consonant followed by a stressed vowel: *m* "come!," masc. **/(ja)ma:?/ > ⲁⲙⲟⲩ, fem. **/(ja)mi:?/ > ⲁⲙⲏ.[145]

(b) The *prospective sdm(.w)=f/jrj.w=f* represents originally the mood of *wish*, used as independent verbal form (Pyr. 1687a *h3j.w=k r=k m wj3 pw nj r'w* "you will go aboard that bark of Re"), as topicalized VP in paradigmatic alternation with the "emphatic" *sdm=f*, especially in the first and third person, when indicating events expected to occur (Pyr. 193 Nt *zj.w N pn zj=k* "this King N will perish if you perish"), in cleft sentences referring to future events (Pyr. 123d *jn ḥm nfr.t-nrw n N rdj=s t? n N* "It is indeed the beautiful one who cares for the King who will give bread to the King"), in other focal environments such as questions (CT V 92f *smn.y=j sw jrf ḥr jšst* "so, to what shall I fasten it?"), in the protasis of conditional sentences after the particle *jr*,[146] or as object of verbs expressing an expectation, a wish or a desire (Pyr. 1712aN *dd ḥrw s3ḥ.w=f jtj=f* "Horus says that he will glorify his father"). Morphologically,[147] it displays the gemination of the stem in II-gem. roots (*m33=f* "he will see" from *m33*), often a semiconsonantal suffix *.w/.y* in the infirm roots (as in *jrj.w=f/jry=f* "he will do" from *jrj*) and in the causative classes with prefix *s-* (*sfḥw=f* "he will release" from *sfḥ*), and a full stem in the anomalous verbs (for example *rdj=f* "he will give" from *rdj*).

The prospective was probably vocalized **cvc(c)i(w/j)-, as shown by the Greek transcription Επιευς for the demotic anthroponym *hrj=w* **/ḥər'jew/, lit. "may-they-be-content" or by the Late Middle Egyptian form <htpe> **/ḥət'pe?/

< *ḥtp=t* **/ḥvt'pic/* "may you be satisfied."[148] Thus, the morphological connections between the prospective form and the indicative *sḏm=f* (section 4.6.3.1), which also displays a *i*-stem, are not yet fully understood.

(c) The *subjunctive sḏm=f/jrj=f* represents the mood of *command*, used as an independent form in sentences referring to the future (Pyr. 1619c *jw.t=k n wsjr* "you shall go to Osiris"), often – like the cohortative *'eqṭǝlâh* in Hebrew or the jussive *yaqtul* in Arabic – as a first and third person counterpart of the imperative (Pyr. 1159c[P] *j.ḥj=f m 'bꜣ ḥrp=f m jꜣꜣ.t* "He shall strike with the lotus scepter, he shall control with the rod"), and as object of verbs of command and of the causative *rḏj* "to let" (Pyr. 1141a *jm jw.t=f* "let him come"). Its morphology exhibits the *j*-prefix in the 2-rad. (*j.nḏ=f* "he shall protect" from *nḏ*), the non-geminated form in the II-gem. (*wn=f* "he shall be" from *wnn*), no suffix in the strong roots (*sḥm=f* "he shall control" from *sḥm*), a sporadic semiconsonantal *j*-suffix in the infirm roots (*hꜣy=f* "he shall descend" from *hꜣj*), and special forms for the anomalous verbs: *ḏj=f* "he shall give" < *rḏj*, *mꜣn=f* "he shall see" < *mꜣꜣ*, *jw.t=f* "he shall come" < *jwj* and *jn.t=f* "he shall fetch" < *jnj*.[149]

The vocalization of the subjunctive displays a pattern **cac(c)a-* (**ja.cca-* in the classes with *j*-prefix), which appears independently or as object of the verb *rḏj* "to cause to": *ḥwj=f-(wj)* **/χaw'jaf-(wvj)/* "(the God Khnum) shall protect me" > **/χǝꞭꞭof/* > Χέοψ "Cheops"; *ḏj.t hꜣj-* **/Ɬiːjit-haꞭ'ja/* "to cause him to build" > **/diꞭꞭǝꞭjo/* > ⲉⲓⲟ /thjo/.[150] The *a*-suffix could be connected with the old accusative or absolutive case ending inherited from Afroasiatic.[151]

In the classical language, with its preference for syntactically bound forms, prospective and subjunctive merge as a grammatical, rather than semantic mood: their use is determined primarily by the syntactic environment as main VP with future reference or as object of verbs of wish or command. The evolution from a semantic to a syntactic mood, from a verbal category whose choice depends solely on the speaker's attitude to the predication to a form only used in a set of subordinate clauses, is known from Indo-European and Afroasiatic languages[152] and represents one of the features of syntactization as a diachronic process, of "genesis of syntax ex discourse."[153] The morphology of this suppletive Middle Egyptian prospective paradigm combines features of the Old Egyptian prospective (for example the sporadic *w-* > *y-* suffix in the III-inf. class) and of the Old Egyptian subjunctive (for example *jw.t=f* and *jn.t=f* from *jwj* "to come" and *jnj* "to fetch" respectively).[154]

The modal contingent tense corresponding to the preterital *sḏm.jn=f* and to the general *sḏm.ḥr=f* is the form *sḏm.kꜣ=f* "then he will hear," where the particle *kꜣ* is probably connected with the root *kꜣj* "to think, devise":[155] Pyr.

1223[P] *jr wdfj ḏꜣꜣ=tn mḥn.t n N pn ḏd.kꜣ N pn m=tn pw* "If your ferrying the ferry to this King is delayed, the King will say that name of yours."[156]

As in the case of tense and aspect, "relation to the co(n)text" is in Old Egyptian a semantic, contextual category, whereas in the classical language it depends on the syntactic, cotextual environment. Also, "prospective" and "subjunctive" have merged in Middle Egyptian into a suppletive paradigm of initial and subjunctive *sḏm=f*-forms, in which morphological features of the two earlier forms appear side by side without functional opposition. Table 4.11 summarizes the main features of the category of mood.

Table 4.11 Mood in earlier Egyptian

MOOD	RELATION TO THE CO(N)TEXT		
	ABSOLUTE/ INITIAL	RELATIVE/ NON-INITIAL	CONTINGENT
WISH (OPTATIVE)	Prospective *sḏm=f/jrj.w=f*		*sḏm.kꜣ=f*
COMMAND (JUSSIVE)	Subjunctive *sḏm=f/jrj=f* Imperative *sḏm*		

4.6.3.3 *Voice*. The verbal category of "voice" defines the role of the syntactic subject in the predication conveyed by the VP.[157] In the unmarked voice (*active*), the subject is the highest argument of the verbal predication on the agentivity scale,[158] i.e. the AGENT in the case of transitive verbs (Urk. I 104,4 *ḥzj wj ḥm=f ḥr=s r jḥ.t nb* "HIS MAJESTY praised me for it more than for anything else"), or its only argument, i.e. the ENTITY, in the case of intransitive or adjectival verbs (Urk. I 103,9 *jj.n mšꜤ pn m ḥtp* "THIS ARMY returned in peace"). In the *middle* voice, the agentive role, although semantically present in the underlying proposition, is not overtly conveyed by the syntactic structure of the sentence: the subject of the verbal form, therefore, indicates the PATIENT (with first-order entities) or the GOAL (with places) of the verbal predication (Urk. I 124,15 *ḥzj.t(j=j) ḥr=s 'ꜣ wr.t* "and I was praised for it very much").[159] In the *passive* voice, the role of AGENT or of CAUSE is introduced by the preposition *jn* (Sh.S. 39–41 *'ḥ'.n=j rḏj.kw r jw jn wꜣw n(j) wꜣḏ-wrj* "then I was brought to the island BY A WAVE OF THE SEA"). We saw in section 4.4.1 that this morpheme may have an ergative origin, since it is also used to indicate the focal subject of cleft sentences (section 4.4). In this respect, Egyptian occupies an intermediate position between a "nominative-accusative" and an

"ergative-absolutive" coding: while subjects of finite suffix conjugation forms behave according to the former pattern, with an identical coding for both transitive and intransitive verbs (*sdm=f* "*he* hears" and *prj=f* "*he* comes"), the syntax of infinitives and of adjectival sentences displays "absolutive" features: pronominal subjects are coded exactly like direct objects of transitive verbs (infinitive transitive *sdm=f* "hearing *him*" vs. intransitive *prj.t=f* "*his* coming," transitive verbal phrase *sdm=f sj* "he hears *her*" vs. adjectival sentence *nfr sj* "*she* is good"); moreover, logical subjects of transitive infinitives, focal subjects of cleft sentences, and overt agents of passive predicates are all introduced ergatively by *jn* (Siut I,68 *gmj.t=f jn hm=f* "finding him by His Majesty"; *jn ntr mrr rmt.w* "*it is god* who loves people"; *jw mrj.w rmt.w jn ntr* "people were loved *by god*").[160]

Middle and passive (henceforth for convenience just "passive") voice is conveyed either by synthetic stems (for example *mrj.w=f* "he will be heard"), or by means of an affix *.tj* > *.tw* between the stem (including the temporal markers) and the nominal or pronominal subject (for example *mrr.tw=f/ mrr.tw rmt* "he/the man is heard").

(a) The synthetic expression of the passive is conveyed in earlier Egyptian by several forms: the *stative* and the *perfect passive sdm(.w)=f* as passive equivalents of the non-initial *sdm.n=f*, the *perfective passive sdm.t=f/jry.t=f* as counterparts of the active form *sdm.t=f*, and the *prospective passive sdmm=f/ jrj.w=f* corresponding to the prospective active form *sdm(.w)=f/jrj.w=f*. On the theoretical level, the passive function of verbal forms conveying the perfective or prospective aspect is predictable, since they semantically "entail," as it were, a passive feature: on the one side, perfect(ive) and prospective, unlike imperfective forms, both localize an event *outside* a reference frame, the event preceding the reference frame in the former, and following it in the latter; on the other side, the passive, privileging the patient or the goal over the agent of a verbal predication, is bound to convey the completeness of an action, shown cross-linguistically by the connections between perfective and prospective aspect on the one hand and passive voice on the other.[161]

In Old Egyptian, the perfect passive *sdm(.w)=f* is used as independent VP with dynamic verbs (Pyr. 942a *jnj(.w) n=k b3.w p dmd n=k b3.w nhn* "the souls of Bouto have been brought to you, the souls of Hierakonpolis have been united to you"), whereas the middle or passive stative is introduced by a topicalized subject and is preferred for the expression of a state (Pyr. 1405a[P] *t3 q3(.w) hr nw.t jn '.wj=tj tfn.t* "the earth has become high under Nut by virtue of your arms, Tefnut"). In Middle Egyptian, the use of a main VP not introduced by a particle or by the topic of the utterance is restricted to modal uses,

and the difference between perfect passive *sdm(.w)=f* and stative becomes grammatical: the pseudoverbal stative is used with pronominal subjects, the verbal passive *sdm(.w)=f* with nominal subjects[162] – an exception being the first person, whose high position on the hierarchy of topicality allows the use of a perfect passive *sdm(.w)=f* (CG 20518 a,1 *msy=j m mp.t-zp 1 n(j) z3-r'w N* "I was born in the first year of the Son-of-Re the King").

(b) Aspectual and modal forms which do not semantically entail a passive feature, namely the initial *sdm.n=f*, the *sdm=f*s, the subjunctive, and the contingent tenses, form their passive counterparts by means of the perfective infix **.t* > *.tj* (in Old Egyptian) > *.tw* (in the classical language): (1) *sdm.n.tw=f* "he was heard," which is always used as topicalized VP, the passive *sdm(.w)=f* functioning as its complementary form in non-topical positions (Louvre C 286,18 *gmj.n.tw hrw hrw=f m3'.w rdj.w n=f j3.t n.t jtj=f* "Horus was found justified and his father's office was bequeathed to him"),[163] (2) the form *sdm.tw=f* "he is heard" corresponding to the various active patterns (topicalized Urk. IV 19,6 *dgg.tw=f mj r'w wbn=f* "he is looked at like Re when he rises," circumstantial Sin. B 52 *nn twt n=f m33.t(w)=f* "there is no one like him when he is seen," subjunctive Pyr. 1161b[P] *j.nd.tj=f* "he shall be greeted"), (3) the contingent tenses *sdm.jn.tw=f, sdm.hr.tw=f, sdm.k3.tw=f*.

In table 4.12, for the sake of an immediate identification of the morphological patterns involved, the forms from irregular verbal classes have been added in certain cases. It should be remembered (see table 4.11) that the opposition between prospective passive *sdmm=f/jrj.w=f* and subjunctive passive *sdm.tj=f/j.dd.tj=f*, originally one of modality (wish vs. command), is dictated in Middle Egyptian by the syntactic position of the form within the sentence (initial vs. dependent), with a noticeable tendency for prospective passive forms to appear limited to archaic uses in religious texts.

Table 4.12 Passive voice in earlier Egyptian

TENSE	ASPECT/ MOOD	RELATION TO THE CO(N)TEXT		
		ABSOLUTE/ INITIAL	RELATIVE/ NON-INITIAL	CONTINGENT
PAST	PERFECT	*sdm.n.tj=f*	Stative	*sdm.jn.tj=f*
	PERFECTIVE	*sdm=f/jrj.w=f*	**sdm.t=f/jry.t=f*	
PRESENT	UNMARKED	*jrr.tj=f*	*jrj.tj=f*	*sdm.hr.tj=f*
FUTURE	WISH	*sdmm=f/jrj.w=f*		*sdm.k3.tj=f*
	COMMAND	*sdm.tj=f/j.dd.tj=f*		

4.6.3.4 *Relative forms.* A feature of Egyptian verbal morphology is the presence of synthetic adjectival forms of the verb, called "relative forms," which are used as predicate of a restrictive relative clause whose subject is different from the antecedent: *rmṯ mrjw=f* "the man whom he loves." For relative forms of the verbs to be used, the antecedent must be specific; it is resumed in the relative clause by a resumptive morpheme.

Earlier Egyptian exhibits at least three relative forms: perfective *jrj.n=f* "which he made" for the past (fem. *jrj.t.n=f*, pl. *jrj.w.n=f*), aorist *jrr=f* "which he makes" for the general present (*jrr.t=f, jrr.w=f*),[164] prospective *jrjw=f* "which he will make" for the future, also sometimes used as aorist: "which he would make" (*jrj.tj=f*,[165] *jrj.w=f*). In addition, Old Egyptian may have possessed a relative equivalent of the indicative *sḏm=f* for the preterite, usually referred to in the literature as "perfective relative *sḏm=f*,"[166] again a general label which comprises both indicative and prospective base. Alternatively, one can interpret the preterital uses as examples of the prospective form in its "perfective" function.

The main morphosyntactic feature of the relative forms is their agreement in gender and number with the antecedent. The agreement is shown by the affixation of the nominal endings (masculine *.ø* or *.w* in the weak classes, fem. *.t*, pl. *.w*) to the verbal stem: CT V 321c–d *mḫȝ.t n.t r'w fȝȝ.t=f mȝ'.t jm=f* "the balance of Re in which he weighs Truth." Verbal classes which show a *j*-prefix in the Old Egyptian "emphatic" *sḏm=f* (section 4.6.3.1b) display the same feature in the aorist relative form: Pyr. 628e *j.ḫr ḫr nj N ḫr=f* "one on whom the King's face falls," lit. "he-who-falls the face of the King on-him."

A morphological relation between relative forms and passive participles is often assumed,[167] and in fact relative forms appear to be distinct from their indicative equivalents: (a) the vocalic pattern of the temporal affix of the relative *sḏm.n=f* may have been **nu*, rather than **na* (**ḏidnuk* "which you said" vs. **ḏidnak* "you said");[168] (b) the relative aorist *jrr=f*, which corresponds to the emphatic *sḏm=f*,[169] may have had a pattern **mara:ruf* rather than **mara:raf*; (c) the Late Middle Eg. perfective-prospective relative *sḏm=f* shows a vocalic pattern reminiscent of the relative *sḏm.n=f*. **ḏi:duf, saḏi:muf, *jari:juf*.[170]

4.6.4 Non-finite verbal forms

Non-finite verbal forms, i.e. verbal formations which do not convey the overt expression of their subject, are morphosyntactically treated as nouns derived from a verbal root. They can indicate: (a) agents or patients of a verbal action,

in which case they are "participles" or *nomina agentis*; (b) the action evoked by the verbal root itself, usually referred to as "infinitive" or *nomen actionis*.

(a) The formation of participles in earlier Egyptian shows connections with Semitic.[171] There are two main participles, usually called "perfective" and "imperfective," for each of the two verbal voices; being [+N], participles display the feminine and plural agreement with the antecedent: *sḏm* "someone who hears," feminine *sḏm.t*, plural *sḏm.w*. Participial patterns, especially in the passive voice, show a considerable degree of morphological similarity to the corresponding relative forms, which are – at least in part – etymologically derived from them.[172] From a syntactic point of view, participles represent the counterpart of relative forms (section 4.6.3.4) when the subject of the relative clause is coreferential with the antecedent, the perfective participle corresponding to the perfective relative form: Sin. B 126 *nṯr ḫm šȝ.t.n=f* "a god who ignores (participle) what he has ordained (relative form)," the imperfective participles corresponding to the aorist relative form: Louvre C 1,4 *jrr ḥzz.t=sn* "one who does (participle) what they praise (relative form)."

Perfective participles indicate the action viewed as a whole and are often found in reference to singular nouns (for example the passive *mrjw jtj=f* "beloved of his father"). The patterns for the active form are: 2-rad. and II-gem. **cic*, fem. **ci:cat*: *mn */min/* "stable" > ⲙⲉⲛ-,[173] II-gem. also **cac*: *wn */wan/* "being" > ⲟⲩⲟⲛ,[174] 3-rad. and transitive III-inf. **ca:cic*, fem. **caccat* < ***cacic-at*: *nfr */na:fir/* "beautiful" > ⲛⲟⲩϥⲉ, *fȝj.t */faRjat/* "carrying" > **/faʔʔ/* (3.6.3) > ϭⲟⲉ "canal," lit. "that which carries (water),"[175] 4-rad. and IV-inf. **caccic*, fem. **cacci:cat*. Their passives are: geminated 2-rad. **c₁vc₂v:c₂iw*: *ḏddw* "said," otherwise **cacciw/j* > **cac'ceʔ*: 3-rad. *sḏdw */saȝdiw/* "told" > **/saȝ'dej/* > ᴮϣⲁⲛⲓ "gossip"; III-inf. *ḥzjw */ḥazjiw/* "praised" > **/ḥasʲeʔ/* > ϩⲁⲥⲓⲉ,[176] fem. either **caccat/*caca:cat* (< ***cacac-at*) or **cacci:wat*: *msḏw.t */masʲi:wat/* "hated" > **/masʲde:wȝ/* > ⲙⲉⲥⲧⲏ.

Imperfective participles imply a notion of repetition and often refer to plural nouns (for example the passive *mrrw nṯr.w* "beloved of the gods").[177] Since none of them has survived through Coptic, the vocalic patterns are difficult to establish: active *sḏm/jrr* "who is hearing/doing," passive *sḏm(w)/jrrw* "who is being heard/done": Khakheperre'seneb vo 2–3 *ḏd ḫr m ḏḏw n=f ḫr* "one who would give orders (active participle *ḏḏ* from *rḏj* "to give," lit. "a giver of orders") has become one to whom orders are given (passive participle *ḏḏw*, lit. "one given to-him orders," section 7.7)." Imperfective passive participles of 2-rad. verbs do not display the gemination of the second consonant; as in the case of emphatic and relative forms, Old Egyptian imperfective active

participles from 2-rad. and some weak classes are preceded by the *j*-prefix: *j.dd*.[178]

While earliest Egyptian had a prospective participle *sdm/jry*, feminine *sdm.tj/srj.tj*,[179] this form becomes obsolete in the classical language. The future participle is conveyed by an inflected form with infix *.tj* is of general use: masc. *sdm.tj=f*, fem. *sdm.tj=s*, pl. *sdm.tj=sn* "he/ she/those who will hear." This form is frequently labelled "verbal adjective" and often appears followed by an additional <j> in the singular forms (*sdm.tj=fj, sdm.tj=sj*). Its morphological origin is controversial: it may represent either the conjugated form of a *nisba* adjective of the type *k3w.tj* "worker" from *k3.t* "work," or a nominalized prospective form specialized in the participial use. In fact, both its morphology and its function display prospective features, for example the rare writing of a glide *.w* in the 2-rad. and III-inf. verbs (Siut 3,1 *hdw.tj=sn* "who will sail downstream") or the sporadic use with passive function (Siut 1,314 *zft.tj=f* "which will be slaughtered").

Table 4.13 Participles in earlier Egyptian

ASPECT AND VOICE	ACTIVE	PASSIVE
PERFECTIVE	2-rad. *mn* */min/ "stable" II-gem. *wn* */wan/ "being" 3-rad. *sdm* */saːjim/ "hearing" III-inf. *prj* */piːraj/ "come"	*dddw* */jvˈdvːdvw/ "said" *hnw* */ˈhiːniw/ "bent" *stp* */ˈsaːtap/ "chosen" *mrjw* */ˈmarjiw/ "beloved"
IMPERFECTIVE	2-rad. *mn* II-gem. *wnn* 3-rad. *sdm* III-inf. *prr*	*ddw* *hnnw* *stp(w)* *mrrw*
PROSPECTIVE	*sdm.tj=f/jrw.tj=f*	

(b) The Egyptian infinitive, which is the basic *nomen actionis* of the verbal root, is neutral in respect to tense, aspect, and voice: it generally implies the unmarked tense and the active voice, but it can also be found with preterital meaning in narrative discourse to mark the beginning of a paragraph: Sin. B 107 *rdj.t=f wj m-h3.t hrd.w=f* "he placed me (lit. "his placing me") in front of his children" or else with passive reference.[180] The main feature of earlier Egyptian infinitives is the morphological opposition between forms without ending and forms which display an ending *.t* affixed to the verbal stem. The most frequent patterns are 2-rad. *caːc* (*mn* */maːn/ "to stay" > ΛΟΥΝ), II-gem. *caˈcac* (*kmm* */kaˈmam/ "to become black" > ΚΛΟΛ), 3-rad. *caːcac* (*sdm*

*/ˈsaːjam/ "to hear" > CWTЖ), 3-rad. ultimae aleph *ciˈcic* (*zh3* */ziˈçiʀ/ "to write" > */sça?/ > cₑλι), III-inf. *ciːcit/*ciccit* (*jr.t* */jiːrit/ "to do" > */ʔiːrə/ > eɪpe, *mrj.t* */mirjit/ "to love" > */meʔʔ/ > ΛE), caus. 2-rad. *siccit/*siciːcit* (*sdd.t* */siɟdit/ > ᴮcλₓι /sacʔ/, *smn.t* */siˈmiːnit/ > cλιꞘE). Infinitives may be used in construct or in pronominal state followed by the subject (with intransitive verbs: *pr.t=k* */pirtvk/ "your going forth") or by the object (with transitive verbs: *sdm=f* */saɟmvf/ "to hear him"; the subject is introduced in this case by the preposition *jn*). The infinitive is a verbal noun and functions as substantive in absolute use (*pr.t m hrww* "coming forth by day"), as object of verbs (Urk. IV 57,3 *jw m3.n=j šsd hr.t hm=f* "I saw the cutting of His Majesty's tomb") and of prepositions, especially in the pseudoverbal constructions: West. 5,3–5 *jb n(j) hm=k r qbb n m33 hnn=sn hn.t m hdj m hntj* "Your Majesty's heart will be refreshed (lit. "is toward refreshing") at the sight of (lit. "for seeing") their rowing upstream and downstream."

Another verbal noun, the "complementary infinitive," is used as internal object of verbs when functioning as predicative complement in order to convey a specific connotation, as in CT I 345c *nj msj.n.tw=j js msy.t* "I was not born through regular birth," lit. "I was not born a bearing," or to provide a grammatical object for intransitive verbs when the verbal action is stressed, as in the above example *hnn=sn hn.t* "their rowing," lit. "that they row a rowing." The complementary infinitive of strong verbal classes sometimes displays the ending *.t* (for example *'h'.t* from *'h'* "to stand"), whereas III-inf. verbs often show the ending *yt* (for example *msy.t* from *msj* "to bear"). The complementary infinitive, therefore, represents a different verbal substantive and is not identical with the regular infinitive.

A third verbal noun, called "negatival complement," is found in earlier Egyptian under the control of a verb which conveys in its semantic value the feature [+NEGATIVE] (section 4.6.5). It is marked morphologically by the ending *.w*, which remains mostly unwritten.[181]

4.6.5 Negative verbal forms

Negative constructions with the particles *nj* (> Late Egyptian *bw* > Coptic Ж-) and *nn* (> Late Egyptian *bn* > Coptic Ꞙ-) will be treated in the chapters devoted to the syntax of the sentence types. Here I would only like to discuss a peculiarity of the Egyptian negative system, i.e. the presence of verbs which convey in their semantics the feature [+NEGATIVE]. These are called "negative verbs." The most common negative verb is the 2-rad. *tm*, originally "to complete" (see Semitic **tmm*), which acquires the conjugated form of the corresponding positive pattern and is used for the negation:

(a) of all nominal or nominalized verbal forms, such as participles (*tm sḏm.w* "someone who does not hear" vs. *sḏm* "a hearer," *tmm.t ḏd.w* "that was not said" vs. *ḏdd.t* "that was said"), infinitives (CT II 131d *tm ꜥq r nm.t nṯr* "Not to enter the god's place of execution"), and relative forms (Louvre C 15 *nn s.t nb.t tm.t.n=j jrj.w mn.w jm=s* "there is no place at all in which I failed to build monuments" vs. *jrj.t.n=j mn.w jm=s* "in which I built monuments").

(b) of verbal forms in syntactic dependency: topicalized "emphatic" *sḏm=f* (Peas. B1,211 *tm=k tr sḏm.w ḥr-m* "why don't you listen?," positive **sḏm=k ḥr-m*, West. 11,21–22 *tm.tw ms jnj.w hn.w ḥr-m* "why aren't vessels brought?," positive **jnn.tw hn.w ḥr-m*), also used in object clauses (Merikare E 53 *rḫ.n=k tm=sn sfn.w* "you know that they are not clement"), the subjunctive *sḏm=f* (Pyr. 675b *j.tm=k sḏm.w n=f sḏm=k ꜣb.t=f jmj.t tp=k* "should you fail to listen to him, you shall hear his *ꜣb.t* which is on your head"), the protasis of a hypothetical clause (Pyr. 277b *jr tm=k jrj.w s.t n N jrj.kꜣ N fꜣ.t m jtj=f gbb* "if you don't make a place for the King, the King will make a *fꜣ.t* on his father Geb"), the circumstantial use of modal forms (Peas. B1,244–45 *m kꜣhs ḫft wsr=k tm spr.w bw-ḏw r=k* "do not exceed when you exercise power, lest trouble befall you"), and VP introduced by conjunctions (Siut 1,229 *sgr qꜣj-ḥrw r tm=f mdw.w* "to silence the vociferous, that he may cease to speak").[182]

Other negative verbs followed by the negatival complement are the III-inf. *jmj* "not to do," used in the imperative *m* and in the subjunctive *jm=f* to express a negative command (Sh.S. 111 *m snḏ(.w)* "do not fear," Peas. B1,162 *jm=k tnm.w* "you should not go astray"), and the 2-rad. *ḥm* "not to be able to," whose participle appears mostly in nominal compounds (*j.ḥm.w-skj.w* "those which cannot perish," i.e. the Circumpolar Stars). Especially in the Old Kingdom, the substantivized participle of other verbs, the most important of which is *nfr* "to be complete," is used in grammaticalized negative patterns: *nfr n X* *"it is complete to X" > "it doesn't happen that X," *nfr pw X* "X is complete" > "there is no X."[183]

4.6.6 Verbal morphology in later Egyptian

In this paragraph, the reader will find a general description of the historical patterns that govern the development of verbal morphology from earlier to later Egyptian. More detailed information on the functional reorganization within the linguistic system of Late Egyptian and Coptic will be provided in the discussion of verbal syntax.[184]

(a) The main evolutive tendency underlying the development of the verbal system is the well-known change from *synthetic* to *analytic* patterns of conjugation. Parallel to the loss of final vowels and to the tendency to have

prefixes carry the morphological functions formerly signalled by suffixes (sections 4.1, 4.6.1), later Egyptian develops periphrastic verbal forms based on the verb *jrj* "to do" (*sḏm.n=f* "he heard" > *jr=f sḏm*, lit. "he did the hearing" > Coptic ⲁ=ϥ-ⲥⲱⲧⲙ̄). The inflected form is eventually grammaticalized as a new conjugational marker and supersedes the old synthetic construction; the infinitive – and gradually the stative as well – become lexical indicators, the nucleus of the predication being represented by the conjugational base followed by the subject: earlier Egyptian prospective *wḏꜣ=f* "may he become prosperous" > Coptic ⲉϥⲉ-ⲟⲩⲝⲁⲓ (conjugational base of the third person masc. Fut. III+Infinitive) "may he be safe"; earlier Egyptian stative *jw=j wḏꜣ.kw* "I am/have become prosperous" > Coptic ϯ-ⲟⲩⲟⲝ (conjugational base of the first person Pres. I + Stative) "I am whole." This change from synthetic to analytic patterns in the verbal system leads to a progressive move from the earlier VSO toward a SVO word order.

(b) Later Egyptian allows the transformation (or "transposition") of the basic verbal forms into their nominalized and subordinate (adverbialized) counterparts by means of a periphrastic verbal form with *jrj* "to do" for the nominalized use and of the particle *jw* "while" – morphologically identical to the Middle Egyptian marker of initiality *jw*, but used in a new, and in a certain sense opposite function – for the adverbialized use: thus, the earlier Egyptian opposition between the initial *jrr=f* and its non-topicalized counterpart *jrj=f*, rather than by different morphological *sḏm=f*-patterns, is conveyed in later Egyptian by the use of the two distinct forms *j.jr=f-sḏm*, lit. "(the fact) that he does a hearing" > ᴮⲁϥⲥⲱⲧⲙ vs. *jw=f-ḥr-sḏm*, lit.: "while he is on hearing" > ᴮⲉϥⲥⲱⲧⲙ. These formants are eventually grammaticalized as *converters*, i.e. as free morphemes *j.jr* and *jw* prefixed to the basic form. Later Egyptian displays a whole set of such converters, for example *wn*, originally the perfective base of the verb *wnn* "to be," which ascribes to a verbal predicate a perfective value, or the relative pronoun *ntj*, which transforms it into a relative form: for example, the so-called Present I *sw ḥr sḏm* "he hears" (> Coptic ϥⲥⲱⲧⲙ̄, section 4.4.2), the functional heir of the Middle Egyptian construction *jw sḏm=f*, can be converted into a nominalized *j.jr=f-sḏm* "that he hears" (> Coptic ˢⲉϥⲥⲱⲧⲙ̄, ᴮⲁϥⲥⲱⲧⲙ, the so-called Present II), into an adverbial form *jw=f ḥr sḏm* "while he hears" (> ⲉϥⲥⲱⲧⲙ̄, ᴮⲉϥⲥⲱⲧⲙ), into a preterital *wn=f ḥr sḏm* "he was hearing" (> ⲛⲉϥⲥⲱⲧⲙ̄), and a relative form *ntj ḥr sḏm* "who hears" (> ⲉⲧⲥⲱⲧⲙ̄).

(c) The later Egyptian verbal system displays so-called "sequential" forms; these are the narrative *jw=f ḥr sḏm* "and he heard" for a sequence of events in

the past – limited to Late Egyptian – and the conjunctive *mtw=f sdm* "and he will hear" for a concatenation of expected events – also shared by Demotic and Coptic (�𝓝ᕌᏟᏔᎢᎠ̄). They are used in non-initial position in order to keep the temporal, aspectual, and modal references of the preceding section of discourse. This evolution is mirrored by a similar development in the verbal system of the Northwest Semitic languages such as Hebrew.[185]

(d) Already in Late Egyptian, and increasingly in the more recent phases of later Egyptian, verbal patterns tend to be organized within a tripartite sequence of conjugation base (often derived from a conjugated form of *jrj* "to do"), nominal or pronominal subject, and infinitive, and to acquire autonomy as main sentences or dependent clauses: for example, the earlier Egyptian construction with the negative particle *nj* followed by the past form *nj sdm.n=f* "he cannot hear" becomes in later Egyptian the form *bw-jr=f-sdm*, in which *bw* is still recognizable as the negative morpheme but is not used productively in the language, being found only in a few bound verbal constructions, and in Coptic ᎷᎬ-ᕌ-ᏟᏔᎢᎠ̄, which is not even any longer segmentable into discrete units, but rather represents a functional equivalent to the morphologically quite distinct positive form ᎧᎪ-ᕌ-ᏟᏔᎢᎠ̄ "he hears."

This evolution had a profound impact at the typological level, causing Egyptian on the one hand to grammaticalize dependent clauses as paradigmatic units (for example the temporal *m-dr jr=f-sdm* > ᏁᎢᎬᏢᎬᕌᏟᏔᎢᎠ̄ "when he heard" or the conditional Demotic *j.jr=f-hn-sdm* > ᎬᕌᎧᎪᏁᏟᏔᎢᎠ̄ "if he hears"), on the other hand to move from the fusional nature of its earlier phases (section 4.1) to the *polysynthetic* type:[186] in Coptic, sentence and clause conjugation, often followed by the verbal object, are combined into a single prosodic unit, i.e. into one word: Ps 68,22 ᎪᎢᏟᎬᏆᎧᎡ̄Ꭻ (*a=u-tse=i-ou-hmj*) /ʔawtsəjʼwhemc/ "they let me drink vinegar" < Late Egyptian *†jr=w dj.t swr=j w'-hmd*, lit. "they did (*jr=w*) causing (*dj.t*) that I drink (*swr=j*) vinegar" < earlier Egyptian (*jw*) *dj.n=sn swr=j* etc.; Lk 23,35 ᎷᎪᏢᎬᕌᎢᏗᎧᎪᏝ (*mare=f-toujo=f*) /marəftəwʼjof/ "let him save himself" < *†jm jr=f-dj.t-wdȝ=f*, lit. "let him do (*jm jr=f*) causing (*dj.t*) that he be safe (*wdȝ=f*)" < earlier Egyptian *dj=f wdȝ=f* "may he cause (*dj=f*) that he be safe." This change from the fusional to the polysynthetic type represents a major typological evolution in the history of Egyptian and is unparalleled in other families of the Afroasiatic phylum.

4.6.6.1 *Tense and aspect*. The *sdm.n=f* is maintained in Late Egyptian only in formal texts, the productive form for the past being the preterital *sdm=f* (and the typologically more analytic form *jr=f-sdm* > Coptic ᎪᕌᏟᏔᎢᎠ̄):[187] Urk. VI 133,20 *mš'=k jrm nȝ-sbj.w* "you have gone with the rebels"; Jn 17,1 ᎪᎢᎬᏔᏁᏜ

ᎬᏆ "the hour (*te-ounou*) came." Its negative equivalent is *bw sdm=f*, replaced from the end of Dyn. XIX by *bw-pw=f sdm* (> *bwpw-jr=f-sdm* > Ꭰ̄ᏁᎬᏟᏔᎢᎠ̄), a periphrastic construction derived from the grammaticalization of the verb *pȝw* "to have done in the past":[188] RAD 80,2–3 *bw jn=f jm=w r tȝ-šn'.t* "he didn't bring any of these to the granary"; Jn 1,10 Ꭰ̄ᏁᎬᏁᏦᏟᎷᎧᏟ ᏟᏔᎢᎧᎢᎠ̄ "the world (*p-kosmos*) did not recognize him."

The form *sdm.t=f*, which already in earlier Egyptian was limited to few bound constructions, is found in later Egyptian in the same perfective environments, i.e. after the negative particle *bw-sdm.t=f* "he has (or had) not yet heard" (> *bw-jr.t=f-sdm* > Ꭰ̄ᏁᎪᎢᕌᏟᏔᎢᎠ̄): KRI I 238,14 *ptr bw-dj.t=k jn.tw=f* "look, you have not yet caused that it be brought"; Jn 2,4 Ꭰ̄ᏁᎪᎢᎬᎢᎪᎧᏔᏁᎧᎢ ᎬᏆ "my hour has not yet come," and controlled by the conjunctions *r* and *šȝ'-r* "until" (> *šȝ'-r jr.t=f-sdm* > ᎧᎪᏁᎢ=ᕌ-ᏟᏔᎢᎠ̄): pAnastasi IV 3,3 *r ph.t=k r jmȝh* "until you have reached the privilege"; Mt 2,9 ᎧᎪᏁᎢᏆᎬᏆ "until he comes."[189]

The sequential *jw=f hr sdm* and its negative counterpart *jw=f hr tm sdm* are used in a narrative chain after an initial preterital form, a syntactic environment in which the classical language used the regular *sdm.n=f* in "continuative" function: LRL 32,5–8 *jry=j tȝ-š'.t jw=j (hr) dj.t=s n X jw=j (hr) dd n=f* "I wrote the letter and gave it to X and I said to him". The contingent tense *sdm.jn=f* "then he said" is limited in Late Egyptian to the verb *dd* "to say" and to the periphrastic construction with the past converter *wn*.[190]

In the present tense, the basic paradigm is the Present I *sw hr sdm/sdm.w* (negative form *bn sw hr sdm/sdm.w*), a pseudoverbal construction in which the subject precedes the predicate, which is either the infinitive governed by the preposition *hr/m* or the stative: pAnastasi IV 3,5–6 *nȝ-nhsj.w m shsh r-hȝ.t=k* "the Nubians run in front of you"; 2 Cor 5,1 ᎢᎡ̄ᏟᏟᏔᎢᎡ̄ "we know."[191] If the subject is pronominal, the Late Egyptian and Demotic third person dependent pronouns *sw* and *st* are replaced in Coptic by the old suffix pronouns *f-* and *s-* under analogical pressure: *sw hr sdm* > ᕌᏟᏔᎢᎠ̄, whereas the new proclitic pronouns built from the particle *tj* (section 4.4.2) appear in the first and second persons (*twj/twk hr sdm* > ᎢᏟᏔᎢᎠ̄, ᏦᏟᏔᎢᎠ̄). The Present I is negated by means of the morpheme *bn*, the heir of the classical *nn* (sections 4.7, 4.11), which in later Demotic and in Coptic is often reinforced by the adverb *jwnȝ* > ᎪᏁ.

In addition to the Present I, which is used for the specific indication of the imperfective aspect, later Egyptian possesses a form *hr=f sdm* (> *hr-jr=f sdm* > ᎧᎪᕌᏟᏔᎢᎠ̄), which corresponds morphologically to the contingent present *sdm.hr=f*, but functionally to the construction *jw sdm=f* of the classical language: it acquires the function of an "aorist," i.e. of a general or gnomic

present:[192] Jn 8,47 "He who is from God ϣⲁϥⲥⲱⲧⲙ̄ ⲉⲛϣⲁϫⲉ ⲙ̄ⲡⲛⲟⲩⲧⲉ listens to God's words." The aorist is negated by the form *bw sdm=f/bw jr=f sdm* (> ⲙⲉϥⲥⲱⲧⲙ̄): KRI II 65,1–4 *jr ph̭=j r ḥḥ jm=sn bw jr rd.wj smn ḥr w'r=sn* "if I attack millions among them, their feet cannot stand, and they flee."[193]

The expression of future tense and prospective aspect experiences some changes. While the pattern *jw=f r sdm* becomes grammaticalized as a bound form in Late Egyptian and represents a true temporal "objective future" (LRL 20,12 *jw=j (r) jr.t=s* "I shall do it"), its Coptic outcome, the so-called Future III ⲉ⸗ϥ-ⲉ-ⲥⲱⲧⲙ̄, is no longer an aspectual form, but has invaded the domain of mood, superseding the prospective *sdm=f* (ⲉⲥⲉϣⲱⲡⲉ "amen," lit. "may it happen"). In the presence of a nominal subject, rather than the form *jw=f r sdm*, later Egyptian shows more frequently *jr NP (r) sdm* > ⲉⲣⲉ-NP (ⲉ)-ⲥⲱⲧⲙ̄, i.e a periphrastic construction – probably of Lower Egyptian origin – with the prospective stem of the verb *jrj* "to do" which has been integrated into the paradigm of *jw=f r sdm*: KRI IV 87,1–2 *jr p3j=j nb r dd=f* "my lord will say it"; Ps 19,2 ⲉⲣⲉ-ⲡϫⲟⲉⲓⲥ ⲥⲱⲧⲙ̄ ⲉⲣⲟⲕ "may the lord listen to you." The negative form is *bn jw=f r sdm/bn jr NP sdm* (> ⲛ̄ⲛⲉϥⲥⲱⲧⲙ̄).[194]

For the expression of the prospective aspect in the narrower sense, later Egyptian develops a Present I construction with the verb *n'j* "to go," which is still a free lexical construction in Late Egyptian: LRL 35,15 *twk rḫ.tw p3y mš' ntj twj m n'y r jr=f* "you know this expedition which *I am going* to make." In Roman Demotic and in Coptic the pseudoverbal predicate *m-n'y* becomes a converter ⲛⲁ- and the form is grammaticalized as prospective counterpart of the Present I, called Future I: Ps 54,20 ⲡⲛⲟⲩⲧⲉ ⲛⲁ-ⲥⲱⲧⲙ̄ ⲉⲣⲟⲓ "God is going to listen to me."[195]

Table 4.14 Tense and aspect in later Egyptian

TENSE/ASPECT		POSITIVE FORM	NEGATIVE FORM
PAST	INITIAL	*sdm=f > a=f-sôtm*	*bw-pw=f-sdm > mpe=f-sôtm*
	NON-INITIAL	*jw=f ḥr sdm*	*jw=f ḥr tm sdm*
PERF.	"UNTIL" "NOT YET"	*š3'-r jr.t=f-sdm > šant=f-sôtm*	*bw-jr.t=f-sdm > mpat=f-sôtm*
PRESENT	IMPF. AORIST	*sw ḥr sdm > f-sôtm* *ḥr=f sdm > ša=f-sôtm*	*bn sw ḥr sdm > n-f-sôtm an* *bw-jr=f-sdm > me=f-sôtm*
FUTURE	PROSP. OBJECTIVE > MODAL	*sw m n'y r sdm > f-na-sôtm* *jw=f r sdm/jr NP (r) sdm >* *e=f-e-sôtm/ere-NP sôtm*	*bn sw m n'y r sdm >n-f-na-sôtm an* *bn jw=f r sdm >* *nne=f-sôtm*

4.6.6.2 Mood. The Late Egyptian imperative[196] is regularly preceded by a *j*-prefix (Coptic ⲁ-); in the later phases of the language, while the morphological imperative is kept in lexicalized remnants, the jussive function is fulfilled by the infinitive: Late Egyptian *j.dd, j.nw* "say, look" > Coptic ⲁϫⲓ, ⲁⲛⲁⲩ, but Late Egyptian *j.sdm* "hear" > Coptic ⲥⲱⲧⲙ̄.

Connected with the imperative is the Coptic sentence conjugation ⲙⲁⲣⲉϥⲥⲱⲧⲙ̄, derived from the paradigmatization of a construction with the imperative of *rdj* "to cause to" followed by a periphrastic prospective *sdm=f:jm jr=f-sdm*, lit. "cause that he hear."[197] This form is used independently or in conjunction with the imperative when the scope of the injunction is a person other than the second: Lk 11,2 ⲙⲁⲣⲉⲡⲉⲕⲟⲩⲱϣ ϣⲱⲡⲉ "thy will (*pe=k-ouôš*) be done (*mare...šôpe*)"; Judg 14,15 ⲁⲣⲓϩⲁⲗ ⲙ̄ⲡⲟⲩϩⲁⲓ ⲁⲩⲱ ⲙⲁⲣⲉϥⲧⲁⲩⲟ ⲉⲣⲟ ⲙ̄ⲡⲉⲡⲣⲟⲃⲗⲏⲙⲁ "deceive (*ari-hal* "do a deception") your husband, that he may explain (*auô ma-re=f-tauo* "and may he explain") to you the riddle."

The basic modal form, the prospective *sdm=f* and its nominalized counterpart *j.sdm=f*,[198] was already in classical Egyptian a suppletive paradigm derived from the merging of the Old Egyptian initial prospective *jrj.w=f* and of the subjunctive *sdm=f* (section 4.6.3.2). However, a major change can be detected in Coptic: here, the prospective *sdm=f* has disappeared and the modal function is delegated to ⲉϥⲉⲥⲱⲧⲙ̄, the old "objective future" of Middle and Late Egyptian: for example Late Egyptian KRI VI 520,10 *ḥsy twtn jmn-r' nsw-ntr.w* "may Amun-Re, King of the gods, praise you!," but Coptic Mt 19,19 ᴮⲉⲕⲉⲙⲉⲛⲣⲉⲡⲉⲕϣⲫⲏⲣ ⲙ̄ⲡⲉⲕⲣⲏⲧ "you shall love your neighbor (*e=k-e-menre-pe=k-šphêr*) like yourself (*m-pe=k-rêti*)." In its use as main sentence, the prospective *sdm=f* is negated by the form *bn sdm=f* (< *nn sdm=f*) and in dependent clauses by the prospective of the verb *tm* (section 4.6.5) followed by the negatival complement or by the infinitive, once the former is reduced to a mere survival in few verbs. Also, the contingent form *k3 sdm=f* (< *sdm.k3=f*) is still found in Late Egyptian, but disappears in the later stages.[199]

A significant change from earlier to later Egyptian is the emergence of a sequential pattern *mtw=f-sdm* > ⲛ̄ϥⲥⲱⲧⲙ̄, called "conjunctive," a non-initial form which makes a chain of events dependent on the initial form:[200] Wen. 1,44–45 "Do you not say: 'Stay one more night,' *r dj.t wḏ t3-bjr j.gm=j mtw=k jj* to cause the ship that I found to depart, so that you may return?"; Pistis Sophia 121,18 ⲉϥⲧⲱⲛ ⲧⲁ-ⲛⲁⲩ ⲉⲣⲟϥ "where is he, that I may see him?"; Jn 1,39 ⲁⲙⲏⲓⲧⲛ̄ ⲛ̄ⲧⲉⲧⲛ̄-ⲛⲁⲩ "come and see."

The conjunctive, therefore, appears to be the modal counterpart to the temporal *jw=f ḥr sdm* (section 4.6.6.1). Its morphological origin[201] lies in an ergative pattern, known from Middle Egyptian, in which the preposition *ḥn'*

"with" is followed by the infinitive and a pronominal or (rarely) nominal subject, reinterpreted as consisting of a morpheme *nt-* followed by the suffix pronoun: *ḥn' sḏm jnk/ntf/jn NP > ḥn'-nt=j/nt=f/ntj NP sḏm > mtw=j/mtw=f/ mtw NP sḏm* > ⲧⲁⲥⲱⲧⲁ̅, ⲛ̅ϥⲥⲱⲧⲁ̅, ⲛ̅ⲧⲉ-NP ⲥⲱⲧⲁ̅.

While the syntax of these forms will be dealt with extensively in chapter 7, here we need to stress the connections between the Coptic conjunctive and the clause conjugation form (ⲛ̅)ⲧⲁⲣⲉϥⲥⲱⲧⲁ̅ < *dj=j jr=f sḏm* "(I will cause) that he may hear." We just saw that the morphological evolution of the conjunctive led to a form ⲧⲁⲥⲱⲧⲁ̅ in the first person singular. In later Demotic and in Coptic, however, the formant ⲧⲁ- < *dj=j-* "I will cause" is grammaticalized in another construction, the clause conjugation (ⲛ̅)ⲧⲁⲣⲉϥⲥⲱⲧⲁ̅,[202] in which the base ⲧⲁ- is followed by the periphrastic prospective *sdm=f* form; but the original personal reference appears neutralized, causing the expression to acquire an optative or promissive meaning: "I will cause that he hear" > "(I will cause") may he hear" > "may he hear": Mt 7,7 ⲁⲓⲧⲉⲓ ⲧⲁⲣ=ⲟⲩ-ϯ ⲛ̅ⲏⲧⲛ̅ ϣⲓⲛⲉ ⲧⲁⲣⲉ=ⲧⲛ̅-ϭⲓⲛⲉ ⲧⲱϧⲁ̅ ⲧⲁⲣ=ⲟⲩ-ⲟⲩⲱⲛ ⲛ̅ⲏⲧⲛ̅ "ask, and it will be given you; seek, and you will find; knock, and it will be opened to you." Symmetrically to what happens in the case of the sentence conjugation ⲙⲁⲣⲉϥⲥⲱⲧⲁ̅, which because of its derivation from an imperative form ⲙⲁ- < *jmj* "let" is excluded from the second person use, the first person origin of the conjugational base ⲧⲁ- < *dj=j* prevents the form ⲧⲁⲣⲉϥⲥⲱⲧⲁ̅ from being used in the first person; in this case, the promissive future is replaced by the first person conjunctive (ⲛ̅)ⲧⲁ-ⲥⲱⲧⲁ̅ < *mtw=j-sdm*.

Table 4.15 Mood in later Egyptian

MOOD	INITIAL FORMS	NON-INITIAL FORMS	CONTINGENT
WISH (OPTATIVE)	Prospective *sdm=f* > Future III ⲉϥⲉⲥⲱⲧⲁ̅	1 pers.: *mtw=j sdm* > (ⲛ̅)ⲧⲁⲥⲱⲧⲁ̅ Other persons: *dj=j-jr=f-sdm* > ⲧⲁⲣⲉϥⲥⲱⲧⲁ̅	
		Conjunctive *mtw=f sdm* > ⲛ̅ϥⲥⲱⲧⲁ̅	*k3-sdm=f*
COMMAND (JUSSIVE)	2 pers.: *j.sdm* > ⲥⲱⲧⲁ̅ Other persons: *jm jr=f-sdm* > ⲙⲁⲣⲉϥⲥⲱⲧⲁ̅		

4.6.6.3 *Voice.* In the preceding paragraphs, we observed many cases in which the verbal system of later Egyptian displays verbal patterns consisting of a conjugational base followed by the subject and the infinitive or the stative, resulting in the latters' tendency to function as lexical indicators rather than as grammatical forms. While this evolution did not affect heavily the morphology of the infinitive, it had a profound impact on the stative, the endings of which gradually became redundant (section 4.4.2): during Dyn. XX, the *tw*-suffix begins to be applied to the first person forms; in the Third Intermediate Period (tenth–seventh century BCE), only two forms survive, one with a *ø-* (primarily for the third persons) and one with a *t*-suffix,[203] until in Coptic each verbal root displays only one form of the stative: ⲁⲟⲥⲉ /cosʔ/ "to be exalted" < masculine *tzj.w* */cazjaw/ "he was exalted" vs. ⲥⲁⲟⲛⲧ "to be established" < feminine *smn.tj* */saˈmantvj/ "she was established."

Major semantic as well as morphosyntactic changes affect the expression of voice in later Egyptian. While both the simple *sdm=f* and the infixed *sdm.tw=f* forms are documented in Late Egyptian, the main innovation in the semantics of passive forms is the grammaticalization of the original perfective infix *.tw* as indefinitive pronoun "one" (French *on*, German *man*) and the ensuing tendency to interpret the infixed passive *sdm.tw NP* "NP was/is/will be heard" as an active construction with the indefinite pronoun "one heard/hears/will hear NP." In Demotic and Coptic, the indefinite pronoun *.tw* is superseded by the third person plural pronoun *=w*.

Late Egyptian keeps the perfective passive *sdm=f/jry=f* (< *sdm=f/ jrj.w=f*): pAnastasi V 17,7–18,1 *gmy m=w r h3b=w m jp.t* "their name was found in order to send them on a mission," the topicalized past passive *sdm.tw=f* as the heir of the earlier Egyptian *sdm.n.tw=f* form: KRI IV 80,12 *jt3.tw=f n p3j=f ḥm-ntr* "it is for his priest that it was stolen," the passive of the *sdm.t=f* form, documented only in the negative construction *bw sdmy.t NP*: KRI II 911,9 *bw jny.t n3j=w ḥsf* "their answer has not yet been brought," the nominalized prospective passive *(j.)sdm.tw=f*: pAnastasi II 6,1 *j.dd.tw n=k sḥr n t3 nb jw=k ḥtp.tj m 'ḥ=k* "the plan of the entire land will be reported to you when you rest in your palace," and the subjunctive passive *sdm.tw=f*: Florence 2616,10 (Khonsuemhab) *dj=j jry.tw=f n=k* "I shall cause that it be done for you."[204] Within the synchronic perspective of Late Egyptian, as we saw above, one also needs to posit a form *sdm.tw NP* belonging to the paradigm of the preterital *sdm=f* (section 4.6.6.1), in which the passive infix *.tw* is grammaticalized as indefinite subject pronoun *tw* "one": KRI VI 695,7 *jn.tw NP ntj m wsf* "one brought NP who was idle."

In Demotic and Coptic,[205] the indefinite pronoun *tw* has been replaced by constructions with the third person plural pronoun, for example in the prospective *sdm=f*: Onchsh. 4,10–11 *mj jn=w n=j wʻ-gst jrm wʻ-dmʻ* "let a palette and a papyrus roll be brought to me," lit. "that they bring to me," or in the preterital ⲁ̀ϥⲥⲱⲧⲙ̄: Lk 1,13 ⲁ̄-ⲧ-ⲥⲱⲧⲙ̄ ⲉ-ⲡⲉ=ⲕ-ϣⲗⲏⲗ "your prayer has been heard," lit. "they heard your prayer." However, when the passive predication conveys an overt agent expression, this is rendered by a prepositional phrase with Demotic *m-dr* > Coptic ϩⲓⲧⲛ̄-/ϩⲓⲧⲟⲟⲧ=, lit. "through the hand of": pRyl. IX 5,1 *ḥwj=w stj r pзj=j ʻ.wj – m-dr nm? m-dr nзj-wʻb.w* "my house has been set in fire – By whom? By these priests" (preterital *sdm=f*), 1 Cor 14,24 ⲥⲉ-ⲛⲁ-ϫⲡⲓⲟ=ϥ ϩⲓⲧⲛ̄-ⲟⲩⲟⲛ ⲛⲓⲙ "he will be blamed by everyone" (Future I). This means that the passive form, in spite of its formal identity with the third person plural, always maintained a distinct paradigmatic autonomy: the semantic structure of a sentence with a third person plural subject was different depending on whether it belonged to the active or to the passive paradigm: in the former case, the overt subject was introduced by the particle ⁵ⲛϭⲓ/ᴮⲛϫⲉ,[206] in the latter by a prepositional phrase with ϩⲓⲧⲛ̄-: Mt 2,16 ⁵ⲁ̀ⲧⲥⲱⲃⲉ ⲙ̄ⲙⲟϥ ⲉⲃⲟⲗ ϩⲓⲧⲛ̄-ⲙ̄ⲙⲁⲅⲟⲥ "he was ridiculed by the magicians" (passive) vs. ᴮⲁ̀ⲧⲥⲱⲃⲓ ⲙ̄ⲙⲟϥ ⲛ̄ϫⲉ-ⲛⲓⲙⲁⲅⲟⲥ "the magicians ridiculed him" (active).

4.6.6.4 Relative forms. In later Egyptian, synthetic relative forms tend to disappear and to be replaced by analytic constructions with the relative pronoun *ntj* > ⲉⲧ-, ⲉⲧⲉ-, ⲛ̄ⲧ-. The only survivals of synthetic relative forms in Late Egyptian[207] are the relative perfective *sdm.n=f* and imperfective *jrr=f* as archaisms inherited from the classical language, and the relative past *j.sdm=f*, which – like its earlier Egyptian ancestor (section 4.6.3.4) – can only modify a specific antecedent, determined by a qualifier, a quantifier, or a determinative pronoun: Doomed Prince 6,13–14 *wn.jn pз-wpw.tj ḥr šm.t ḥr smj <md.t> nb.t j.dd=s n pзj=s jtj* "then the messenger went to report everything she had said to her father," Two Brothers 1,10 *mtw=f sdm pз-dd=sn nb* "and he would hear everything they said."

Otherwise in Late Egyptian, and regularly in Demotic and Coptic, relative forms are rendered analytically by means of the relative converter *ntj*, which converts a main predication into a relative clause: Lk 15,6 ⲡⲁ-ⲉⲥⲟⲟⲩ ⲉⲛⲧ-ⲁ=ϥ-ⲥⲱⲣⲙ̄ < Demotic *pзj=j-sj.w ntj jr=f-srm* "my sheep that had gone astray."[208]

4.6.6.5 Non-finite verbal forms. Participles, as adjectival forms of the verb (section 4.6.4), show evolutive patterns that are predictably similar to those of the relative forms: except for a few archaizing instances of the imperfective participle, the only forms in productive use in Late Egyptian are the perfective active and passive simple *j.sdm* and periphrastic *j.jr-sdm*, a remnant of which survives until Coptic ⲉⲣ-ⲥⲱⲧⲙ̄ < *j.jr-sdm* "he who did."[209] As a rule, participles are superseded in later Egyptian by verbal or pseudoverbal patterns with the relative converter *ntj*, the only trace of synthetic participles in Coptic being the so-called "conjunct participle" in construct states: ⲙⲁⲓⲛⲟⲩⲧⲉ "pious" < *mrj nṯr* */ma(:)rijʼnaːcar/ "who loves God."

In the *nomina actionis*, the negatival complement has disappeared from later Egyptian and survives only in the negative imperative of *jrj* "to do": *m jr.w* */ʔvmʔàːraw/* > ⲙ̄ⲡⲱⲣ. As for the infinitives,[210] the main changes from earlier to later Egyptian are phonetic: in general, they are motivated by the different forms of the infinitive in periphrastic patterns, depending on whether it was used absolutely or followed by a noun or a pronoun. This is very evident in the III-inf. verbs which, in the phonological reorganization caused in later Egyptian by a strong tonic stress (section 3.5.3), lost the ending *.t* in the absolute state (*mrj.t* */mirjit/* "to love" > Late Egyptian *mrj* */merʔə/*[211] > Coptic ⁵ⲙⲉ, ᴮⲙⲏⲓ /meʔ(?)/) or in non-sonorant environments, such as in the nominal state, where the infinitive is followed by a noun, i.e. inevitably by a consonantal phoneme (ⁿⲙⲉⲣⲉ-), but maintained it in a sonorant environment, for example when it was followed by the short vowel of the suffix pronoun (*mrj.t=f* */mirjiːtvf/* "to love him" > Late Egyptian *mrj.tw=f* > ⁵ⲙⲉⲣⲓⲧ=ϥ /məʼriːtəf/). The Late Egyptian marker <tw>, which was originally the graphic signal of this permanence of /t/ in the pronunciation before suffix pronouns, soon came to be perceived as an autonomous morpheme and was also sporadically applied to forms where it was not justified at the etymological level, such as in the infinitive of strong verbal classes (*ʻšз.tj* "to be numerous" > ⲁϣⲉⲓⲧⲉ together with the regular form *ʻšз* > ⲁϣⲁⲓ), or introducing the object pronouns of the new type (*twj, twk, twf*, etc.) even when not governed by an infinitive.[212] Heirs of this new suffix pronoun are the unusual Coptic suffix pronouns used after consonants and glottal stop: first person =ⲧ (ⲕⲁⲁ=ⲧ "to place me" < *ḫзʻ=twj*) and second person feminine =ⲧⲉ (ⲕⲁⲁ=ⲧⲉ "to place you" < *ḫзʻ=twt*).

4.7   Prepositions, conjunctions, particles

Earlier Egyptian exhibits a considerable number of prepositions, whose emergence, often from the absolute use of an etymological substantive, was

probably favored by the early decay of the case system in prehistoric times.[213] Prepositions can be followed by a noun or a suffix pronoun, in which case their stem shows a tonic vowel *a (*jr=f* */ja'raf/* > ⲉⲣⲟϥ "to him"), probably the heir of the Afroasiatic absolutive case (section 4.3.1).[214] They can often function as conjunctions introducing nominalized verbal phrases.

The most important simple prepositions are: *m* "in, by, with, at," etymologically related to Sem. *b*; *r* (< *jr*) "toward, more than (comparative)," see Sem. *'l*; *n* "to, for," see Sem. *'l*; *jn* "by" (with agent, section 4.4.1), etymologically connected with Arabic *'inna*; *ḥr* */ḥar/* "on, because, through," see Sem. *'al*; *ḥn'* "together with," see Ar. *'inda*, replaced in later Egyptian by *jrm*, Coptic ⲙⲚ (< *r-jm* "at the side of"); *ẖr* */çur/* "under"; *ḥr*, used with the meaning "to, for" in the presence of a difference of status between the two speakers, for example *ḏd ḥr* "to speak to a superior or inferior"; *ḥft* "in front of, according to"; *mj* (< *mr*) "like, as"; *ḏr* "since"; *ḥʒ* "behind"; *ḥnt* "in front of"; *tp* "upon" (< *tp* */tap/* "head"); *ḥt* "through"; *jmjtw* "between," from the *nisba* adjective of the preposition *m* "which is in." *Nisba* adjectives are frequently derived from simple prepositions: for example *jmj* "which is in," *jrj* "concerning," *ḥntj* "which is in front of." Compound prepositions of nominal or adverbial derivation are also frequent: *n-jb-nj* "for the sake of" (< "for the heart of"), *m-sʒ/r-sʒ* "in the back of, behind" *m-ḥnw* "in the interior of," *wpw-ḥr* "except" (< "separated from"), etc. Some of these are used most frequently as conjunctions: *n-mrw.t* "in order to" (< "for the love of), *n-'ʒ.t-n.t* "inasmuch as" (< "for the greatness of"), etc.

Besides licensing the use of prepositions to introduce verbal clauses, Egyptian also possesses "true" conjunctions, the most important of which are *wnt* and *ntt* before noun clauses as object of verbs, as in English "that": Pyr. 1862a–b *ḏd=ṯn ḥr r'w wnt=f jj.w m nṯr* "you shall say to Re that he has come as god," Urk. IV 835,16 *rḫ.kw ntt ḥtp=f ḥr=s* "I knew that he would be happy with it." Etymologically, both these conjunctions are nouns: *wnt* is a feminine derivative from the root *wnn* "to be"; *ntt* is the feminine, i.e. neuter form of the relative pronoun *ntj*, according to a pattern of evolution also known in Indo-European languages: see Greek ὅτι, Latin *quod*, English *that*. Similarly, compound conjunctions built with preposition and *ntt* (*r-ntt* "so that," *ḥr-ntt* "because," *ḏr-ntt* "since") introduce adverbial clauses. In later Egyptian, *ntt* is replaced by *r-ḏd* (Coptic ⲭⲉ), originally derived from the preposition *r* followed by the infinitive of the verb *ḏd* "to say" (lit. "in order to say").

Two other conjunctions introducing verbal or adverbial clauses are *jsk/sk* (> *jst/st*) "while" and *jr* "as for, if." The former (*sk*) is used in earlier Egyptian in clauses of circumstance, mostly following the main clause and conveying

background information necessary to the understanding of the context: Urk. I 101,2–3 *jnk jr(j) m zḥʒ w'j.kw ḥn' zʒb jrj-nḫn w'j st jʒ.t=j m jmj-rʒ ḥntj.w-š prw-'ʒ* "I alone put it in writing together only with a senior warden of Nekhen, while my office was Supervisor of the royal tenants."[215] In later Egyptian, it becomes grammaticalized in the new set of personal pronouns used as subject in an adverbial sentence: *twj, twk,* etc. (section 4.4.2). The conjunction *jr* is also used in the protasis of hypothetical verbal clauses: Pyr. 1252c–d *jr prj=f m sbʒ pw jmn.tj n(j) p.t jn n=f sbʒ pw rsj n(j) p.t* "if he comes out of this western gate of heaven, bring him this southern gate of heaven," or introducing topicalized adverbial clauses (section 5.3): Hatnub 22,2 *jr m wn=j m ḥrd wn=j m smr* "when I was a child, I was already a Friend," lit. "as for in my being as a child, I was already a Friend";[216] pKahun 22,8–9 *jr m-ḥt spr=sn kʒ.tw sḏm.tw=f* (?) *m-ḥzj jry* "after they arrive, he should be confronted with this," lit. "as for after they arrive, he should be heard as concerns related matters."

As in the case of the relative pronoun (section 4.4.3), earlier Egyptian also possesses a conjunction *jwt* "that not" as negative counterpart of *ntt*. This conjunction is semantically equivalent to *ntt* followed by a negative predicate: CT I 170g–i *jw grt sḏm.n=j mdw...jwt mwt=j n=sn mwt sjn* "I have indeed heard the word...that I shall not die for them a swift death."

Apart from prepositions and conjunctions, Egyptian exhibits a certain number of morphemes, generally subsumed under the heading "particles," which may be prosodically enclitic or proclitic: the negative particles *nj* and *nn,* adverbs (for example *nḥmn* "surely" or *smwn* "probably"), interjections (*j* "oh"), and especially conjugation auxiliaries (*jw, mk, jḥ, 'ḥ'.n,* etc.). Since the latters' behavior bears heavily on the structure of the sentence type, their patterns will be discussed in the treatment of the syntax of verbal sentences.

Further reading

Allen, J. P. *The Inflection of the Verb in the Pyramid Texts.* Bibliotheca Aegyptia II (Malibu: Undena, 1984) [A detailed morphological analysis of the earliest Egyptian corpus].

Doret, E. *The Narrative Verbal System of Old and Middle Egyptian.* Cahiers d' Orientalisme XII (Geneva: Patrick Cramer, 1986) [Verbal morphology of the stage of the language immediately following the Pyramid Texts].

Kammerzell, F. "Personalpronomina und Personalendungen im Altägyptischen," in D. Mendel and U. Claudi (eds.), *Ägypten im afro-orientalischen Kontext. Aufsätze zur Archäologie, Geschichte und Sprache eines unbegrenzten Raumes. Gedenkschrift Peter Behrens.* Afrikanistische Arbeitspapiere. Special issue 1991 (University of Cologne, 1991), 177–203 [The most thorough treatment of Egyptian pronouns, also important for comparative issues].

Loprieno, A. *Das Verbalsystem im Ägyptischen und im Semitischen. Zur Grundlegung einer Aspekttheorie.* Göttinger Orientforschungen IV/17 (Wiesbaden: Harrassowitz, 1986) [A comparative reconstruction of the Egyptian and Semitic verbal system].

Osing, J. *Der spätägyptische Papyrus BM 10808.* Ägyptologische Abhandlungen XXXIII (Wiesbaden: Harrassowitz, 1976) [Reconstruction of Egyptian nominal and verbal morphology on the basis of a Late Middle Egyptian text in a Greek-derived script].

Schenkel, W. *Aus der Arbeit an einer Konkordanz zu den altägyptischen Sargtexten. II: Zur Pluralbildung des Ägyptischen.* Göttinger Orientforschungen IV/12 (Wiesbaden: Harrassowitz, 1983), 171–230 [An analysis of plurals between graphic forms and morphological reconstruction].

Vernus, P. *Future at Issue. Tense, Mood and Aspect in Middle Egyptian: Studies in Syntax and Semantics.* Yale Egyptological Studies IV (New Haven: Yale Egyptological Seminar, 1990) [Especially important for the opposition between prospective and subjunctive in early Middle Egyptian].

Winand, J. *Etudes de néo-égyptien, I. La morphologie verbale.* Aegyptiaca Leodiensia II (Liège: CIPL, 1992) [A complete morphological analysis of the verb in Late Egyptian].

5

Nominal syntax

5.1   Introduction

Throughout its history, Egyptian displays a variety of patterns for sentences with nominal predicate.[1] The predicate of such a sentence can be a *nominal* (NP) or an *adjectival* phrase (AdjP): *rmṯ pw* "it is a man (NP)" vs. *nfr sw* "he is good (AdjP)." At the syntactic level, *bipartite* patterns consist only of predicate and subject, as in the above sentences, whereas *tripartite* patterns display a copula as carrier of the nexus (*rmṯ pw z3-nht* "Sinuhe is a man";. Finally, considering also the pragmatic dimension, the typology of Egyptian nominal sentences shows a further distinction between *unmarked* structures, in which third person[2] subjects follow it (*rmṯ pw, nfr sw*), whereas first and second person subjects tend to precede the predicate (*jnk rmṯ* "I am a man," *ntk nfr* "you are good"), and *marked* patterns, which display a generalized preference for the specific subject to occupy the first position in the sentence (*ntk ḥrw* "*you* are Horus," *jn nṯr mrr rmṯ.t* "*it is god* who loves mankind").

The nominal constructions to which this chapter is devoted are captured in table 5.1. We shall first consider the nominal patterns (section 5.2) and the syntactic structure in which an entire clause is embedded as predicate of a nominal sentence (section 5.3), and then move to the adjectival sentences (section 5.4). We will then devote some attention to the more complex nominal patterns such as possessive, interrogative, and existential sentences (sections 5.5–5.6) and to the impact of negation on nominal patterns (section 5.7). The last few sections will deal with the evolution of all types of nominal sentence in Late Egyptian, Demotic and Coptic (sections 5.8–5.11).

Since the part of speech *noun* is [+N] but [-V],[3] i.e. it has nominal but not verbal properties, patterns with substantival predicate will be insensitive to the typically verbal tense/aspect dialectics, and will always adjust to the contextual frame of reference, expressing a so-called relative present. The *adjective*, on the other hand, is [+N] and [+V], i.e. it combines nominal and verbal properties; patterns with adjectival predicate will therefore be able to convey to a certain extent temporal or modal references.

Table 5.1 Patterns of nominal sentences in Egyptian

TYPOLOGY	MORPHOSYNTAX	
	Predicate = NP	Predicate = AdjP
UNMARKED ORDER Subject = 1–2 person Subject = 3 person	CLASSIFYING SENTENCE *jnk rmṯ* "I am a man" *rmṯ pw (zḥꜣw)* "He (the scribe) is a man"	QUALIFYING SENTENCE *jnk nfr* "I am good" *nfr sw (rmṯ)* "He (the man) is good"
Subject = adjectival phrase	IDENTIFYING SENTENCE (PSEUDOCLEFT) *rmṯ pw ḥzy.n=f* "The one whom he praised is a man"	
MARKED ORDER Subject = pronoun Subject = noun	SPECIFYING SENTENCE *ntf ḥrw* "He is Horus" *zḥꜣw=k(pw) ḥrw* "Your scribe is Horus"	IDENTIFYING SENTENCE (CLEFT SENTENCE) *ntf ḥzj wj* "It is he who praised me" *jn rmṯ ḥzj wj* "It is the man who praised me"

5.2 Bipartite vs. tripartite patterns

5.2.1 Classifying and identifying patterns

The sentence *rmṯ pw* "he is a man" represents the core of an Egyptian nominal sentence, with a bare or referential predicate[4] followed in bound constructions directly by a nominal subject:

(1)   Pyr. 1434b   *wrrtj m nj jtj=k* "Your father's name (*m nj jtj=k*) is *wrrtj*"

otherwise by an enclitic pronoun, most commonly the demonstratives *pw* or less frequently *nn* (originally "this");[5] together with the predicate they build a bipartite sentence with *classifying* function:

(2)   CT VI 155f B₁Bo   *ḥqꜣ=f pw* "He (*pw*) is its ruler"

(3)   Sin. B 23   *dp.t mwt nn* "This (*nn*) is the taste of death"

As an enclitic, *pw* tends to move to the position after the first prosodic unit of the sentence, regardless of its position in the semantic structure, even in cases when this leftward movement breaks the surface unity of a phrase:[6]

(4)   CT IV 410 (220a)   *wꜣ.t pw n.t sḫ.t jꜣr.w*
"This is (*pw*) the way (*wꜣ.t*) of (*n.t* "that-of") the Fields of Rushes (*sḫ.t jꜣr.w*)"

(5)   Sin. B 81   *tꜣ pw nfr* "It was (*pw*) a good land (*tꜣ nfr*)"

The bipartite nominal sentence consisting of predicate and subject appears expanded into a tripartite pattern when a nominal subject follows the pronoun *pw*, which in this case loses here its original deictic force and acquires the function of a semantically empty copula ("this [is]" > "is"):[7]

(6)   Disp. 38   *dmj.t pw jmn.t* "The West is (*pw*) a place of residence (*dmj.t*)"

(7)   Pyr. 1620a   *zꜣ=k pw wsjr N* "The Osiris N is (*pw*) your son (*zꜣ=k*)"

When the subject of a nominal sentence, rather than the *delocutive* third person, is the *interlocutive* first or second person, which occupy a higher position than the third person on the hierarchy of salience,[8] the independent pronoun is used instead of the dependent pronoun. This pronoun, however, requires the more topical initial position; thus, in the first and second person, the nominal sentence displays the pattern S => [Subject pronoun+Pred]:

(8)   Peas. B1,93   *ntk jtj n nmḥw* "You (*ntk*) are a father (*jtj*) to the orphan"

(9)   CT III 321c   *jnk wsjr* "I (*jnk*) am Osiris (*wsjr*)"

an example which also displays a version in the "delocutive" third person:

(9')   CT IV 192–3b   *wsjr pw* "This (*pw*) is Osiris"

In "presentative" contexts, in which a specific subject is introduced deictically, the function of predicate of a bipartite sentence S => [Pred-*pw*] is fulfilled by the independent pronoun:

(10)   CT IV 24c   *jnk/N pn pw* "That is me/this N"[9]

(11)   Sin. B 268   *ntf pw m-mꜣꜥ.t* "This is really (*m-mꜣꜥ.t*) he (*ntf*)"

More rarely, a nominal subject can appear topicalized, i.e. dislocated to the left of the nexus "Pred-*pw*," in which case the subject is presented as the communicatively salient, pragmatically given argument within the flow of discourse,[10] followed by a regular bipartite nominal sentence pattern. In this case, the topic is resumed by the enclitic *pw* in the main sentence:

(12)   Pyr. 133f   *ḫnd šꜣsr.t ꜣw.t=f pj*
"Thigh and loaf – these are (*pj*, older form of *pw*) his meal (*ꜣw.t=f*)"

This pattern is frequent in aetiological, i.e. explicative discourse, where the subject is often topicalized and introduced by the particle *jr* "as for":

(13)   CT IV 318c–d   *jr zmꜣ.t-tꜣ.wj dhn.t qrs wsjr pw*
"As for the 'Unification of the Two Lands' (*zmꜣ.t-tꜣ.wj*), this means (*pw* "it is") the attribution (*dhn.t*) of Osiris' tomb (*qrs wsjr*)"

In the bipartite or tripartite nominal sentences with interlocutive "*jnk/ntk*-Pred" or delocutive "Pred-*pw*" discussed so far, the nominal predicate

classifies the subject, i.e. it defines one or more of its semantic properties. This applies to all cases of *pw*-sentence in which the subject is a noun or a pronoun. If the subject of a nominal sentence is an adjectival phrase, i.e. a participle or a relative form (section 7.7), it agrees in gender and number with the predicate, the congruence being carried by the appropriate adjectival ending:

(14)   CT VI 75g B$_3$Bo   *N tn pw mkj.t.n ḫbn.tjw*
"The one (fem.) whom the wrongdoers protected (*mkj.t.n ḫbn.tjw*) is this N (*N tn*)"

(15)   Peas. B1,21   *jmj-rꜣ prw pw sḫꜣ.y=k*
"But the one (masc.) whom you mention (*sḫꜣ.y=k*) is the High Steward (*jmj-rꜣ prw*)"

(16)   CT IV 228b   *jnk pw ḫpr jm=ṯn*
"I am the one who has become you (*ḫpr jm=ṯn*, participle)"

(17)   CT VII 250m   *jnk pw šms(.w).n=sn*
"I am the one whom they followed (*šms.w.n=sn*, relative form)"

(18)   Pyr. Nt 712   "Who is the one who will survive? *jnk pw zp.t(j)=f*
"I am the one who will survive (*zp.tj=f*, prospective participle)"

Although this pattern is syntactically identical to the classifying nominal sentence with nominal or pronominal subject, its semantic or pragmatic function differs from it to some extent: because of its status as object or – much less frequently – subject of a relativized VP, the head NP functions here not only as syntactic predicate of the proposition, but also as pragmatic focus of the utterance.[11] The nominal predicate, rather than classifying the subject, *identifies* it as the only specimen possessing the properties decribed by the converted verbal clause. Thus, the structure of this pattern becomes close to the English *pseudocleft* sentence: "the one whom the wrongdoers protected is this N," "the one you mention is the High Steward," "the one whom they followed is me."[12] The identifying sentence with focalized object of the relative VP occurs frequently in the construction *sḏm pw jrj.n=f* "what he did was to hear," in which the predicate is a verbal infinitive and the subject a relative form (*jry=f, jrj.n=f*) or a passive participle (*jry*) of the verb *jrj* "to do":

(19)   Peas. B1,35   *prj.t pw jrj.n=f r ḥrw*
"What he did (*jrj.n=f*) is (*pw*) to go up (*prj.t*) higher (*r ḥrw*)"

(20)   Sin. B 236   *jwj.t pw jry r bꜣk-jm*
"This servant has indeed been sent for" < "What has been done (*jry*) is (*pw*) to send for (*jwj.t r* "to come to") this servant (*bꜣk-jm* "the-servant-there")"

5.2.2 Specifying patterns

In the nominal patterns we discussed so far, the distribution of subject and predicate is readily retrievable on syntactic and semantic grounds: a set of properties which we define as the predicate – "the taste of death" in (3),

"Osiris" in (9), "his meal" in (12), "to go up" in (19), etc. – is ascribed to a subject usually more determined and semantically more specific than the features predicated of him ("this," "I," "thigh and loaf," and "what he did"). But there are Egyptian sentences of the [NP1-NP2]-type that cannot be convincingly analyzed as S =› [Pred(-*pw*)-Subj], but rather as S =› [Subj(-*pw*)-Pred]. This happens when the subject and the predicate are coextensive: rather than classifying the semantic sphere of the subject, the predicate *specifies* it; in a technical sense, it exhaustively characterizes its subject:[13]

(21)   CT II 120g S$_1$C   *mḥj.t=j mḥj.t wr.t*
"My flood (*mḥj.t=j*) is the Great Flood (*mḥj.t wr.t*)"[14]

(22)   CT I 277c–d   *zḫꜣ=k pw ḥrw j'w.t(j)=k pw stš*
"Your scribe (*zḫꜣ=k*) is (*pw*) Horus, your interpreter (*j'w.tj=k*) is (*pw*) Seth"

(23)   CT V 59c S$_{10}$C   *bw.t=j pw 'q r nm.t-nṯr*
(23') Ibid. B4Bo   *bw.t N tn 'q r nm.t-nṯr*
"My / this N's abomination is to enter the gods' place of execution"

Similar to these from a structural point of view are instances in which a topicalized VP, i.e. a clause nominalization functioning as pragmatically "given" within the communicative flow of discourse (section 7.5), is the subject of a specifying *pw*-sentence whose predicate is an infinitive, followed in (24) by a suffix pronoun indicating its agent:

(24)   Sin. B 60–61   *ršj=f pw hꜣj.t=f rꜣ-pḏ.t*
"He rejoices when engaging in archery" < "that-he-rejoices (*ršj=f*) is (*pw*) his-engaging-in archery (*hꜣj.t=f rꜣ-pḏ.t*)"

In the specifying sentence [Subj-*pw*-Pred], the subject and the predicate share the same extension:[15] in example (22), the subjects "your scribe" and "your interpreter" are specified by the predicates "Horus" and "Seth," subject and predicate referring to one and the same referent. When the subject is pronominal, the independent form of the personal pronouns will be used in all persons, yielding a pattern [Subj pronoun-Pred] formally similar to the one we encountered with classifying predicates in the first and second person:

(25)   CT I 207c–d   *ṯwt jtj=j jnk zꜣ=k*
"You (*ṯwt*) are my father and I (*jnk*) am your son"

(26)   CT IV 37f Sq$_6$C   *ntf zꜣ wsjr* "He (*ntf*) is Osiris' son"
(27)   CT VI 166c B$_4$C   *nts r'w* "She is Re"

The communicative difference vis-à-vis the classifying pattern lies in the fact that the pronominal subject, rather than the *theme* of the utterance, is here its pragmatic *rheme*:[16] the identity between the subject pronoun and the predicate displays a high degree of contextual novelty. Thus, if in example (7)

the subject *wsjr N* "the Osiris N" is presented as a predictable host for the predicate *z3=k* "your son," this is much less the case for the subject *ntf* "he" in (26): instead of a classifying statement "he is Oriris' son," which would be rendered by the bipartite sentence *z3 wsjr pw*, this is a sentence with rhematized subject: "*he* is Osiris' son." Pragmatic salience, i.e. the subject's role as rheme of the utterance, and semantic performance, i.e. the predicate's specifying, rather than classifying function, go hand in hand in this pattern, and it would be pointless to determine which one represents the primary strategic goal of the sentence type. The interesting point is that the linguistic hierarchies of salience, with interlocutive persons being conversationally more salient than delocutive and inanimate subjects, are kept in the distribution of the Egyptian classifying sentence, in which the first or second person is more likely to be topicalized than the third person, as in (28) vs. (28'),[17] but are neutralized in the specifying sentence, where both nominal (with copula *pw*) and pronominal subjects (without *pw*) appear topicalized, as in (29) vs. (29'):

(28)   CT I 44b S₁₀C   *jwt hrw prj <m> šnt.t*
(28')   Ibid. B₁Bo   *hrw pw prj <m> šnt.t*
"You are (*jwt*)/he is (*pw*) Horus who came out (*prj*) of the battle"
(29)   Pyr. 1441cᴾ   *N pw w'j jm=tn ntr.w*
(29')   Ibid. 1441cᴹ   *swt w'j jm=tn ntr.w*
"N/he is the (only) one (*w'j*) among you (*jm=tn*), O gods (*ntr.w*)"

Therefore, the opposition between classifying and specifying patterns, which also plays a role in the syntax of adjectival sentences,[18] was in Egyptian not only semantic, but also morphosyntactic. Coptic shows two forms which differ in their prosodic realization: the subject pronouns are unstressed when used with classifying or qualifying function: proclitic first and second person sing. *(j)anak-* > ⲀⲚⳖ, *(j)vntak-* > ⲚⲦⲔ, *(j)vntac-* > ⲚⲦⲈ, pl. *(j)anan-* > ⲀⲚⲚ, *(j)antacan-* > ⲚⲦⲈⲦⲚ and enclitic third person *-paw* > ⲡⲉ, *-nan*, but keep their full prosodic form when functioning as specifying or identifying elements: sing. *(j)anák* > ⲀⲚⲞⲔ, *(j)vnták* > ⲚⲦⲞⲔ, *(j)vntác* > ⲚⲦⲞ, *(j)vntáf* > ⲚⲦⲞϥ, *(j)vntás* > ⲚⲦⲞⲤ, pl. *(j)anán* > ⲀⲚⲞⲚ, *(j)vnta:cin* > ⲚⲦⲰⲦⲚ, Middle Egyptian *(j)vnta:sin* / Late Egyptian *(j)vntaw* > ⲚⲦⲞⲟⳡ.[19]

Focal pronouns provide a transition to the study of the sentence pattern with the focal particle *jn*, a morpheme which will play a central role in our discussion of adjectival sentences. The first sentence type is an archaic variant of the specifying pattern [Subj-Pred], in which the subject is introduced by the particle *jn* and functions as pragmatic focus[20] of the utterance:

(30)   Pyr. 1370a   *jn ppj pn z3 sm3.t jd t wr.t*
"It is this Pepi (*ppj pn*) who is the son of the Great Wild Cow (*sm3.t jd.t wr.t*)"

Early Middle Egyptian examples of alternation between a pattern with independent pronoun in one text and with a bare nominal subject in a variant seem, if they are not the result of a mechanical change on the part of the scribe,[21] to point to the possibility of conveying the indication of focality through suprasegmental features rather than by means of the particle *jn*:

(31)   CT VI 253d Sq₆C   *ntf d.t* "*He* is Eternity"
(31')   Ibid. Sq₄C   *N pn d.t* "*This N* is Eternity"

But this pattern is already extremely rare in early Egyptian and disappears altogether in the classical language. The particle *jn* remains nonetheless the most common Egyptian marker of the function of a subject NP as focus, being also etymologically entailed in the independent pronouns of the *jnk*-series.[22]

Finally, mention should also be made of a specifying presentative pattern corresponding to the classifying *jnk pw* (section 5.2.1), in which the independent pronoun is the predicate of a first person subject expressed by a coreferential dependent pronoun:

(32)   CT VII 495i   *N pn wj/N wj/jnk wj zp 2*
"I am really (*zp 2* "twice," section 2.3) this N/N/myself"

or two pronouns appear in immediate juxtaposition, forming a kind of focalized "balanced sentence":[23]

(33)   CT VII 157c   *jnk pw s(j) stt pw wj tz-phr*
"I (*jnk*) am really it (*sj*) and it (*stt*) is really me (*wj*), and vice versa (*tz-phr*)"[24]

5.3   Entire clauses as predicate of *pw*: "thetic" statements

We saw above that any NP can act as subject or as predicate of a nominal *mt pw*-sentence: not only substantives, but also infinitives and adjectival transpositions of the verb such as participles and relative forms. An interesting peculiarity of Egyptian syntax, however, is that not only nominals, but entire sentences can be nominalized and embedded as predicate of a higher classifying *pw*-sentence. This is not surprising when the clause acting as predicate of such a sentence is overtly marked as nominal, for example by means of a nominal converter such as the conjunction *ntt* "that" (originally the neuter of the relative adjective *ntj*) which merges with the enclitic *pw* to form *nt-pw*, the head of this pattern:

(34)   pEbers 99,5   *nt-pw mdw=f hnt mt.w n.w '.t nb.t*
"This means (*nt-pw*) that it speaks out of the liquids of each limb"

This pattern seems semantically to resemble the adverbial clause introduced by the conjunction *ḫr-ntt* "because"; in fact, example (35) offers the context immediately preceding (34) in the original text:

(35)   pEbers 99,4   *(ḫr-ntt) mt.w=f n '.t=f nb.t*
"For each of his limbs (*'.t=f nb.t*) has its liquids (*mt.w=f*)"

But complications arise from the use of this construction applied not only to overt, but also to formally unmarked nominalizations of entire verbal or pseudoverbal sentences embedded as predicate of bipartite *pw*-sentences:[25]

(a) Verbal sentences:

(36)   CT IV 187d   *wbn=f pw m jꜣb.t p.t*
"This means (*pw*) that he rises (*wbn=f*) from the Eastern part (*jꜣb.t*) of the sky (*p.t*)"

(37)   Sin. B 311   *jw=f pw hꜣ.t=f r pḥ(.wj)=fj*
"This is how (*pw*) it comes from its beginning to its end"

(b) Pseudoverbal sentences (i.e. with stative or preposition + infinitive):

(38)   Urk. V 53,1–2   *wnn šw pw ḥr jrj.t jmj.t-prw n gbb*
"This means (*pw*) that Shu is making (*ḥr jrj.t*) a testament (*jmj.t-prw*) in favor of Geb"

To define the semantic nature of these clauses properly, I would use the term "thetic":[26] unlike the more common "categorical" statement, in which a predicate affirms or denies a property of a well-defined and recognized subject, a thetic statement displays no clear-cut internal distribution of subject and predicate; rather, a state of affairs is presented as a whole, usually with a semantically insignificant "dummy" subject, if its presence is required by the morphosyntactic pattern: "there is water," "it rains," etc. Thetic sentences are in fact assertions containing one global message, which is not easily segmentable into discrete semantic components:

(39)   Peas. R1.1   *zj pw wn.w ḫwj.n-jnpw m=f*
"(Once upon a time) there was a man named Khuienanup" < lit. "It is that (*pw*) a man was (*zj wn.w*), Khuienanup (being) his name"

The thetic nature of these clauses is the reason for their extensive use in medical and in "aetiological" contexts which explain the development of a mythological frame: diagnoses and aetiologies present global circumstances as the result of previous statements introduced by categorical sentences:

(40)   pEbers 855z   "If his heart is flooded, *mhh jb=f pw mj ntj ḥr sḫꜣ.t k.t md.t* this means (*pw*) that his heart is oblivious (*mhh jb=f*), like (*mj*) the one who is thinking (*ntj ḥr sḫꜣ.t*) of something else"[27]

(41)   CT IV 412 (162–5a)   *jnk mjw pw 'ꜣ nt(j) m jwnw ḏd(.w) r'w [p]w r zꜣ=f ḥrw mjw sw m nꜣ n(j) bw-nfr jrj=f ḫpr m=f pw n(j) mjw*

"'I am this great cat who is (*ntj*) in Heliopolis.' This (*pw*) is what Re says (*ḏd.w*) to his son (*r zꜣ=f*) Horus. He is cat-like (*mjw sw*) in this goodness (*nꜣ nj bw-nfr*) which he does (*jrj=f*). This is how (*pw*) his name of 'cat' (*m=f nj mjw*) comes about (*ḫpr*)"

Egyptian also displays a similar pattern which has often been associated – by the present writer as well[28] – with thetic sentences, but which in fact differs from them syntactically and semantically. Let us consider contrastively examples (41) above and (42) below:

(42)   CT II 334b   *r'w pw ḏd.n=f n ḥrw*

It would be somewhat counterintuitive to argue that this clause, in which a well-defined subject (*r'w* "Re") is not only extraposed, but also expanded by the verbal sentence following the pronoun *pw* (*ḏd.n=f n ḥrw* "he said to Horus"), conforms to the characteristic of the thetic statement, which is precisely the inadequacy of a separation between topic and comment as parts of a global judgment on a state of affairs. Yet, since this pattern can hardly be a form of tripartite nominal sentence (which would yield **he-said-to-Horus is Re*, syntactically and semantically impossible in Egyptian as much as in English), the sentence *r'w ḏd.n=f n ḥrw* must in fact represent the predicate of *pw*. What we have here is the embedding of a verbal clause *with topicalized subject* as predicate of a hierarchically higher bipartite *pw*-sentence. In the case of verbal sentences, which have a VSO typological order, the fronted topic will be resumed by a coreferential pronoun in the main sentence; conversely, in the case of pseudoverbal or adverbial sentences, in which the subject precedes the predicate, there is no need for a resumptive pronoun, the noun followed by *pw* functioning both as extraposed topic (because of the "break" represented by *pw*) and as syntactic subject of the sentence. The strategies for the translation of this construction will necessarily differ from case to case, ranging from explanatory devices to the use of actualizers.

(a) Verbal sentences:

(43)   CT V 110g   *dp.t tn pw nj 'pr(.w)=s m ꜣḫꜣḫ.w=s*
"It is so that this ship (*dp.t tn pw*) is not equipped (*nj 'pr.w=s*) with its spars"
S =› [[[[*dp.t tn*]NPtopic[*nj 'pr.w=s m ꜣḫꜣḫ.w=s*]VerbS]VS]NPpred [*pw*]subj]

(44)   CT II 342b   *stẖ pw jrj.n=f ḫprw r=f m šꜣj km*
"As for Seth, it happened (*stẖ pw*) that he transformed himself (*jrj.n=f ḫprw*) into a black pig (*šꜣj km*) against him"

(b) Pseudoverbal sentences (i.e. with stative or preposition + infinitive):

(45)   West. 6,4–6   "I asked her: 'Why don't you row?' And she answered: *nḥꜣw pw nj nnfkꜣ.t mꜣ.t ḫr.w ḥr mw*. 'Because (*pw*) a jewel of new malachite (*nnfkꜣ.t mꜣ.t*) fell into the water' (*ḫr.w ḥr mw*)"

S =› [[[nḥȝw nj mfkȝ.t mȝ.t]NPtopic [ȝw ḫr.w ḥr mw]PseudoverbS]NPpred [pw]subj]

(46)   Neferti 57–58   nzw pw r jj.t n rsj

"But a king (nzw pw) will come from the South (r jj.t n rsj)"

(c) Adverbial sentences:

(47)   Pyr. 763a–b   "O King N! Let your soul stand among the gods and among the spirits, snḏ=k pw jr ḥȝtj.w=sn that the fear of you (snḏ=k) be (pw) to their hearts (jr ḥȝtj.w=sn)"

S =› [[snḏ=k]NPtopic [ȝw jr ḥȝtj.w=sn]AdvS]NPpred [pw]subj]

While we could take the AdvP "will come from the South" in (46) or "to their hearts" in (47) to be mere adverbial adjuncts of the head noun, the resulting semantic yield ("this is a king who will come from the South," "this is your fear to their hearts") does not properly satisfy the requirements of the contexts, which call for an explanation of the events described in the preceding context rather than for general statements of categorical character.

Since it lies in the nature of this pattern that the noun followed by pw is not only the subject of the nominalized clause, but also the topic of the nominal pw-sentence in which it appears embedded, it is not surprising that the well-known hierarchies of topicality (according to which the first person is a more likely topic than the second, and the second more likely than the third) favor a frequent use of this pattern with first person subjects:

(48)   Sh.S. 89–91   jnk pw hȝj.kw r bjȝ m wpw.t jtj

"What happened is that I (jnk pw) had set out (hȝj.kw) to the mines on a royal mission"

S =› [[[jnk]NPtopic [(wj) hȝj.kw r bjȝ m wpw.t jtj]PseudoverbS]NPpred [pw]subj]

5.4   Sentences with adjectival predicate and cleft sentences

5.4.1   Qualifying patterns

If the general frame of the discussion of nominal sentences with substantival predicate can be directly applied to the study of adjectival sentences, this latter syntactic type displays a number of distinctive features, such as a more extensive use of focalizations and nominalizations of verbal clauses, which justify its treatment under a separate heading. In the unmarked pattern, a nominal subject regularly follows the adjectival predicate:

(49)   Sin. B 155   nfr prw=j wsḫ s.t=j

"My house is good, my place of dwelling is large"

The subject can be any part of speech which is also [+N], including infinitives and nominalizations (substantival or adjectival) of verbal phrases:

(50)   Sh.S. 182   mk nfr sḏm n rmṯ.t

"Look (particle mk), it is good for people (n rmṯ.t) to listen (sḏm, infinitive)"

(51)   West. 9,22   qsn mss=s

"Her delivery (mss=s "that-she-delivers," nominalized VP) was difficult (qsn)"

(52)   Sh.S. 124   rš-wj sḏd dp.t.n=f

"How (enclitic particle wj) happy is the one who can relate (sḏd, participle) what he experienced (dp.t.n=f)!"

(53)   Pt. 629   nfr-wj sbȝ(.w).n jtj=f

"How fortunate (nfr) is he whose father instructed him (sbȝw.n jtj=f "whom his father instructed," relative form as adjectival VP)"

The main difference vis-à-vis the substantival sentence lies in the use of the dependent pronoun masculine sw, feminine sj/st, plural sn/st instead of the invariable demonstrative pw to express the pronominal subject. Moreover, since adjectival predicates are not only [+N] but also [+V] – as opposed to substantival patterns, which are [+N] but [-V] – the unmarked form of the predicate is maintained with feminine (sj) or plural subjects (sn, st), without agreement with the subject:

(54)   Ens. Loy. 2,10   sḥḏ-wj sw tȝ.wj r jtn

"How he illuminates (sḥḏ) the Two Lands (tȝ.wj) more than the solar disk (r jtn)!"

(55)   Sin. B 66   ḥ'j s(j) jm=f r nṯr=sn

"It ("the city," fem.) rejoices (ḥ'j) in him (jm=f) more than in the local god"

(56)   Urk. IV 99,15   ḏsr st r ḫpr.t m p.t

"They were more splendid (ḏsr) than what happens in heaven (ḫpr.t m p.t)"

When the subject is thematized, a frequent construction when the subject is an entire nominal phrase rather than a single noun, the syntactic sequence is reversed to subject-predicate. In this case, however, the pattern acquires the features of the *pseudoverbal* sentence (section 6.2), the adjectival predicate being expressed not by the adjective, but by the stative, i.e. the conjugated pseudoverbal form of the root of which the adjective represents a participle:[29]

(57)   Urk. IV 944,1   (ḥr-ntt) tȝw=k nj 'nḫ nḏm.w m šr.t=j

"Because your breath of life (tȝw=k nj 'nḫ) is sweet (nḏm.w) in my nostril (m šr.t=j)"

(58)   Pt. 20–21   jrr.t jȝw n rmṯ bjn(.w) m ḫ.t nb.t

"What old age does (jrr.t jȝw) to people is bad (bjn.w) in every respect"

We observed in section 5.2 above that when the head noun of an AdjP is not overt, it is assumed to be a so-called *neuter*: "something" or the like. In these cases, participles and relative forms appear substantivized, i.e. treated as the predicate of nominal patterns of the rmṯ pw-type. Here, the overt marker of substantivization is the feminine adjectival ending .t of the participle (59)

or the relative form (60), which in Middle Egyptian also fulfills the function of "neuter," i.e. of a semantically unspecified noun:

(59)   CT VI 286a   *wd.t n=k pw* "This is what is ordered (*wd.t*) to you (*n=k*)"

(60)   Peas. B1,77   *mk jrr.t=sn pw* "Look (*mk*), this is what they do (*jrr.t=sn*)"

Rather than as exceptions to the rule, therefore, instances of an adjectival predicate followed by a pronominal subject *pw* should be analyzed as substantivized uses of the adjective:

(61)   Peas. R7.4   *hns pw nj wsb js pw*
"It was a narrow one (*hns*, scil. "path"), not a broad one (*wsb*)"[30]

Interlocutive subjects generally behave as in the nominal pattern. The tendency of the first person is to be expressed by the independent pronoun:[31]

(62)   CT VI 335b   *jnk jrj bprw m 3b.w*
"I am someone who turned (*jrj bprw* "who made a transformation") into 3b-spirits"

whereas in the second person the use oscillates between a pattern with independent pronoun S => [pronoun-Pred] and a pattern with dependent pronouns S => [Pred-pronoun], the former being syntactically a main clause, the latter a subordinate clause:

(63)   Sin. R 55   *nfr tw hn'=j* "For you (*tw*) are happy with me (*hn'=j*)"

(64)   CT VII 22n   *twt wrj jmj msj.w*
"You are the greatest one among the children"

The tripartite pattern corresponding to the tripartite nominal sentence is also documented, though not as much as with substantival predicates, and only in exclamatory sentences with the particle *wj*:

(65)   Urk. IV 1166,10   *hd-wj st n3 n(j) rnp.t wd(.t) ntr br=k*
"How bright are they (*st*) – the (*n3-n*) years (*rnp.t*) which God has granted (*wd.t ntr*) you!"

Examples of adjectival sentences with extraposed topicalized subject resumed by a coreferential pronoun in the body of the sentence are also rare:

(66)   Pt. 25   *dp.t nb.t 3q sj* "All taste (*dp.t nb.t*) – it (*sj*) is lost (*3q*)"

5.4.2 Identifying (cleft) sentences

If qualifying adjectival patterns, therefore, can be said on the whole to closely resemble classifying nominal sentences, some structural differences emerge when turning to the typologically marked types, which in Egyptological literature are usually subsumed under the headings "participial statement" and "cleft sentence."[32] We already observed that the combination of the two

main features [+N] and [+V] characterizes in Egyptian a certain number of morphosyntactic structures: (a) infinitives, (b) topicalized VPs, (c) participles, (d) relative forms. While infinitives represent verbal substantives, what Arabic grammarians call the *masdar* of a verbal root, and thematized VPs can be generally said to acquire substantive-like *masdariyya* functions within the verbal clauses in which they appear, participles and relative clauses are adjectival nominalizations of a verbal sentence (section 7.7). In fact, "pure" adjectives, i.e. qualificative nouns not derived from a verbal root, are relatively rare in all Afroasiatic languages, and Egyptian is no exception to this rule. Thus, the most frequent morphosyntactic structures acting as adjectival predicates will be the participle and the relative form, the former being coreferential with the noun they modify, the latter representing the adjectival conversion of a VP whose subject is different from the antecedent. We will observe in section 7.7 that in all cases other than as object of the relative form, the antecedent of an adjectival phrase is resumed by a coreferential pronoun in the relative clause. The distinction between participles and relative forms, however, is morphologically fluid and is justified only on the basis of syntactic considerations:

(67)   CT III 351c   *jnk mry jtj=f mrrw jtj=f wr.t*
"I am someone beloved of his father (*mry jtj=f*, perfective passive participle) and whom his father loves (*mrrw jtj=f*, imperfective relative form) dearly (*wr.t*)"

When compared with most languages inside and outside the Afroasiatic family, Egyptian shows a considerable development of the syntactic type in which a nominal subject precedes an adjectival predicate. In discussing the nominal sentence (section 5.2.1), we saw that this typological order is semantically associated with a *specifying*, rather than classifying function of the predicate. In the case of the adjectival sentence, which displays a higher "verbality" than the nominal sentence, I prefer to call the marked type corresponding to the unmarked qualifying pattern the *identifying* sentence type:

(68)   Urk. IV 895,1   *jnk sd sw* "I was the one who destroyed (*sd*) it"

From a pragmatic point of view, this sentence type carries a focalization of the subject, i.e. a higher communicative emphasis laid on it than is normally expected within the unmarked flow of discourse. The focalized subject becomes an element with contrastive function within the context in which it appears, the remainder of the utterance, including the predicative AdjP, being demoted to the rank of conversational presupposition. When the focalized subject is a noun, it appears preceded by the particle *jn* and followed by

the adjectival predicate. When it is a pronoun, the independent series – which in its classical form etymologically "entails" the particle *jn* – is used:

(69)   Sin. B 308   *jn hm=k rdj jrj.t(w)=f*

"It is Your Majesty (*jn hm=k*) who caused (*rdj*) that it be done (*jrj.tw=f*)"

(70)   Peas. B1,116–17   *ntf dd n=f st*

"It was he (*ntf*) who would give (*dd*) it (*st*) to him (*n=f*)"

In restricted cases,[33] the independent pronoun is followed by the enclitic *pw*, thus creating not only a semantic, but also a formal identity with the identifying pseudocleft sentence (section 5.2):

(71)   Peas. B1,51–52   *jnk pw mdw n=k* "I am the one who speaks (*mdw*) to you"

The marker of focality can be omitted when the focalized subject is a personal name of high contextual prominence, such as the name of the owner or a funerary text or of the author of a letter:[34]

(72)   CT VII 369a   *jnk/N pn/tn/jn N pn sgr mw* "It is [subj.] that pacifies the water"

Following the seminal work by Polotsky,[35] this construction has been labeled by Egyptologists "cleft sentence" on the basis of its similarities with constructions of the pattern *c'est ... qui* in French or *it is ... who* in English. In fact, its "cleft" character, i.e. the relative autonomy of the second part of the sentence vis-à-vis the first, shown for example by the lack of gender and number agreement between the subject and the cleft predicate, appears in Egyptian to result from a diachronic development: while in early Egyptian the adjectival predicate sometimes still agrees in gender and number with the nominal antecedent:

(73)   CT VI 258e Sq3C   *nts jtj.t t3w=f* "It is she (*nts*) who took (*jtj.t*) his breath"

in the classical language the unmarked form of the adjective is regularly employed, pointing to a phenomenon of progressive grammaticalization of the clefting with the resulting "break" between focalized subject and presuppositional predicate:

(74)   Adm. 12,14   *jn '3з.t sm3 'nd.t*
"It is the majority ('*3з.t*) that kills (*sm3.ø*) the minority"

(75)   pEbers 100,8–9   *ntsn dd n=s mw* "It is they (*ntsn*) that give (*dd.ø*) water to it"

The pragmatic function of the subject as focus, i.e. as promoted element dominating the communicative salience of a demoted predicate, is particularly evident in the use of the *jn*-construction in contrastive contexts such as in questions (*completive focus*):

(76)   West. 9,7–8   "His Majesty asked: 'Who then will bring it to me?' And Djedi answered: *jn wrj nj p3 hrd w 3 ntj m h.t n(.t) rwd-dd.t jnj=f n=k sj* 'The eldest (*wrj*) of the three children (*nj p3 hrd.w 3*) who are in Rudjdjedet's womb will bring (*jnj=f*) it to you'"

or in order to correct an earlier contextual assumption (*replacing focus*):

(77)   CT VII 464a–b   "I did not order that they perpetrate evil. *jn jb.w=sn hd dd.t.n=j.* (Rather,) it is their hearts (*jn jb.w=sn*) that transgressed (*hd*) what I had said (*dd.t.n=j*)"

In the cleft sentence, which is originally an ergative construction (section 4.6.3.3), the use of relative forms or of passive participles, i.e. of adjectival conversions of the verb with a different agent from the antecedent, is not documented.[36] This restriction is due to the universal semantic hierarchy of salience whereby the subject is by far the most likely argument to be exposed to pragmatic promotion, i.e. to be topicalized or focalized.[37] In transitive verbal phrases, therefore, agents will be much more likely than patients or other arguments to become the focus of the utterance. The reader will recall that when the element assigned pragmatic focus is the patient (or less frequently any other argument), rather than the cleft sentence, Egyptian displays the pseudocleft pattern "Pred-*pw*-Subj" discussed in section 5.2. The most widespread of these constructions is the periphrastic *sdm pw jrj.n=f/jry* "what he did (*jrj.n=f*)/what was done (*jry*) was (*pw*) to hear (*sdm*)." The noun phrase indicating the patient of the verbal phrase is assigned in these instances the role of syntactic predicate and fronted (with or without contrastive stress) to the head position of the sentence. Examples (15) and (71) above offer good evidence for the choice of the tripartite pattern with *pw* when the pragmatically emphasized element is the patient of the verbal phrase: "Then this Nemtinakht said: 'Is this the proverb that people say: A poor man's name is pronounced on account of his master? *jnk pw mdw n=k jmj-r3 prw pw sh3y=k* I am the one who speaks to you, but the one whom you mention is the High Steward.'"[38]

Being [+V], adjectival predicates can also convey the expression of temporal or aspectual features, with the perfective participle in the preterite:

(78)   Urk. IV 766,5   *jn hm=j rdj wsr=f*
"It is My Majesty who caused (*rdj*) that he be powerful (*wsr=f*)"

the imperfective participle in the unmarked tense (i.e. the relative present):

(79)   Pt. 184   *jn ntr jrr jqr* "It is God who brings about (*jrr*) excellence"

For the reference to the future, earlier Egyptian still shows cases of prospective participles acting as predicate of a cleft sentence,[39] but in the classical language a prospective verbal form is found as presuppositional predicate:

(80)   Pyr. 537c   *jn dr.t N wṭz=s sw* "It is N's hand that will raise (*wṭz=s*) him"

This evolution is similar to the grammaticalization of the masculine singular form of the participle for all genders and numbers in the cleft sentence: in presence of the verbal category of *modality*, the adjectival forms are replaced by a finite "*that*-form" in agreement with the antecedent.[40]

5.5   Possessive and interrogative patterns

Egyptian constructions with possessive or interrogative predicate represent a semantically specialized and syntactically regular subset of adjectival or adverbial sentences. In the case of patterns which indicate possession, the possessive indicator acts as predicate of an adjectival sentence and is followed (in the unmarked sequence Pred-Subj) or preceded (in the marked sequence Subj-Pred) by a nominal or pronominal subject. As in the basic sentence type, the distribution of marked and unmarked constructions depends on the qualifying or identifying function of the adjectival predicate.

5.5.1   *Possessive constructions*

In their basic form, possessive constructions[41] are normally conveyed by an adverbial sentence S => [Subj$_{NP}$-Pred$_{AP}$] in which the predicate is introduced by the preposition *n* "to" (see section 6.2):

(81)   Pyr. 2030a   *ḥkꜣ=k n=k ḥkꜣ n N n=f*
"You have your magic, the King has his magic," lit. "Your magic (*ḥkꜣ=k*) is to you (*n=k*); the King's magic is to him"

(35)   pEbers 99,4   *(ḥr-ntt) mt.w=f n ꜥ.t=f nb.t*
"For each of his limbs (*ꜥ.t=f nb.t*) has its liquids (*mt.w=f*)"

A few bound constructions, especially personal names, show an adjectival pattern[42] consisting of the determinative pronoun *nj* "that-of" as predicate (thus invariable in gender and number, see section 5.4),[43] immediately followed by a first NP indicating the argument to which the quality is ascribed and forming together with the determinative pronoun *nj* the predicative unit of the sentence, and then by a second NP as subject: the name of Amenemhat III (eighteenth century BCE) as King of Upper and Lower Egypt is

(82)   *nj-mꜣꜥ.t-r꜂w*
"Re belongs to Maat" (< "Re is that-of-Maat," i.e. the sun god Re conforms to the principles of order, justice, etc.)[44]

Complications, however, arise from the tendency of the Egyptian writing system to have divine names graphically precede any other noun in the NP – a phenomenon which is referred to as "honorific anticipation" (section 2.3) – and from our own tendency to read as a relation of *possession* what is in Egyptian a predication of *features*. The result is our perception of a semantic looseness in the mutual distribution of the NP functioning as subject and the NP acting as predicative complement, which often becomes a matter of extralinguistic, i.e. cultural interpretation: example (82) could just as well be read *nj-r꜂w-mꜣꜥ.t* and interpreted as "Maat belongs to Re" ("Maat is that-of-Re," justice derives from the sun god Re), an alternative analysis which would also perfectly fit the religious background of the name.

This ambiguity vanishes in the more regular use of adjectival sentences with *nj* "that-of," when the subject, i.e. the entity displaying the features indicated by the predicate, is expressed by a pronoun. The pattern consists of the determinative pronoun *nj* immediately followed by the dependent pronoun indicating the subject: being an enclitic, it has to be appended to the first prosodic unit of the sentence, i.e. to the determinative pronoun itself. The dependent pronoun is followed by a NP indicating the quality ascribed to the pronominal subject and forming together with the determinative pronoun *nj* the predicative unit of the sentence: *nj- wj-*NP (< [**nj-*NP]$_{pred}$-[*wj*]$_{subj}$) "I am that-of-NP," "I belong to NP":

(83)   CT III 311a T₁Be   *n(j)-wj prw wsjr*
"I (*wj*) belong to the House of Osiris (**nj prw wsjr* "that-of the-House-of Osiris")"
(84)   Sh.S. 62   *n(j)-sw mḥ 30*
"It (*sw*) was thirty cubits long (**nj mḥ 30* "that-of-thirty cubits")"

Syntactically, this type of adjectival sentence behaves like a qualifying pattern, allowing the subject to undergo pragmatic extraposition. In example (85), the fronted topic ("this N") is resumed by the coreferential subject pronoun in the body of the sentence (*sw*):

(85)   CT IV 82p   *N pn nj-sw ḥm wrj*
"As for this N, he belongs to the Great Shrine (*ḥm wrj*)"

whereas in example (86) the rhematic subject is indicated by a dependent pronoun with cataphoric function, dislocated to the end of the sentence as "tail," witness the first person variants of the same text (for the construction with *nnk* see below):

(86)   CT IV 340a L₁L.i   *n(j)-sw N tm* "It, i.e. the Whole (*tm*), belongs to N (**nj-N*)"
(86')   Ibid. B₉C   *nnk tm* "To me belongs the Whole"

But when both the subject and the predicative complement are pronominal, we are confronted with the same semantic problems raised by the sequence *nj*-NP1-NP2 above, i.e. with a substantial difficulty in determining which quality is ascribed to whom, for example in (87) whether a subject "it" (in this case *jr.t ḥrw* "Horus' Eye," a feminine word) is predicated of "you" or else a subject "you" of "it":

(87)   Pyr. 2033   "Formula to be recited: 'O Osiris N, take for yourself the Eye of Horus; *n(j)-ṯw s(j)* it belongs to you'"

The close syntactic tie between the adjectival head *nj* and its predicative complement makes it clear, however, that if the two arguments are conveyed by an identical morphological pattern, in this case the dependent pronoun, the original order is maintained: "it (*sj*) is that-of-you (*nj-ṯw*)."

This is confirmed by the existence of another possessive pattern. When the pronominalization affects the nominal complement of the adjectival predicate (NP1), two different constructions are preferred, corresponding to an unmarked and to a marked adjectival pattern. In the unmarked pattern, which has *qualifying* function, the possessed entity is conveyed by a nominal or pronominal subject, whereas the possessor is indicated by a predicate "belonging-to," consisting of the preposition *n* followed by the suffix pronoun of the possessor and by the *nisba jmj* from the preposition *m*:

(88)   Urk. IV 96,7   *n=k-jmj ḥd*
"Silver (*ḥd*) belongs to you (*n=k-jmj* "belonging-to-you")"

(89)   Sin. B 222–23   *n=k-jm(j) s(j) mj.tt ṯzm.w=k*
"It (*sj*) belongs to you (*n=k-jmj* "belonging-to-you"), like (*mj.tt*) your dogs (*ṯzm.w=k*)"

In (89), the subject is expanded by an apposition following it, but it can also be topicalized and resumed by a coreferential subject in the main sentence, as in (90):

(90)   Sh.S. 151   *'ntjw n=j-jm(j) sw*
"As for myrrh (*ntjw*), it belongs to me (*n=j-jmj* "belonging-to-me")"

As the adjectival *nisba* of the preposition *m*, *n=k-jmj* can also be used nonpredicatively, i.e. as an adjective following the NP it refers to and agreeing with it in gender and number; the resulting construction expresses in a prosodically stressed form the relation normally conveyed by suffix pronouns:

(91)   CT III 224c   *sḫm=k m pr.t-ḫrw n=k-jmj.t*
"May you control (*sḫm=k m*) the funerary offerings (*pr.t-ḫrw*, fem.) that are meant for you (*n=k-jmj.t*, feminine adj. "your")"

In the marked construction, which has an *identifying* function, the determinative pronoun *nj* is followed by the independent pronoun, and often appears combined with it into a single prosodic unit: *nj-jnk* > *nnk*, *jnk*; *nj-ntk* > *ntk*; *nj-ntf* > *ntf*.

(92)   CT V 279c M₆C   *nnk bꜣ nb* "Every soul belongs to me," vs.
(92')   Ibid. B₁Bo   *n=f-jm(j) bꜣ nb* "Every soul belongs to him"
(93)   CT I 254f   *jw n=k grḥ nj-ntk hrww wsjr*
"Yours is the night (*grḥ*), to you belongs the day (*hrww*), O Osiris!"
(94)   Adm. 10,4   *ntf jtj bdt* "To him belong barley (*jtj*) and emmer (*bdt*)"

5.5.2 *Interrogative constructions*

The same paradigmatic identity with nominal and adjectival patterns is displayed by interrogative constructions in which the interrogative pronoun is the subject or the object of the verbal predicate.[45] As a general rule, interrogative pronouns behave like focalized subjects or objects of nominal predicates. The focalized subject pronoun (*j)n-m* "who?" (< "ergative" particle *jn* + interrogative pronoun *m* "WH") occupies the position of the independent pronoun in a specifying pattern:

(95)   CT IV 243a B₉Cᵃ   *(j)n-m tr rḥ.wj*
"Who (*jn-m*) are then (*tr*) the Two Companions (*rḥ.wj*)?"

or in the cleft sentence:

(96)   Sh.S. 69–70   *(j)n-m jnj ṯw nḏs*
"Who brought you, little one?" < "who (*jn-m*) the-one-who-brought (*jnj*) you (*ṯw*)?"
(97)   CT V 110e M₂C   *(j)n-m tr sḫm=f m tm jn(.w) n=k*
"Who then will have power over (*sḫm=f m*) that which won't bring (it) to you?"

The interrogative pronouns *m*, *zj*, or *pw* "who?" "what?" are found in the predicative position of an adjectival sentence with the usual hierarchies of topicality, i.e. preferably with a sequence "subject-predicate" in the case of interlocutive subjects, and with a clear preference for the sequence "predicate-subject" in the third person:

(98)   CT III 59b   *ṯwt m-tr* "Who (*m*) are you (*ṯwt*) then (particle *tr*)?"
(99)   BD (Budge) 241,14   *(j)n-m tr ṯw ntk zj*
"Who (*jn-m*) are you (*ṯw*) then, who (*zj*) are you (*ntk*)?"
(100)   CT IV 188b   *p-tr sw 'ꜣ ḫpr ḏs=f*
"Who then (*p-tr* < *pw tr*) is he, the great one who came into existence by himself?"
(101)   Sin. B 261   *p-tr ḏd.t n=j nb=j*
"What does my lord say to me?" < "What is what-my-lord-says (*ḏd.t nb=j*) to me?"

5.6   Existential sentences and temporal-modal features

Existential sentences are those in which a nominal predicate fulfills the function of stating the existence of a subject.[46] When the existence of a nominal subject occurs absolutely – an extremely rare case in the classical language[47] – existential sentences are treated as a nominal pattern introduced by the particle *jw* (originally an auxiliary verb) as overt existential predicate:

(102)   CT IV 29e   *jw ● sšp dd N jw ● knh dd N*
"'There is light (*sšp*),' says the Deceased; 'There is darkness (*knh*),' says the Deceased"

(103)   Disp. 123–24   *jw ● šw m 'q-jb*
"There is a lack of close friends (*šw m 'q-jb* "lack of one-who-enters-the-heart)"

In the much more frequent cases in which the existence of the subject is accompanied by a beneficiary or by an adverbial circumstance, the resulting sentence is adverbial. Adverbial sentences will be dealt with in the next chapter, so that just one example will suffice here:

(104)   Peas. B2,65–66   *jw šd.w=k m sḫ.t jw fq3=k m sp3.t jw 'qw=k m šn'*
"Your plots of ground (*šd.w=k*) are in the field, your estate (*fq3=k*) is in the nome, your income (*'qw=k*) is in the storehouse"

But when the existence of the subject is a function of temporal or modal features which project it to the realized past or to the potential future, the predicate of Egyptian existential sentences is a verbal form of the verb *wnn* "to be," "to exist," which is normally not used in the general present tense. In (105), the subject "my wife" and the adverb "there" are both arguments of the verbal predicate indicating existence:

(105)   pKahun 12,13   *wnn t3j=j hjm.t jm*
"My wife will be there" (< "There will be my wife there")

While from a syntactic point of view the present paragraph should find its place in the treatment of adverbial and verbal sentences, the semantic kinship of the predication of "existence" with states of affairs otherwise expressed by nominal patterns justifies their presentation in this chapter. We discussed in sections 5.2 and 5.4 the basic expression of nominal (*rmṯ pw*) and adjectival (*nfr sw*) existence respectively, in section 5.3. the thetic presentation of a state of affairs by means of the demonstrative pronoun *pw* used as "dummy" subject, and in section 5.5 possession as a specialized form of adverbial or adjectival predication qualifying a subject. Rather than the absolute "being" of the subject, these patterns describe the latter's relation to the concomitant circumstances of its being. In this case, Egyptian does without any overt morphosyntactic expression of the idea of "being," choosing to shift attention to

its semantic environment. But when a crucial component of the semantic environment of this "being" is represented by its temporal or modal setting, its overt expression is delegated to verbal sentences with a *sdm=f* form of the verb *wnn* as predicate, which in classical Egyptian completely supersede the simple construction *jw* NP: they display the non-geminated form (section 4.6.3.1b) in the aorist *wn=f* "he is/was" (106) and in the subjunctive *wn=f* "that he be," which is used after verbs of wish or command (107), and the geminated form in the thematized *wnn=f* "(the fact that) he is" (108) and in the prospective *wnn=f* "he will be" with modal functions (109):

(106)   West. 6,26–7,1   *jw wn nds ddj m=f*
"There is (*jw wn*, VP *jw sdm=f*) a well-off citizen (*nds*) whose name is Djedi"

(107)   Pyr. 638b   *rdj.n=s wn=k m ntr*
"She caused (*rdj.n=s*) that you be (*wn=k*) a god (*m ntr* "as a god")"

(108)   Sin. B 43–44   *wnn jr=f t3 pf mj-m m-ḫmt=f*
"But how (*mj-m*) is that land (*t3 pf*) without him (*m-ḫmt=f*)?"

(109)   Sin. B 77   *mk tw '3 wnn=k ḥn'=j*
"Now (*mk*) you are here (*tw '3*) and you will remain (VP *wnn=k*) with me"

We will observe in section 6.4 that in the classical language adverbial sentences such as *tw '3* in (109) have to be introduced by a particle of initiality when they function as initial clauses – a rule which applies to many categories of verbal sentences as well. This is the function fulfilled by *mk* in (109). Of these particles, which are syntactic complementizers and each of which represents a different proposition operator,[48] the most complex and at the same time the most germane to our discussion of existential clauses is the particle *jw*, which, if it is related to Sem. *hwy* "to be" or to Eg. *jwj* "to come,"[49] could etymologically mean something like "there exists." Whenever *jw* introduces an adverbial sentence with the preposition *m* "in" indicating a transitory, rather than an essential quality of the subject:

(110)   Adm. 2,10   *jw ms jtrw m znf* "The Nile (*jtrw*) is really (*ms*) blood (*znf*)"

i.e. it has become like blood as a result of the many killings, it appears in complementary distribution with the *wnn=f* form of the type we encountered in (108)–(109). Compare the subjunctive *wn=k m ntr* "that you be a god" in (107) with example (111), where the same message is rendered first by an unmarked adverbial present and then by the prospective tense:

(111)   CT I 55b   *jw=k m ntr wnn=k m ntr*
"You are divine (*m ntr* "as a god") and you will be divine"

In the syntactic model of the Standard theory, these sentences have been interpreted within an adverbial understanding: both sentences are seen as

adverbial, the predication of existence in the second being emphasized by the topicalized VP *wnn=k* "that-you-are." In this perspective, the second sentence would emphasize the unmarked adverbial predicate of the first: "you are divine, you are (or: will be) *divine*"; the construction with *wnn=f* is taken to be the syntactic device that converts unmarked adverbial sentences introduced by *jw* into pragmatically marked ones with promoted comment.

However – and I shall return to this point in my discussion of adverbial and verbal sentences – one of the main functions of a topicalized VP is precisely the definition of the diathetic, temporal or modal features governing the higher predication; in other words, since the thematized VP is assigned all the verbal features of the utterance, the inevitable consequence of the concentration of semantic functions on the head VP is the pragmatic emphasis on the rheme, such as the interrogative adverb *mj-m* "how?" in example (108). The complementary distribution of *jw* and *wnn* in existential clauses shows in an ideal way this interface between syntax and semantics at work: while the unmarked attribution of a quality to a subject in the general present is conveyed by nominal and adverbial predicates, the semantic complexity generated by temporal or modal features requires the resort to a verbal pattern; and symmetrically, the transformation of an adverbial sentence into a verbal clause expands the pragmatic potential of the non-verbal components of the sentence, such as what used to be the adverbial predicate in a *jw*-sentence and has now been reduced to the role of adverbial adjunct in a *wnn*-clause: "you-(are)-divine," but "you-are-X," with "X" inevitably acquiring promoted pragmatic status. In this way we can properly interpret the role of *wnn*:[50] whether the underlying morphological pattern is the emphatic *wnn=f* or the prospective *wnn=f*, the verbal character of these forms, i.e. the restriction of the predicated existence to a specific temporal or modal setting, causes the communicative emphasis of the utterance to be laid on the adverbial adjunct which modifies the predicative VP.

The later stages of the development of existential constructions in classical Egyptian, which anticipate the situation in later Egyptian (section 5.8), see a grammaticalization of *wn* and *wnn* as "converters," i.e. as free morphemes added to the sentential patterns in order to embed them into verbal clauses: in (112) and (113), the temporal converters *wn.jn*, originally the conjugational base of the contingent *sdm.jn=f*-form, and *wnn*, originally the base of the prospective *sdm=f*-form, assign the scope of the adjectival *nfr sw*-patterns to the past and to the future respectively:

(112)   Kagemni 2,6   *wn.jn nfr st hr jb=sn*
"This was good in their heart" < *"It was [it is good in their heart]"

(113)   pKahun 3.36   *mk wnn ndm sj hr jb=f*
"Look, it will be pleasant in his heart" < *It will be [it is pleasant in his heart]"

Strategies of semantic readjustment also occur in the syntax of adjective verbs, i.e. of those verbs whose participles constitute the adjectives referred to in section 5.4: *nfr* "to be good," *ʿʒ* "to be great," *ʿšʒ* "to be numerous," etc. These roots express temporally unmarked situations when used in the adjectival construction *nfr sw/jnk nfr* and in the pseudoverbal construction *mk sw nfr.w* with thematized subject followed by the stative. The same applies to their substantival conversion *nfr=f* used after verbs of perception such as *mʒʒ* "to see" or *rh* "to know" (section 7.6):

(114)   Urk. IV 363,6   *jw hm.t=j rh.tj ntrr=f*
"My Majesty (*hm.t=j*, fem.) knows that-he-is-divine (*ntrr=f* < *ntrj* "to be divine")"

but not to their prospective *nfr=f*, i.e. to their verbal form appearing after verbs of volition or in main optative clauses, which displays a semantic shift in from the static to the dynamic meaning ("he will *become* good"):

(115)   Pyr. 618a   "O Osiris N: may your heart be raised to him, *ʿj jb=k* may your heart become great, may your mouth be opened, may Horus revenge you: it cannot last that he does not revenge you"

In other words, the acquisition of true verbal features, for example the expression of tense, aspect, or mood, causes semantic readjustments that bear consequences for the syntactic environments in which a form appears.

5.7   Negative patterns

When compared with similar patterns in related Afroasiatic languages, Egyptian negative constructions display a high degree of complexity both from a syntactic and from a semantic point of view. While no separate chapter of this book is devoted to a global treatment of negation,[51] I shall discuss in each section the pertinent negative patterns and try to show how they display a surprisingly high degree of uniformity in spite of the syntactic differences among the underlying positive patterns.

Earlier Egyptian shows two main negative morphemes: the first one is indicated by a logogram of two human arms in gesture of negation and is conventionally transliterated *n* or *nj*, but from an comparative point of view it is more likely to have displayed a bilabial /m/;[52] the second one shows the same logographic sign accompanied by the phonogram *n* /n/ and is conventionally transliterated *nn*, although it probably exhibited just a single /n/;[53] in addition, there is a negative pattern in which *nj* (in the later stages of earlier Egyptian *nn*) is combined with the subordinating particle *js* (section

6.3.1) to form a continuous morpheme *nj-js* (later *nn-js*) and a discontinuous morpheme *nj...js* (later *nn...js*), depending on the construction in which they appear. In general, the functional distribution of these three negative patterns may be defined as follows:

(a) *nj* is a nexal, i.e. propositional negative particle indicating simple *contradiction*,[54] for example of a nominal *rmt pw*-pattern (section 5.3):

(116) Sin. B 266–68   "Then they said to His Majesty: *nj ntf pw m mꜣ'.t* 'This (*pw*) is not (*nj*) really (*m mꜣ'.t*) he, Sovereign my Lord!' But His Majesty said: - *ntf pw m mꜣ'.t* 'Yes, this is really he'"

The negative particle *nj* is also rarely used for the nexal contradiction of adjectival *nfr sw*-sentences, although the positive counterpart of (117) is more likely to have been a possessive **jw n=k 'ntjw wrj* "you have much myrrh" (section 5.5) than an adjectival **wrj n=k 'ntjw* "myrrh is great to you" (section 5.4):

(117) Sh.S. 150   *nj wrj n=k 'ntjw*
"You don't have much myrrh" < "Myrrh (*'ntjw*) is not (*nj*) great (*wrj*) to you (*n=k*)"

A much higher degree of productivity is displayed by the nexal negation of sentences with verbal forms of adjectival verbs. The rules for the negation of verbal sentences apply unchanged to these sentences, with *nj nfr.n=f* negating an unmarked present state (118) and *nj nfr=f* used for the negation of a past quality (119):

(118) Siut I,280–81[55]   *nj ndm.n n=f ḫtḫt jm*
"The reverse thereof (*ḫtḫt jm*) is not pleasant (*nj ndm.n-*) to him (*n=f*)"
(119) Urk. IV 1082,15   *nj qnd=j [ḥr jz n(j) sprw]*
"I did not become angry (*nj qnd=j*) at the appeal of a petitioner"

Older texts show cases of contradictory negations of existential patterns (section 5.6) corresponding to positive constructions with *jw (wn)* (120), of adverbial sentences (121), or of *wnn=f* in prospective verbal sentences (122):

(120) Pyr. 1322c   *nj pq=f nj mnqb=f*
"There is no (*nj*) bread of his (*pq=f*), there is no fan of his (*mnqb=f*)"
(121) Pyr. 2293b^N   *nj jtj=k m rmt* "You father (*jtj=k*) is not (*nj*) a man (*m rmt*)"
(122) BH I 25,98–99   *nj wnn zꜣ=f ḥr ns.t=f*
"His son will not be (*nj wnn zꜣ=f*) on his seat (*ḥr ns.t=f*)"

But as a general trend, *nj*-patterns are diachronically recessive in nominal sentences, tending gradually to disappear and their function to be assumed by existential patterns with *nn* – see under (b) – or by focalized patterns with *nj-js* – see under (c) below.

(b) *nn* is a predicative negative particle, denying the existence of a subject:

(123) Disp. 121–22   "To whom shall I speak today? *nn mꜣ'.tjw* There are no righteous people"
(124) Sin. B 309   *nn šwꜣw jry n=f mj.tt*
"There is no commoner for whom the same has been done (*jry* "who-was-done," *mj.tt* "the same," *n=f* "for him," relative clause modifying the subject *šwꜣw* "commoner," see section 7.7.2)"

From an etymological point of view, *nn* is presumably the result of the addition of an intensifier to the nexal *nj*, much in the same way in which similar predicate denial operators developed in Indo-European languages: Latin *non* < **ne-oenum* "not-one," English *not*, German *nicht* < **ne-wicht* "not-something," etc.[56] And in accordance with the complex interface displayed by existential statements (section 5.6) between nominal or adverbial sentences on the one hand and verbal sentences with the verb *wnn* "to be" on the other hand, *nn* can also appear combined in a construction with the perfective participle of *wnn* to form a new predicative form *nn-wn* "there is not," which in later historical phases of the language will become the regular operator for the negation of existence: *nn-wn*-Subj "there is no Subj":

(125) Disp. 130   *nn-wn pḥ.wj=fj*
"There is no end to it" < "Its end (*pḥ.wj=fj*) does not exist"

Once "intensified" morphemes of the kind of Latin *non* or Egyptian *nn* are created, the basic original marker of contradiction tends to fall under its pressure and either to disappear altogether, as in many Indo-European languages, or to become restricted to *bound* constructions, which is the case in Egyptian: in an evolution beginning in early Egyptian, then investing gradually different spheres of the classical language, and finally concluding its development in Late Egyptian, *nn* (and its later Egyptian heir conventionally transcribed *bn*) will emerge as the only *unbound* negative morpheme of the language and take over many domains originally covered by *nj*, such as adverbial or existential sentences:

(126) Pyr. 638b   *nn ḫftj=k m m=k n(j) ntr*
"You have no enemy (*nn ḫftj=k*) in your name of 'God'"
(127) Sh.S. 100–101   *nn wḫꜣ m-ḥr-jb=sn*
"There was no idiot (*nn wḫꜣ*) among them (*m-ḥr-jb=sn*)"

(c) *nj-js* and *nj...js* represent focal negations indicating *contrariety*; *nj-js* immediately precedes the negated syntagm, which is often an adverbial adjunct or an adverbial clause (128), more rarely the focalized nominal subject of a cleft sentence (129):[57]

(128) Pt. 74–75   "If you find a disputant in action *m ḥwrw nj-js mj tw=k*
who is poor (*m ḥwrw* "as a poor"), and not (*nj-js*) your equal (*mj.tw=k*)"

(129) CT III 336f–i   *nj-js jtj=j rḏj n=j   nj-js mʔw.t=j rḏj n=j   jn jw' pw /pw/ 'ꜣ knz.t
swt rḏj n=j s(j)*
"Not my father (*jtj=j*) gave (it) to me; not my mother (*mʔw.t=j*) gave (it) to me, but
this heir (*jw' pw*), the great one ('ꜣ) of Kenzet – he (*swt*) is the one who gave it to me"

The discontinuous *nj...js*, on the other hand, wraps the first prosodic unit
of the sentence:

(130) CT VI 332k–n   *jrw=k pw nj jrw=j js pw 'šm=k pw nj 'šm=j js pw*
"This (*pw*) is your form (*jrw=k*), it is not (*nj...js*) *my* form; this is your image ('*šm=k*),
it is not *my* image"

Rather than the nexus between the subject *pw* and the predicate *jrw=k* or
'*šm=k*, which remains unaffected by the insertion of the negative marker, the
scope of the negation in these examples is represented by the *focus* of the
utterance, which is the predicative complement in (128), the subject in (129),
and the suffix pronoun in (130). The scope of this negative pattern is *internal*
to the proposition in that the truth of the predicative nexus of existence (*pw*)
of a certain *jrw* "form" or of a certain '*šm* "image" is shown by the preceding
positive sentences to be upheld and not modified by the insertion of the
negative operator. What the focal negation performs is the creation of a
polarity, of a pragmatic contrast to its explicit or implicit positive counter-
part; rather than its contradictory, it represents its marked contrary.[58] It
appears in nominal and adjectival patterns to negate one of the semantic or
syntactic components of the predicate, such as its intensional meaning:

(131) Disp. 31–32   "This is what my soul said to me: *nj ntk js zj jw=k tr [...] 'nḫ.tj*
You are not (*nj ntk js*) a real man (*zj*), although you are indeed [...] alive"

the indication of possession in the patterns *nj-sw* and *nj-jnk*:

(132) CT III 390e   *nj nj-wj js zpꜣ.t* "I do not belong to the district (*zpꜣ.t*)"
(133) BD (Naville) II,40/8   *nj nj-jnk js rꜣ=k* "Your spell (*rꜣ=k*) is not mine"[59]

or an adverbial modifier, for example a "virtual" relative clause (section 6.3.3,
7.3):

(134) CT II 160b–c   *nj jnk js wꜣḏ swꜣj=f jnk wꜣḏ prj m nb.t*
"I am not a passing-by (*swꜣj=f* "which passes by") *wꜣḏ*-amulet; (rather,) I am a *wꜣḏ*-
amulet coming forth from mankind (*prj m nb.t*)"

The construction *nj...js* supplies the negative counterpart to all patterns
involving focality, such as the subject of a specifying sentence S =, [Subj-*pw*-
Pred] in (135) or of a cleft sentence S =, [*jn*-Subj-Pred] in (136):

(135) Pyr. 1233b   *N pw ḏḥwtj nḏ jn nj N js pw stš jt(j) s(j)*
"N is Thoth who protects (*nḏ*) you, N is not Seth who takes (*jtj*) it ("Horus' Eye")"

(136) Pyr. 1324a–b   *nj jn js N pn ḏd nn jn ḥkꜣ ḏd nn*
"It is not N (*nj jn js N*) who says this; (rather,) it is a magician (*ḥkꜣ*) who says this"

In accordance with the so-called O > E drift,[60] which is the general trend
of "weak" contradictory negations to move to the "strong" contrary pole of
semantic oppositions, the pattern *nj...js* will tend on the one hand to be
historically replaced by *nn...js* (*nj* > *nn*), on the other hand to assume functions
originally fulfilled by the simple *nj* (*nj* > *nj...js*); examples from a non-literary
text of the First Intermediate Period (137), a post-cassical literary text (138)
and from a later copy (Dyn. XVIII) of a literary text of the Middle Kingdom
(139) are:

(137) Nag' ed-Dêr 84, A6–7[61] "I am a successful citizen who lives out of his own
wealth, *nn-js m gmj.t.n=j m-' jtj=j* and not out of (*m*) what was bequeathed to me by
(*gmj.t.n=j m-'* "what I found from") my father"
(138) West. 9,6   *mk nn jnk js jnn n=k sj*
"Look, it is not I (*jnk*) who bring (*jnn*) it to you"
(139) Pt. 213–14 (L₂)   *nn zꜣ=k js pw nn msj.n.tw=f js n=k*
"He is not *your* son; he wasn't born (*nn msj.n.tw=f js*) to *you*"[62]

One may then compare the typologically innovative *nn-js* in (137) with
the classical *nj-js* in (128) above, the function of *nn...js* in (138) with the *nj...js*
in (131)-(132), and *nn...js* in (139) with the older *nj...js* in a similar semantic
environment in a monumental text of the classical period (140):

(140) Berlin 1157,18–20   "As for any son of mine who will keep this border
which My Majesty made, *zꜣ=j pw* he is my son, born to My Majesty...But as for him
who abandons it, who will not fight for it, *nj zꜣ=j js* he is not my son, he was not born
to me"[63]

Negative patterns with the basic morpheme *nj* will therefore be exposed
to two types of diachronic pressure: morphosyntactically, to the tendency for
the simple negative to be replaced by a "intensified" version (*nj* > *nn*) more
likely to acquire predicative status and to function as negative existential
operator; semantically, to the tendency for propositional contradictories to be
reinforced into focal contraries (*nj* > *nj...js*, *nn...js*); the original morpheme
will be maintained preferably in bound, especially verbal constructions.

A last observation pertains to a semantically interesting peculiarity of the
verb *nfr*, whose basic meaning is "to be complete" and which is mostly in the
positive sense of "to be good," but which is also integrated into the negative
system of Egyptian because of the opposite connotation "to be finished" it
can acquire in specific contexts. This appropriation of the lexical potential of

a verb into the morphosyntactic system of negations occurs rather often in verbal patterns, the most paradigmatic example being the verb *tm* "to be complete," from which the negative counterparts of nominal transpositions of the verb (topicalized forms, participles and relative clauses, infinitives) are formed and which will be discussed in chapter 7. But a tripartite pattern with a substantivized participle of the verb *nfr* as predicate of a S ⇒ [Pred-*pw*-Subj] should find its mention here:

(141)   Adm. 4,11–12   *nfr pw pḫr.wt jrj*
"There are no appropriate (*jrj*) remedies (*pḫr.wt*)"

That this pattern is grammatically treated exactly like a positive sentence is proved by its possibility to be integrated into the system of converters (section 5.6) in less formal Middle Egyptian texts:

(142)   pKahun 22,7   *jr wnn nfr pw ḏdd.t nb.t (j)r=s*
"If (*jr*) there should be (*wnn*) nothing that has been said (*ḏdd.t*) about it..."

From what we have seen so far in this paragraph, we can obtain the Egyptian version (β) of the traditional square of semantic oppositions (α) applied to the negation of nominal patterns:

contraries

(α)

subalterns   contradictories

subcontraries

(*jw*) *wn NP* "NP exists"   *nj (> nn) NP js* (+ *Focus*) "NP is not-Focus"

(β)

wnn NP (+ *Focus*) "NP is (Focus)"   (*nj >*) *nn NP* "NP does not exist"
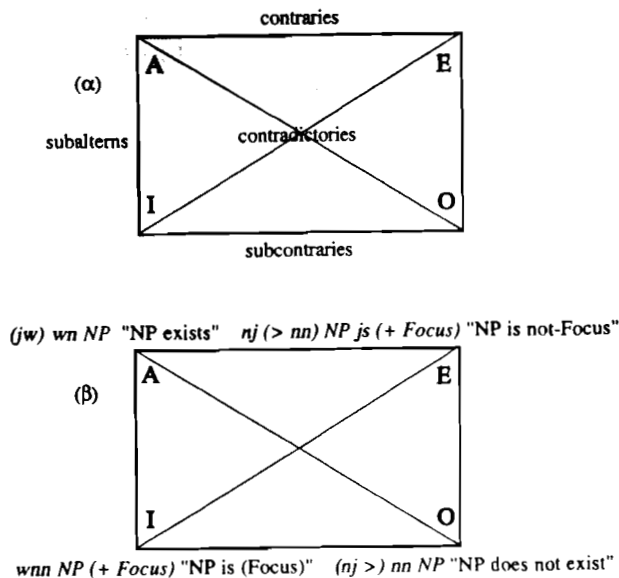
We shall see very similar developments at work in the later phases of the language, and an identical distribution of semantic and pragmatic functions

of negative morphemes and patterns applied to the other syntactic types as well – verbal, pseudoverbal and adverbial.

5.8   Nominal sentences in later Egyptian

While semantic principles and macrosyntactic structures of the nominal sentence in later Egyptian[65] still follow the models of the classical language:

(143)   pChester Beatty I vo C 1,4   *ḫsbd mꜣ' šnj=s*
"Her hair (*šnj=s*) is true lapislazuli (*ḫsbd mꜣ'*)"

(144)   Two Brothers 1,10   *nfr pꜣ-smw n s.t ḥmn.t*
"The grass (*pꜣ-smw*) of such-and-such a place (*n s.t ḥmn.t*) is good (*nfr*)"

both of which are examples of the well-known pattern "Pred-Subj," distribution and frequency of the morphosyntactic patterns undergo a higher degree of change. In general, following a trend we already observed in the less classical forms of Middle Egyptian, movements of topicalization and focalization tend to play a more crucial role in the later phases of the language – which probably finds its justification both in the cross-linguistic tendency towards the grammaticalization of pragmatic phenomena[66] and in the different cultural setting of the texts in Late Egyptian, Demotic, and Coptic. Late Egyptian and Demotic are less bound than the classical language to the religious and monumental sphere, which remained the domain of the postclassical form of Middle Egyptian often referred to as "Late Middle Egyptian"[67] or *égyptien de tradition*;[68] Coptic is the vehicle of a different religious world altogether. Thus, later Egyptian as a whole is scholastically less fixed and therefore more open to the communicative needs of contemporary speech. For example, while both the nominal patterns *rmṯ pw/jnk rmṯ* and the adjectival sentence *nfr sw/jnk nfr* are indeed maintained:

(145)   Doomed Prince 4,9   *ṯsm pꜣj* "It (*pꜣj*) is a dog"
(146)   Onchsh. 16,23   *jnk pꜣj=k sn* "I (*jnk*) am your brother (*pꜣj=k sn*)"
(147)   Ps 5,5   ⲛ̄ⲧⲕ̄ ⲟⲩⲛⲟⲩⲧⲉ "You (*ntk*) are a god (*ou-noute*)"
(148)   Heb 11,4   ⲟⲩⲁⲓⲕⲁⲓⲟⲥ ⲡⲉ "He (*pe*) is just (*ou-δίκαιος* "a just man")"

the closer ties exhibited by later Egyptian to the spoken registers of discourse are evident in its preference for patterns with topicalized subject, including its frequent recourse to dislocated pronominal subjects, i.e. to topicalized arguments placed outside the body of the sentence:

(149)   Wen. 2,8   *ntk jb pꜣ-jn=k n=j gr jnk*
"But (*gr*) you, what (*jb*) have you brought me?"

(150)   Cant 1,5–6   ⲁⲛⲟⲕ ⲇⲉ ⲁⲛⲅ̄ ⲟⲩⲕⲁⲙⲏ...ϫⲉ ⲁⲛⲅ̄ ⲟⲩⲕⲁⲙⲏ ⲁⲛⲟⲕ
"But as for me (*anok δέ*), I am (*ang*) black (*ou-kamē*)...that (*je*) I am black"

In these examples, the subject is fronted as pragmatic topic (*ntk, anok*) and resumed by a coreferential pronoun in the relative clause "that which you have brought" in (149) and in the nominal sentence "I am black" in (150) Both examples also exhibit a rear extraposition of the indirect object in (149) and of the subject in (150) respectively, resumed as rhematic "tail"[69] (*jnk, anok*) and cataphorically anticipated by the suffix pronoun of the prepositional phrase *n=j* "to me" in (149) and again by the subject of the nominal sentence *ang ou-kamê* "I am black" in (150).

It is therefore surprising that, although the topicalized bipartite pattern with extraposed subject resumed by the demonstrative pronoun or copula *pw* > *p3j*[70] after the predicate is indeed maintained in Late Egyptian:

(151)   oDeM 437,2–3   *p3-h3.t j.jr=k b3kw p3j*
"Your coming down was work-related" < "The coming down which you did (*p3-h3.t j.jr=k*) – it was work (*b3kw p3j*)"

it is not as frequent in this phase of the language as the later Egyptian propensity for the use of topicalizations would lead one to assume; that it did, however, remain a productive pattern in the language is shown by its vitality in Demotic,[71] where S => [Subj-Pred-copula] has become the most common form of nominal sentence, and in Coptic, especially in Bohairic:[72]

(152)   Onchsh. 27,13   *rmt jw=f mḫj jrm n3-p3j=f tmj 3bjn ḏ.t p3j*
"A man (*rmt*) who vilifies (*jw=f mḫj*) his fellow-citizens (*n3-p3j=f tmj* "those of his city" Coptic *na-pe=f-time*) is (*p3j*) is despicable (*3bjn*) forever (*ḏ.t*)"
(153)   Cant 1,15   ноɣвал ченвал ńропоопе не
"Your eyes (*nou-bal*) are (*ne*) eyes of a dove (*hen-bal n-croompe*)"

Turning to the specifying patterns, the balanced sentence [Subj-Pred] documented in examples (21)–(23) in section 5.2 is alive and well in Late Egyptian and Demotic:

(154)   pBM 10052, 5,8–9   "I didn't see anything else: *p3-ptr=j p3-ḏd=j* what I saw (*p3-ptr=j*) is what I said (*p3-ḏd=j*)"
(155)   pRyl. IX 3,7–8   *p3-hp j.jr=w n=w dj.t šp=w sh n šw 50*
"The judgment (*p3-hp*) that they will get (*j.jr=w n=w* "that they will do to them") is to have them receive (*dj.t šp=w*) fifty blows of whip"[73]
(156)   Onchsh. 13,7   *jrj rmt-swg rmt-swg*
"The friend (*jrj*) of an idiot is an idiot (himself)"
(157)   pWien KM 3877 I,x+3   *n3-j.jr=f nb n hs ḫsf*
"All he has done (*n3 j.jr=f nb*) as singer (*n hs < m hs*) is vice (*ḫsf*)"[74]

The tripartite specifying sentence [Subj-*pw*-Pred], on the other hand, is not productive in Late Egyptian,[75] a stage in the history of the language in which tripartite patterns generally appear to be under pressure (section 5.9).

But this sentence pattern displays renewed vitality in Coptic,[76] where the construction [Subj-*pe*-Pred] maintains the specifying functions it had in the older phases of the language:

(158)   1 Cor 15,56   пιειв ᴅε ᴀпʌоɣ пе пнове тɕолᴅ ᴅε ᴀпнове пе пноʌос
"But (*δέ*) the sting (*p-ieib*) of death (*m-p-mou*) is (*pe*) the sin (*p-nobe*), and the power (*t-com*) of sin is the law (νόμος)"

As in the corresponding patterns of the classical language, the subject of a later Egyptian nominal sentence can also be an adjectival form of the verb, coreferential with the antecedent (participle)[77] as in (159) and (160) or controlled by a different subject (relative form) as in (161) or (162):

(159)   Two Brothers 15,4   *bj3j.t '3.t t3j-ḫpr.t*
"What happened (*ḫpr.t*) is (*t3j*) a great wonder (*bj3j.t '3.t*)"
(160)   1 Thess 5,24   оɣпιcтоc пе пентᴀчтᴀₐʌń
"He who has summoned us (*p-ent-a=f-tahm=n*) is (*pe*) trustworthy (*ou-πιστος*)"
(161)   pBM 10052, 14,7   *'ḏ3 p3j-ḏd=f nb*
"Everything he said (*ḏd=f nb*) is (*p3j*) wrong (*'ḏ3*)"
(162)   Ex 35,10   ченщнпре не нечнᴀᴅᴅɣ нᴀк
"What I shall do (*n-et=i-na-aa=u*) for you (*na=k*) are (*ne*) wonders (*hen-špêre*)"

One should pay attention here to the change in the syntax of the copula *pw* > *p3j* > пе. Unlike the Middle Egyptian *pw*, which is invariable both in classifying and in specifying patterns, in later Egyptian the situation is more complex. While the Coptic specifying sentence [Subj-*pe*-Pred] maintains the invariable copula, later Egyptian classifying and qualifying sentences display gender and number agreement of the copula with its antecedent: masc. *p3j* (пе), fem. *t3j* (тe) pl. *n3j* (не). In this way, an original [Pred-*p3j*-Subj] is reinterpreted as a bipartite pattern in which an adjectival form, introduced by the so-called prosthetic *yod*, i.e. by the initial *j* which in Late Egyptian regularly precedes participles and relative forms, functions as the subject preceded by the newly created definite article *p3* (п-), *t3* (т-), *n3* (ń-): what used to be typologically a tripartite [*bj3j.t '3.t*] [*t3j*] [*ḫpr.t*] "what happened is a great wonder" is therefore treated in Late Egyptian as a bipartite [*bj3j.t '3.t*] [*t3-j.ḫpr.t*] "a great wonder is (that)-which-happened." We will see in the next section that this reinterpretation of the structure of the tripartite nominal sentence has important consequences for the overall distribution of nominal patterns in later Egyptian.

5.9   Old and new cleft sentences

Quite expectedly, Late Egyptian maintains in full productivity the Middle Egyptian cleft sentence, the pattern in which the subject of the adjectival

predicate is the focus of the utterance and is introduced by the particle *jn* (written *m* in less formal texts) – sometimes omitted in specific pragmatic environments[78] – or by the independent pronouns:

(163) Horus and Seth 6,14–7,1   *jn r3=k j.dd sw ds=k jn Ss3 hr=k wp tw ds=k*
"It is your own mouth (*r3=k...ds=k*) that said (*j.dd*) it, your own intelligence (*Ss3 hr=k*) that judged (*wp*) you (*tw*)"

(164) LRL 70,14–15   *hr ntk j.jr=k 'n-smy n f3.tj hr=w*
"Now (*hr*), it is you who will report (*ntk j.jr=k 'n-smy*) to the vizier about them (*hr=w*)"

But this pattern survives through Coptic only in functional remnants (table 5.2).[79] The parentheses in the last row symbolize the vestigial status of the construction ⲀⲚⲞⲔ (ⲡ)ⲉⲣ-ⲤⲰⲦⲀ̄ in Coptic.

Table 5.2 The evolution of the cleft sentence *jn*-NP₁-NP₂

PHASE	TENSE		
	PRETERITE	AORIST	PROSPECTIVE
EARLIER EGYPTIAN	*jn NP sdm* (perf.) "It is NP who heard"	*jn NP sdm* (imperf.) "It is NP who hears"	*jn NP sdm=f* (prosp.) "It is NP who will hear"
LATE EG. 1	*m NP j.sdm* "It is NP who heard"	*m NP j.jr sdm* "It is NP who hears"	*m NP j.jr=f sdm* "It is NP who will hear"
LATE EG. 2 – DEM.1	*NP j.jr sdm* "It is NP who heard"	*NP ntj hr sdm* "It is NP who hears"	*NP ntj-jw=f r sdm* "It is NP who will hear"
DEM.2 – COPTIC	(*anok p-er-sôtm* "It is I who heard")	*anok p-et-sôtm* "It is I who hear"	*anok p-et-na-sôtm* "It is I who shall hear"

The reason for the decay of this pattern in the later stages of the language lies in the threat represented by the emergence of a new syntactic pattern in Late Egyptian. This new construction is a second type of cleft sentence, occurring in Late Egyptian when the focalized argument is not the subject, but rather the object or one of the adverbial adjuncts of the verbal predicate, and gradually expanding in Demotic and Coptic to subjects as well. One will recall that in Middle Egyptian nominal sentences, the pragmatic prominence of an argument different from the agent was not conveyed by the cleft sentence S ⇒ [*jn*-Focus-Pred], but rather by the pseudocleft pattern S ⇒ [Pred-*pw*-Subj]. In this construction, the dislocated patient occupies the role of pragmatically promoted predicate of the sentence. The new later Egyptian

cleft sentence type is in fact nothing else than the heir of this earlier Egyptian tripartite pattern; but while in the Middle Egyptian pseudocleft construction the contrastive stress was simply an additional, optional feature of the predicate, in later Egyptian the pattern is completely reinterpreted as a bipartite cleft sentence, in which focalization was the primary function of the pattern: S ⇒ [Focus-*p3*-Presupposition]. The originally predicative head noun has now become the focus of the utterance; the old copula *pw* is reinterpreted as a definite article *p3* defining the second nominal phrase, which is now a presuppositional predicate conveyed by a participle (165) or a relative VP (166), which in the later stages are replaced by a relative clause introduced by the converter *ntj* (167):

(165) pBM 10052, 13,7–8   *N p3j=f sn p3-jy n=j*
"It was his brother N (*N p3j=f sn*) who came (*p3-jy*) to me (*n=j*)"
(166) Cod. Herm. 7,7[80]   *jn.t=f r-hrj n p3 jtr p3-j.jr=j*
"To bring it (*jn.t=f*) out of the river (*r-hrj n p3 jtr*) is what I did (*p3-j.jr=j*)"
(167) Rom 9,1   ⲤⲞⲨⲘⲈ ⲦⲈϮ̄ϪⲰ ⲘⲘⲞⲤ, ⲂⲞⲨⲘⲎⲒ ⲠⲈϮ̄ϪⲰ ⲘⲘⲞⲤ
"It is the truth (Ⲥ*ou-me*, Ⲃ*ou-mêi*, "(a) truth") that I say (ⲤⲦ*e-t=i-jô*, Ⲃ*pe-t=i-jô*)"[81]

Any argument of the cleft sentence can appear topicalized and resumed by a coreferential pronoun:

(168) 2 Khaemwaset 4,21–22   *n3j-sdy z3-wsjr p3-ntj jr n-jm=w*
"As for these sayings (*n3j-sdy*), it is Siosiri who is doing (*p3-ntj jr*) them (*n-jm=w*)."

But here, of course, a question arises: how can we discern whether later Egyptian did in fact maintain a functional difference between the new form of cleft sentence shown in examples (165)–(168) and a formally identical heir of the tripartite nominal pattern [Pred-*pw*-Subj] displayed by examples (159)–(162)? How can one confidently state that the first position in (165)–(168) is occupied by the focalized subject or object, whereas the same slot in (159)–(162) is taken by the predicate, pragmatically promoted as it may be? How should we decide whether

(169) Horus and Seth 14,5–6   *m3'.t(j) m hh n sp p3(j)-dd dhwtj n t3-psd.t*

is an adjectival sentence "What Thoth said to the Ennead is absolutely true," or rather a cleft sentence "It is the absolute truth that Thoth said to the Ennead"?

The answer to this question represents one of the thorniest issues of later Egyptian grammar and must be sought in the diachronic observation of the morphological form and the syntactic behavior of the copula *p3(j)*, *t3(j)*, *n3(j)* and, at least to a certain extent, in the study of the corresponding negative

patterns (section 5.11). As one will recall, the cleft sentence with *jn* was reserved in earlier Egyptian to the focalization of the agent, whereas the pseudocleft pattern S => [Pred-*pw*-Subj] was used when the focalized element was the patient of the VP: the emphasized element became the syntactic predicate, whereas the VP underwent adjectival conversion as the subject of the sentence. In fact, Late Egyptian itself exhibits no formal differences between the vestiges of this tripartite pattern and the new bipartite cleft sentence, and we can only infer that, if there was any difference between the two constructions, suprasegmental features must have played a role in conveying it. The history of the language shows that in Late Egyptian the linguistically more productive construction was clearly felt to be the cleft sentence: in Roman Demotic and especially in Coptic, only the cleft sentence pattern is kept and a *new* tripartite nominal pattern with congruing copula ne, тe, нe is added to the syntactic inventory of the language:[82] in this new pattern, the first position is taken by the predicate followed by the copula, the original determinative pronoun having completed its functional evolution and become the definite or possessive article of the subject:

(170) Prov 12,1   оудонт де пе петдосте Rнедпю

"The one who hates (*p-et-moste* < *pꜣ-ntj ḥr msdj.t*) the reproaches (*ne-jpio*) is (*pe*) senseless (*at-hēt* "without mind")"

whereas Bohairic shows a marked preference for the topicalized pattern:

(171) Ibid.   Вфн етдоct ноvcоꙻ оvдтꙻнт пе

"The one (*phē*) who hates (*et-mosti*) a reproof (*n-ou-sohi*) is (*pe*) senseless"

Now again, as in earlier Egyptian, the language exhibits a clear opposition between a bipartite cleft sentence with only one pronoun of the *p*-series (in Sahidic nет-, тет-, нет- congruing with the focalized antecedent,[83] in Bohairic nет-/ne eт- invariable in gender and number), morphologically undistinguishable from the definite article of the following noun but syntactically serving as nexal copula preceding a NP without determinative morpheme,[84] and a tripartite nominal pattern with two pronouns of the same series (in Sahidic ne nет-, тe тет-, нe нет-, in Bohairic ne фн ет-, тe ѳн ет-, нe нн ет-), the first of which is a true copula and the second of which precedes the subject as demonstrative pronoun (пдı, тдı, ндı), as definite article (if the subject is a simple noun phrase), or as determinative pronoun (if the subject is a relative clause).

The evolution from the earlier Egyptian tripartite pattern S => [Pred-*pw*-Subj] to the situation in Coptic is summarized in table 5.3. Parentheses indicate that the pattern is not formally distinguishable; its paradigmatic

existence, therefore, cannot be established with certitude. In Demotic and Coptic, the use of the new cleft sentence pattern observed in table 5.2 is extended to the construction with focalized subjects,[85] leading to the decay of the old cleft sentence.

Table 5.3 The evolution of the pattern NP$_1$-*pw*-NP$_2$

PHASE	PATTERN	
	PSEUDOCLEFT SENTENCE (WITH OPTIONAL FOCUS)	CLEFT SENTENCE (WITH REGULAR FOCUS)
EARLIER EG.	*ḥjm.t pw sḏm.t.n=f* "The one whom he heard is a woman"	
LATE EG. 1	(*wꜥ.t-ḥm.t tꜣj-sḏm=f* "The one whom he heard is a woman")	*wꜥ.t-ḥm.t tꜣ-j.sḏm=f* "It is a woman that he heard"
LATE EG. 2 – DEM. 1		*wꜥ.t-ḥm.t tꜣ-j.jr=f sḏm* "It is a woman that he heard"
DEM. 2 – COPTIC	S*ou-shime te t-ent-a=f-sotm=s* B*the et-a=f-sothm=es ou-shimi te* "The one whom he heard is a woman"	S*ou-shime te-nt-a=f-sotm=s* B*ou-shimi pe-et-a=f-sothm=es* "It is a woman that he heard"

5.10 Interrogative, possessive, and existential patterns

In later Egyptian, one of the frequent uses of specifying (with substantival predicate) or identifying (with adjectival predicate) bipartite sentences occurs with interrogative pronouns such as *nm* (< *jn-m*) "who?" (Coptic нıм) or *jḥ* "what?" (Coptic дш, оv) or with the interrogative adjective *jḫ* "which?"[86] as predicates, occupying the first or the second position in the pattern, depending on whether the subject is delocutive, i.e. third person, or interlocutive, in which case it complies with the hierarchies of salience discussed in sections 5.2–5.4:

(171) Truth and Falsehood 5,3   *ntk šrj nm* "Whose son (*šrj nm*) are you?"

(172) Horus and Seth 2,13   *jḥ pꜣ-ntj-jw=n r jr=f*

"What shall we do?" < "What (is) the(-thing)-which-(*pꜣ-ntj*) we-shall-do-it (*jw=n r jr=f*)?"

(173) pBM 10052, 13,7   *jḫ šms n N pꜣ-jy n=k*

"Which one of N's messengers came to you?" < "Which messenger (*jḫ šms*) of N's is the one who came (*pꜣ-jy*) to you?"

In the possessive patterns, later Egyptian follows rather closely the con-structions of the classical language. While the frequent fusion of the head NP *nj-sw/ nj-st* "he/she is one-of" into *ns-*, which is a frequent formative for personal names (*ns-mnw* "He-belongs-to-Min"), is primarily a phonetic and graphic phenomenon,[87] the most relevant evolution concerns the identify-ing pattern with pronominal predicate: in Late Egyptian, independent pronouns are used in this function without the introductory determinative pronoun *nj*, keeping until the end of the second millennium BCE the old form of the second and third person pronouns (*ntk sw, twt sw* "it belongs to you"; *ntf sw, swt sw* "it belongs to him"). A good example of Late Egyptian possessive patterns at work is:

(174) Wen. 1,20–21   *j3 jr p3-jȝj j.ȝj tw ntk sw ns-t3j=k br*
"But the thief who robbed you– he is *yours*, he belongs to *your* ship!,"

where the subject of the sentence is topicalized and resumed by the depen-dent pronoun *sw* and where the indication of possession is conveyed by the identifying independent pronoun *ntk* ("belonging to you") in the first sentence, and by the qualifying adjectival morpheme *ns-* in the second.

In the more recent stages of later Egyptian, the situation changes. While Demotic still maintains the use of stressed pronouns in adjectival sentences to indicate possession:

(175) Siut 8,26[88]   *ntk st n3j=k nk.t ntj-ḥrj*
"Your property (*n3j=k nk.t*) above (*ntj-ḥrj* "which is above") is yours (*ntk*)"

in Coptic the older indicators of possession of type *nj-sw* and *nj-ntf* have disappeared and been superseded by a new set of possessive pronouns deriving from the independent use of the determinative pronoun ⲡⲁ- < *p3 n-* "that-of" (with nominal referent) and of the possessive article (with pronominal referent); these have replaced in later Egyptian the older synthetic indication by means of the suffix pronoun, still kept in a few lexical items referring most frequently to the sphere of the human body: earlier Egyptian *sn=f* "his brother" > later Egyptian *p3j=f sn* (Coptic ⲡⲉϥⲥⲟⲛ), in pronominal use *p3w=f* (Coptic ⲡⲱϥ) "his, of his":

(176) Ex 19,5   ⲡⲱⲓ ⲅⲁⲣ ⲡⲉ ⲡⲕⲁϩ ⲧⲏⲣϥ
"For (ⲅⲁⲣ) the entire world (*p-kah tēr=f* "the earth [to] its entirety") belongs to me (*pō=i pe* "is mine")"

As for existential clauses, we have already discussed the diachronic ten-dency exhibited by Egyptian to move away from the expression of existence conveyed by simple adverbial or adjectival sentences towards an increasing use

of constructions with forms of the verb *wnn* "to be," originally limited to the expression of temporal, aspectual, or modal features of the predicated exis-tence, but soon regularly used in negative patterns and gradually extended to the indication of absolute existence. This historical trend appears concluded in Late Egyptian, where the existential predicates *wn* "there is" and *mn* (< *nn-wn*) "there is not," often combined with the preposition *m-dj* "by, with" (< *m-'w* "in the hand of")[89] precede the indefinite subject, adverbial constructions being maintained for specific subjects (pattern *p3-rmt m pr* "the scribe is in the house," section 6.6):

(177) Two Brothers 3,5–6   *wn pḥ.tj '3 jm=k*
"There is great strength (*pḥ.tj '3*) in you (*jm=k*)!"

(178) LRL 10,8–9   *y3 wn hrw dy r-ḥ3.t=tn*
"But you still have time" < "But there is day (*wn hrw*) here (*dy*) before you (*r-ḥ3.t=tn*)"

(179) LRL 3,6   *mn m-dj=w bt3*
"They have no damage (*bt3*)" < "There is no damage with-them (*m-dj=w*)"

(180) RAD 53,16–54,1   *mn ḥbs.w mn sqn mn rm.w mn sjm*
"There are no clothes, no ointment, no fish, no vegetables"

The later developments[90] see a combination of two phenomena: (a) first, a permanence of the opposition between the predication of existence for definite subjects by means of an adverbial sentence introduced by the preposi-tions ⲛ̅ⲧⲟⲟⲧ= < *m-dr.t=* "in the hand of," ⲛ̅ⲧⲁ= < *m-dj=* "by," ⲁ̅ⲙⲟ= < *jm=* "in," ⲉⲣⲟ= "to" indicating the locative, the beneficiary or any other adjunct and the verbal or adjectival predication with ⲟⲩⲛ̅- and ⲁⲛ̅- in the case of indef-inite subjects:

(181) Ps 134,17   ⲛⲉⲩⲟⲩⲉⲣⲏⲧⲉ ⲁ̅ⲙⲟⲟⲩ
"They have feet" < "(There are) their feet (*ne=u-ouerête*) in them (*mmo=ou*)"

(182) Lk 14,22   ⲁⲩⲱ ⲟⲛ ⲟⲩⲛ̅ ⲙⲁ "And (*auō*) there is (*oun*) still (*on*) a place"

(b) second, a grammaticalization of the possessive patterns *wn m-dj* and *mn m-dj* as ⲟⲩⲛ̅ⲧⲉ-, ⲟⲩⲛ̅ⲧⲁ= and ⲁⲛ̅ⲧⲉ-, ⲁⲛ̅ⲧⲁ= respectively. Conforming to the cross-linguistic tendency for prepositional compounds indicating possession followed by their subject to be semantically (and eventually also syntactically) reinterpreted as predicative phrases controlling a *direct object*,[91] these constructions are treated in Coptic (regularly in Sahidic, less so in Bohairic, where the original construction is maintained together with the reinter-preted pattern) as VPs with the meaning "to have" followed by their original morphosyntactic subject, now treated as a direct object; the latter is often accompanied by a localistic[92] indicator, namely the adverb ⲁ̅ⲙⲁⲩ "there," and

introduced by the preposition ⲛ-, ⲙ̄ⲙⲟ= when the pronominal beneficiary is prosodically stressed (ⲟⲩⲛ̄ⲧⲁ=, ⲙ̄ⲛ̄ⲧⲁ=):

(183) Jn 4,44   ⲙ̄ⲙⲏⲧⲉ ⲡⲣⲟⲫⲏⲧⲏⲥ ⲧⲁⲉⲓⲟ ϩⲙ̄ ⲡⲉϥϯⲙⲉ ⲙ̄ⲙⲓⲛ ⲙ̄ⲙⲟϥ

"A prophet receives no honor in his own village" < "There-is-not-by (*mmnte-*) a prophet (προφήτης) honor (*taeio*) in his village (*hm pe=f-time*) his own (*mmin mmo=f*)"

(184) 2 Cor 4,7   ⲟⲩⲛ̄ⲧⲁⲛ ⲇⲉ ⲙ̄ⲙⲁⲩ ⲙ̄ⲡⲉⲓⲁϩⲟ

"But we have this treasure" < "But (δέ) there-is-by-us (*ounta=n*) there (*mmau*) this treasure (*m-pei-aho*, object)"

5.11 Negation in later Egyptian

Nominal negative patterns regularly display the morpheme ⲁ̲ *bn* (Coptic ⲛ̄) as the heir of Middle Egyptian *nn*, which is still used in the literary register and with which *bn* was also phonetically identical,[93] the grapheme <b> serving presumably only as a semantic indicator of negation, much like the sign of the open arms conventionally transliterated *nj* in Middle Egyptian:

(185) Wen. 2,11–13   *nn f3y-mlk p3-wn=w jr.t=f n p3j=j jt jr jnk gr jnk nn jnk p3j=k b3k*
"What they did for my father (*n p3j=j jt*) was not a royal gift (*nn f3y-mlk*), and as for myself (*jr jnk gr jnk*), I am not your servant either (*nn jnk p3j=k b3k*)"

One will recall that in the presence of pragmatic focality, such as in a cleft sentence, the negation tends to become one of contrariety rather than one of nexal contradiction. In this case, the later Egyptian negative pattern is the discontinuous *bn...jwn3* (Demotic *bn...jn*, Coptic ⲛ̄...ⲁⲛ), which corresponds functionally to the Middle Egyptian *nj...js* (> *nn...js*):

(186) Wen. 2,23   *bn m3ʿ swg3 jwn3 n3-ntj twj jm=w*
"It is not foolish travels (*m3ʿ swg3*) that I am engaged in!" < "Not foolish travels (are) the(-ones)-that-(*n3-ntj*) I-am in-them"

The pervasive O > E drift discussed in section 5.7 above, however, caused not only the negative morpheme *bn* to invade further than the postclassical Middle Egyptian *nn* domains previously covered by the simple propositional negation *nj* (> Late Egyptian *bw*, limited to bound verbal patterns), but also the originally focal negative marker to be used in non-focal constructions, such as in nominal and adjectival patterns:

(187)   oBerlin 10627,6   *bn ntk rmt jwn3*
(187') pRyl. IX 1,18   *bn ntk rmt jn* "You are not a (real) man"[94]
(188)   LRL 2,1   *ḥr jnk p3j=tn nfr bn jnk p3j=tn bjn jwn3*
"For I am (to) your benefit (*p3j=tn nfr*), and not (to) your disadvantage (*p3j=tn bjn*)"
(189)   pBM 10052, 11,21   *bn m3ʿ jwn3 n3* "This (*n3*) is not true (*m3ʿ*)"

We observed in section 5.7 that this phenomenon corresponds to the cross-linguistic tendency for focal negations of contrariety to progressively invade semantic spheres and syntactic patterns previously negated by "weak" contradiction: in fact, more formal or literary Late Egyptian texts show instances, such as example (185) above, in which nominal patterns are negated by the simple morpheme without the focal reinforcer. Comparing (189) with the same adjectival pattern in (190), one will observe a number of signals of a higher linguistic register:[95] the absence of *jwn3*, the use of older *nn* for *bn*, and the topicalization of the subject resulting in the tripartite pattern [Topic-Pred-copula_Subj], otherwise rare in Late Egyptian:

(190) pAnastasi I 18,2   *p3-jn.t=k r sḫt=n nn nfr p3w*
"The fact of bringing you (*p3-jn.t=k*) to punish us (*r sḫt=n*) is not good"

This gradual invasion of *bn...jwn3* into the semantic domain of the simple *nn* > *bn* can be observed in the side-by-side coexistence, sometimes as variants of the same text, as is the case in (193)–(193'), of identical constructions with and without *jwn3*, showing that it would be artificial always to ascribe to the negative pattern with *jwn3* a higher degree of focality:

(191) LRL 6,8   *bn nfr p3j-j.jr=k* "What you have done (*p3j-j.jr=k*) is not good"
(192) Ani 8,11   *bn nfr jwn3 n3-šm.w m ḥrj=f*
"The behavior (*n3-šm.w*) as his superior (*m ḥrj=f*) is not good"
(193) KRI II 53,4   *bn rmṯ pw p3-ntj m-ḥnw=n*
"The one who is among us (*p3-ntj m-ḥnw=n*) is not (just) a man (*bn rmṯ pw*)"
(193') KRI II 53,5   *bn rmṯ.w jwn3 n3w p3-ntj m-ḥnw=sn*
"Those who are among them are (*n3w*) not (real) men (*bn rmṯ.w jwn3*)"

Although the version displayed by (193') probably represents an error in the scribal transmission, since the text is concerned here with King Ramses II's military bravery rather than with the enemies' cowardice, the correspondence of a nominal *rmṯ pw*-sentence built according to the classical pattern with a rare example of the later Egyptian tripartite pattern negated by *bn... jwn3* shows that, if originally the cleft sentence exhibited *jwn3* whereas the unmarked nominal sentence did not, the O > E drift led to a progressive merging of the two negative patterns.[96] The later evidence confirms these evolutive lines: Demotic *bn...jn* and Coptic ⲛ̄...ⲁⲛ are the *only* morphemes used in the negation of nominal patterns, with a tendency in Coptic, shared once more by similar patterns in other languages,[97] to drop the actual negative marker (*n*) and to keep only the reinforcer (*an*):

(194) pKrall 23,11[98]   *bn-jw 3ḥj jn p3j p3-rmt*
"The man is (*p3j*) not a reed (*bn-jw 3ḥj jn*)"

(195) Siut 23,11   bn-jw nts jn tȝj "This is (tȝj) not hers (bn-jw nts jn)"[99]

(196) Gal 4,31   ⲛ̅ⲁⲛⲟⲛ ⲛ̅ϣⲏⲣⲉ ⲛ̅ⲧϥ̅ⲙ̅ϩⲁⲗ ⲁⲛ ⲁⲗⲗⲁ ⲁⲛⲟⲛ ⲛⲁ ⲧⲣ̅ⲁ̅ϩ̅

"We (anon) are not (n...an) ⲑⲉ children (n-šêre) of the slave woman (n-t-hmhal), but (ἀλλά) we are those of ⲣⲁ , see 5.10) the free woman (t-rmhê)"

(197) 1 Jn 4,10   ⲁⲛⲟⲛ ⲁⲛ ⲡⲉⲛⲧⲁⲛⲙⲉⲣⲉ ⲡⲛⲟⲩⲧⲉ ⲁⲗⲗⲁ ⲛ̅ⲧⲟϥ ⲡⲉⲛⲧⲁϥⲙⲉⲣⲓⲧ̅ⲛ̅

"It is not we (anon an pe-) who loved (nt-a=n-mere-) God (p-noute), but rather (ἀλλά) he (ntof) who loved us (pe-nt-a=f-merit=n)"

And according to the later Egyptian preference for topicalized patterns, the negation bn...jwnȝ is also regularly applied to the predicate of a tripartite sentence [Topic-Pred-copula$_{Subj}$], in which it follows the extraposed subject:

(198) Dem. Krug A 11[100]   pȝ-ḫl (n) m=f bn-jw pȝj=j šrj jn pȝj

"The said young man (pȝ-ḫl n m=f) is not (bn...jn pȝj) my son (pȝj=j šrj)"

(199) Jn 8,13   ⲧⲉⲕⲙⲛ̅ⲧⲙⲛ̅ⲧⲣⲉ ⲛ̅ⲟⲩⲙⲉ ⲁⲛ ⲧⲉ

"Your testimony (te=k-mnt-mntre) is not (n...an te) genuine (ou-me "a truth")"

Finally, the passage below from the "Tale of Wenamun," the last known literary text of the New Kingdom (around 1070 BCE) should offer a short summary of some of the main points treated in the last sections (sections 5.8–5.11):

(200) Wen. 2,23–24   mn jmw nb ḥr-tp j(t)r jw bn ns-jmn ntf pȝ-jm ḥr ntf pȝ-lbln ntj-twk (ḥr) ḏd jnk sw

"There is no ship (mn jmw) on the waters (ḥr-tp jtr) which does not (jw bn) belong to Amun (ns-jmn). To him belong the sea (ntf pȝ-jm) and also Lebanon, of which you say 'It belongs to me (jnk sw)'"

Further reading

Callender, J. B. *Studies in the Nominal Sentence in Egyptian and Coptic*. Near Eastern Studies XXIV (Berkeley–Los Angeles: University of California Press, 1984).

Doret, E. "Phrase nominale, identité et substitution dans les Textes des Sarcophages," *Revue d'Egyptologie* 40 (1989), 49–63; 41 (1990), 39–56; 43 (1992), 49–73.

Johnson, J. H. "Demotic nominal sentences," in *Studies Presented to Hans Jakob Polotsky*, ed. by D.W. Young (Beacon Hill: Pirtle & Polson, 1981), 414–30.

Junge, F. "Nominalsatz und Cleft Sentence im Ägyptischen," in *Studies Presented to Hans Jakob Polotsky*, ed. by D. W. Young (Beacon Hill: Pirtle & Polson, 1981), 431–62.

Loprieno, A. "Der ägyptische Satz zwischen Semantik und Pragmatik: die Rolle von jn," *Studien zur Altägyptischen Kultur. Beihefte III* (1988), 77–98.

Polotsky, H.J. *Grundlagen des koptischen Satzbaus*. American Studies in Papyrology XXVII–XXIX (Atlanta: Scholars' Press, 1987–90), 9–140.

Satzinger, H. "Nominalsatz und Cleft Sentence im Neuägyptischen," in *Studies Presented to Hans Jakob Polotsky*, ed. by D. W. Young (Beacon Hill: Pirtle & Polson, 1981), 480–505.

Shisha-Halevy, A. *Coptic Grammatical Categories*. Analecta Orientalia LIII (Rome: Pontifical Biblical Institute, 1986).

Vernus, P. "Observations sur la prédication d'identité ("Nominal predicate")," in *Crossroads III Preprints*.

Westendorf, W. *Beiträge zum ägyptischen Nominalsatz*. Nachrichten der Akademie der Wissenschaften in Göttingen, Phil.-Hist. Klasse, vol. 3, Göttingen 1981.

6

Adverbial and pseudoverbal syntax

6.1   Introduction

The adverbial sentence represents one of the most frequent patterns from Old Egyptian to Coptic.[1] In this syntactic type, a nominal or pronominal subject (NP), which can be bare or preceded by a particle, is followed by an adverbial phrase (AP) as predicate:[2]

$$S \Rightarrow [(\text{Particle-})\text{NP}_{subj}\text{-AP}_{pred}].$$

The adverbial predicate can be an adverb proper, as in (1), or a prepositional phrase, as in (2):

(1)   Sin. B 77   mk tw ꜥꜣ   "Look (particle mk), you (tw) are here (ꜥꜣ)"

(2)   Sin. B 156   sḫꜣ.y=j m ꜥḥ   "The memory of me (sḫꜣ.y=j) is in the palace (m ꜥḥ)"

Similarly to what we observed in the treatment of nominal sentences (section 5.4), any type of NP, for example a relative verbal form in (3), can be found in a prepositional phrase functioning as the predicate of an adverbial sentence:

(3)   Pt. 216   wdj r=k m ḫbd.n=sn

"He who acts (wdj) against you (r=k) is one whom they have rejected (ḫbd.n=sn, relative sḏm.n=f)"

In rare cases, all of them belonging to the earliest phase of the language and mostly in interrogative environments, the AP appears dislocated to the left of the NP:

(4)   Pyr. 681a   jnj ḥrw prj m šnj

"Where (jnj) is Horus who came forth from the serpent?"

but this pattern disappears from the syntax of the classical language.[3]

Since the part of speech "adverb" is [-N] and [-V],[4] i.e. it has neither nominal nor verbal properties, patterns with adverbial predicate will draw their temporal reference from their context: the time setting of adverbial sentences is determined by the contextual tense.[5] Some prepositions, however, naturally evoke a time reference associated with their semantic scope; this is

the case with m "in, as," which expresses a simultaneous situation of the subject, as in (3) and in (5), or r "toward, bound to," which often implies a prospective reference, as in (6):

(5)   Neferti 54   sꜣ-ꜥ m nb-ꜥ
"The former weak-of-arm (sꜣ-ꜥ) is now (m "is as") a strong-of-arm (nb-ꜥ)," lit. *"the broken-of-arm (is) as lord-of-arm"[6]

(6)   Sin. B 280–81   jw=f r smr m-m srj.w
"He (jw=f) will be (r) a Friend (smr) among the officials (srj.w)," lit. *"truly he (is) toward a Friend among the officials"

Adverbial sentences of the type represented in (5)–(6) represent a bridge to the common syntactic pattern in which the predicate is not an AP in the narrower sense, i.e. an adverb or a prepositional phrase, but rather a form of the verbal paradigm used in a syntactically adverbial environment. Such an environment can either be a prepositional phrase with ḥr, m (mostly with verbs of motion), or r followed by the infinitive:[7]

(7)   Khakheperre'seneb 12   nhpw ḥr ḫpr r'w-nb
"Dawn (nhpw) comes (ḥr ḫpr "happens") every day (r'w-nb)"

(8)   Peas. R1.2–3   mj wj m hꜣj.t r km.t
"Look, I am going down (wj m hꜣj.t) to Egypt (r km.t)," lit. *"I am in going-down"

(9)   Sh.S. 117–18   mk tw r jrj.t ꜣbd ḥr ꜣbd
"Look, you will spend (tw r jrj.t) month after month (ꜣbd ḥr ꜣbd)" lit. "you are toward making"

or a non-initial stative following its nominal or pronominal subject:

(10)   Peas. B1,101   mk wj ꜣtp.kw "Look, I am burdened (ꜣtp.kw)"

While sentences (1)–(6) are usually called **adverbial**, patterns of the type (7)–(10), in which the predicate is morphologically and semantically a form of the verbal paradigm, are ascribed by Egyptologists the label **pseudoverbal sentences**. We saw in section 4.6.4 that the infinitive combines nominal and verbal properties ([+N] and [+V]); the same holds true for the stative, originally a conjugated verbal adjective (section 4.4.1). This feature [+V] displayed by their predicate allows pseudoverbal sentences, in spite of their syntactic likeness to adverbial sentences, to be more sensitive to tense, aspect, or mood:

(11)   Merikare E 93   jw=f ḥr ꜥḥꜣ ḏr rk nṯr
"*He has been fighting* (lit. "he is on fighting") since god's time (ḏr rk nṯr)"

(12)   pKahun 11,16–18   "Testament made by the Controller of *phyle* Intef-meri, called Kebi, for his son Meri-intef, called Iu-seneb: jw=j ḥr rḏj.t pꜣj=j mtj-n(j)-sꜣ n zꜣ=j mry-jntf 'Herewith I give my (pꜣj=j) office of controller of *phyle* (mtj-nj-sꜣ) to my son Meri-intef'"

(13)   West. 5,3–15   *jb n(j) ḥm=k r qbb n m33 ḫnn=sn ḥn.t m ḥdj m ḫntj* "'Your Majesty's heart will be refreshed (*r qbb*) at seeing (*n m33*, section 4.6.4b) how they row up and down, *jw=k ḥr m33 z3.w nfr.w n(w) 3=k* as you watch (*jw=k ḥr m33*, section 6.4.2a) the beautiful thickets of your lake *jw=k ḥr m33 sḫ.wt=f ḥf33.wt=f nfr.w* and as you watch its fine fields and banks; *jw jb=k r qbb ḥr=s* truly (*jw*, section 6.4.2), your heart will be refreshed (*r qbb*) by these things!' – *jw=j ḥm r jrj.t ḥnj.t* 'Indeed (*ḥm*), I shall go boating! Let there be brought to me twenty oars of ebony plated with gold, with handles of *sqb*-wood plated with electrum. Let there be brought to me twenty women with the prettiest body, breasts, and braids, who haven't yet given birth. And let there be brought to me twenty nets and let them be given to these women instead of their clothes.' So everything was done according to His Majesty's order. And they rowed up and down, *wn.jn* (section 5.6) *jb n(j) ḥm=f nfr.w n m33 ḫnn=sn* and His Majesty's heart became happy (*nfr.w*) at seeing how they rowed (*ḫnn=sn*)"

Whenever possible, adverbial and pseudoverbal sentences will be treated here as a syntactic unit: in the history of Egyptian, the original morphological and semantic differences between them – which will be pointed out when they emerge in the course of our discussion – tend to be neutralized, and in the more recent phases of later Egyptian pseudoverbal patterns lose their syntactic autonomy vis-à-vis adverbial sentences.

6.2   Adverbial and pseudoverbal patterns

We observed in chapter 4 that Egyptian displays great flexibility in the morphosyntactic variety of the subject of a nominal sentence, which can be any NP, including a nominalized VP (section 5.2). The same flexibility applies to the subject of adverbial or pseudoverbal sentences. It can range from a bare noun:

(14)   Peas. B1,332   *jw 'qw=k m 3n'* "Your income (*'qw=k*) is in the storehouse (*3n'*)"

(15)   Sh.S. 42   *jb=j m sn.nw=j*
"My heart (*jb=j*) was my (only) companion (*sn.nw=j*)"

to a suffix, a dependent, or (only in archaic texts) independent pronoun:

(16)   Peas. B1,249   *jw=f m jmj-ḥ3.t n jrr*
"He is (*jw=f*) a model (*jmj-ḥ3.t* "one who is in the front") for the evildoer (*jrr* "doer")"

(17)   Peas. B1,208   *mk tw m mnjw* "Look (*mk*), you (*tw*) are a shepherd (*mnjw*)"

(18)   Pyr. 1114bᴾ   *jnk jr p.t* "I (*jnk*) am toward (*jr*) heaven (*p.t*)"

to a participle, a relative form, or rarely an infinitive:

(19)   Adm. 8,3   *wn m wpw.tj ḥr h3b ky*
"He who used to be (*wn*) a messenger (*wpw.tj*) now sends (*ḥr h3b*) someone else (*ky*)"

(20)   Pt. 20–21   *jrr.t j3w n rmt bjn(.w) m ḫ.t nb.t*
"What old age does (*jrr.t j3w*) to people is bad (*bjn.w*, stative) in every respect"

(21)   Pyr. 1730a   *jws 3m.t=k tn jtj N mj 3m ḥrw n jtj=f wsjr*

"Behold (*jws*, particle), this going of yours (*3m.t=k tn*), O father the King, is like (*mj*) Horus going (*3m ḥrw*, nominalized VP) to his father Osiris"

The subject position of an adverbial sentence can also be filled by a complex syntagm in which the subject slot of an adverbial clause (S¹) is converted into a verbal phrase introduced by *wnn*, a grammaticalized form of the verb "to be" (S²):

$$S^1 \Rightarrow [(\text{Particle})\text{-NP}_{\text{subj}}\text{-AP}_{\text{pred}}] > S^2 \Rightarrow [[\textit{wnn-}\text{NP}_{\text{subj}}]\text{vp-AP}]$$

This conversion, which was already discussed in the treatment of nominal syntax (section 5.6), allows the originally unmarked adverbial clause to acquire modal features, conveyed by the prospective *wnn=f* in (22), or to confer pragmatic prominence to an adverbial adjunct such as an interrogative adverb, as signalled by the emphatic *wnn=f* in (23):

(22)   pKahun 12,13   *wnn t3j=j ḥjm.t jm*
"My wife will be (*wnn t3j=j ḥjm.t*) there (*jm*)"

    S¹ ⇒ [(*jw*ₚₐᵣₜ) [*t3j=j ḥjm.t*]ₙₚₛᵤᵦⱼ [*jm*]ₐₚₚᵣₑₐ] "my wife is there"

>   S² ⇒ [[*wnn t3j=j ḥjm.t*]ᵥₚ [*jm*]ₐₚ] "my wife will be there"

(23)   Sin. B 43–44   *wnn jr=f t3 pf mj-m m-ḥmt=f*
"But (*jr=f*) how (*mj-m*) is that land (*wnn t3 pf*) without him (*m-ḥmt=f*)?"

    S¹ ⇒ [(*jw*) [*t3 pf*]ₙₚₛᵤᵦⱼ [*m-ḥmt=f*]ₐₚₚᵣₑₐ] "that land is without him"

>   S² ⇒ [[[*wnn t3 pf*]ᵥₚ [*m-ḥmt=f*]ₐₚ] [*mj-m*]ₐₚ] "how is that land without him?"

The functional yield of the transformation of an adverbial into a verbal sentence by means of the converter *wnn* is particularly evident when the adverbial sentence is contextually juxtaposed to its converted verbal counterpart. In (24), an adverbial sentence indicating the general present is followed by a verbal sentence with a prospective *wnn*-form conveying modal features:

(24)   CT I 55b   *jw=k m nṯr wnn=k m nṯr*
"You are divine (*m nṯr* "as a god") and you will be divine"

At this juncture, a short digression is in order. We just saw that any NP, including nominal forms of the verb and VP resulting from the use of a form of the verb *wnn* "to be" as converter, can be found as head of an adverbial sentence. Generalizing the scope of the paradigmatic flexibility displayed by the head syntagm of an adverbial sentence, the Standard theory, i.e. the approach to Egyptian grammar which developed in the footsteps of H. J. Polotsky (section 1.3), came to interpret *all* cases of an initial verbal form accompanied by an AP:

(25)   Adm. 1,5   *m33 zj z3=f m ḥrwy=f* "a man now regards his son as his enemy"

as complex adverbial sentences in which the adverbial phrase, in this case the predicative complement *m ḫrwy=f* "as his enemy," functions as predicate of a sentence whose subject is the nominalized VP, in this case *mꜣꜣ zj zꜣ=f* "a man regards (*mꜣꜣ zj*) his son (*zꜣ=f*)." The underlying structure of (25), therefore, would be *that-a-man-regards-his-son (is) as-his-enemy."[8] This analysis seems to be confirmed by the study of the negative patterns: in fact, these initial verbal forms are negated by the corresponding form of the negative verb *tm* followed by the negatival complement (section 7.8.5):

(26)   West. 6,5   *tm=ṯ ḥnj(.w) ḥr-m* "Why (*ḥr-m*) don't you (*tm=ṯ*) row (*ḥnj.w*)?"

which is the negative counterpart of *ḥnn=ṯ ḥr-m* "why do you row?"

A predictable, but problematic effect of this strictly substitutional analysis, however, was the extension of its scope to non-initial verbal forms, which – because of their paradigmatic similarity to adverbial phrases – came to be interpreted as "circumstantial" (section 4.6.3.1) predicates of an adverbial sentence:

(27)   Sin. R 21–22   *bjk ḥ=f ḥnꜥ šms.w=f* "the Falcon (*bjk*) flies with his followers"

Here, the VP *ḥ=f* "he flies" is perceived by the Standard theory to be functionally equivalent to (or "transposed" into) the predicate of an adverbial sentence, syntactically identical to the adverb or the prepositional phrase in (1)–(3). Following this model, the underlying structure of (27) would be *"the-Falcon (is) while-he-flies." The ultimate consequence of this approach was the drastic reduction in the inventory of verbal sentences posited for classical Egyptian and the dramatic growth of the category "Adverbial Phrase," which was believed to encompass the vast majority of predicative structures.[9]

In recent years, the limits of this approach have become evident. First of all, the restricted inventory of sentence patterns licensed in Middle Egyptian seems to be at odds with the variety of stylistic forms and devices documented in the classical literature; examples are the semantics of tense and aspect and pragmatic topicalization or focalization phenomena – two areas which are not adequately addressed in the Standard theory. Secondly, while relevant in the assessment of syntactic properties, paradigmatic substitution does not justify by itself a homogeneous treatment of such different morphological and semantic realities as adverbs (which are [-N], [-V]) and nouns ([+N], [-V]) on the one hand vs. verbal forms ([-N], [+V]) on the other. In particular one should be careful not to confuse the pragmatic notion of *topic*, such as *mꜣꜣ zj zꜣ=f* "a man regards his son" in (25), *tm=ṯ ḥnj.w* "the fact that you don't row" in (26), or *bjk* "the Falcon" in (27), with the syntactic and semantic concept of

subject, as is the noun *zj* "a man" in (25), the second person feminine pronoun in (26), and the third person pronoun in (27). Also, a circumstantial VP behaves like any other independent sentence[10] in that it can build a main clause when introduced by a proclitic particle (section 7.3):

(28)   Sh.S. 2–3   *mk pḥ.n=n ḥnw*
"Look (*mk*), we have reached (*pḥ.n=n*) the residence (*ḥnw*)"

whereas this is not the case with a bare adverb (*mk ꜥꜣ* "look here"), with a prepositional AP (*mk m prw* "look in the house"), or with an adverbial clause of the type discussed in section 6.3 (*mk ḥr-ntt...* "look, because...").[11] There does exist a sentence pattern in which an AP follows an initial particle:

(29)   Sin. B 225   *jw-ꜥ mj sšm rsw.t* "It was like (*mj*) the situation of a dream"

But these are instances in which the underlying non-specific nominal subject ("it," i.e. the entire event described in the preceding context) has been omitted under relevance (section 6.3.3).[12] Thirdly, although very powerful from the point of view of the internal *description* of grammatical structures, the Standard theory is more vulnerable at the level of an adequate *explanation* of linguistic phenomena,[13] creating a model of Egyptian syntax where a great variety of verbal patterns is idiosyncratically balanced by a marginal role assigned to verbal predication as opposed to its nominal and especially adverbial conversions. It seems appropriate, therefore, to stick to a verbalistic approach to Egyptian syntax and to treat patterns with verbal predicate as verbal sentences. Attempts aimed at expanding the inventory of sentence types licensed within the Standard theory by means of adjustments of the theory itself will be discussed in the next chapter (sections 7.4–7.5).

From a purely syntactic point of view, what we call a "pseudoverbal" sentence is in fact nothing other than an adverbial sentence in which the NP of the prepositional predicate is an infinitive, the stative being – as it were – the surface structure acquired by an underlying prepositional phrase "in the state of." But on the other hand, the choice of a verbal root allows pseudoverbal patterns to become much more sensitive than adverbial sentences to semantic features, such as the expression of tense, aspect, or mood. In fact, pseudoverbal sentences are best understood as grammaticalized constructions in which the preposition has lost its original semantic scope and has acquired a new status: the locative function of *ḥr, m* or *r* is reinterpreted as indicating the "position" of the actor within the predication expressed by the verbal infinitive.[14] This "position" of the subject is in fact the main feature of verbal aspect as defined in section 4.6.2 above: while prepositions like *ḥr* "on" or *m* "in" will express different nuances of imperfectivity depending on the

Aktionsart of the verb, the former being preferred for *accomplishments* and *achievements*, the latter for *activities*, the stative being confined to *states*, *r* "toward" will tend to be grammaticalized as a marker of prospectivity. Contrast example (30), in which the preposition *ḥr* keeps its original locative meaning, with (31), a sentence drawn from the same literary text, where *ḥr* is grammaticalized in the pseudoverbal pattern "*ḥr* + infinitive":

(30)   Adm. 7,10   *mtn šps.wt ḥr šd.w* "Look, noble ladies are on rafts (*ḥr šd.w*)"

(31)   Adm. 8,13   *mtn šps.wt ḥr sḥs* "Look, noble ladies are fleeing (*ḥr sḥs*)"

The situational meaning of *ḥr* in (30), i.e. "on rafts," is applied in (31) to the location of the subject *šps.wt* "noble ladies" within the action evoked by the verb *sḥs* "to flee"; the result is a viewing of the verbal action as "imperfective," i.e. as not(-yet)-complete(d).

Finally, topicalization can be applied to any argument of an adverbial or pseudoverbal sentence when different from the subject, which functions in fact as the "default" topic of these patterns. When topicalized, the element is dislocated to the left of the entire construction and resumed by a coreferential pronoun in the main clause:

(32)   Adm. 7,7   *qn ḥzy ḥr nhm [ḥ.t]=f*

"As for the brave man (*qn*), the coward steals (*ḥr nhm*) his property"

This construction occurs with particular frequency when the topicalized element controls an adverbial or pseudoverbal sentence the subject of which is a body part:[15]

(33)   CT III 370b   *jw ḥrj.w-p.t jb=sn nḏm.w*

"The heart of those who are in heaven is happy," lit. "those who are in heaven (*ḥrj.w-p.t*) – their heart is happy (*jb=sn nḏm.w*)"

6.3   Adverbial conversions

6.3.1   Adverbial clauses

Any type of Egyptian sentence – nominal, adverbial, or verbal – can be converted into an adverbial clause by means of a subordinating conjunction. This conjunction is often the pronominal morpheme *ntt* "that" (see Greek ὅτι, Latin *quod*), already referred to in section 5.3, introduced by a preposition, for example *ḥr-ntt* "because" followed by a nominal sentence in (34), *r-ntt* "to the effect that" with a pseudoverbal sentence in (35), and *ḏr-ntt* "since" with a verbal sentence in (36):

(34)   Siut 1,288   *ḥr-ntt jnk zꜣ w'b mj w'j jm=tn nb*

"because I (*jnk*) am the son of a priest (*zꜣ w'b*) like (*mj*) anyone among you"

(35)   pKahun 27,8–9   "This is a letter to my lord (may he be alive, prosperous, and healthy) *r-ntt ḥꜣw nb n(j) nb=j 'nḥ.w wḏꜣ.w snb.w 'd.w wḏꜣ.w m s.wt=sn nb* to the effect that all the affairs (*ḥꜣw nb*) of my lord (may he be alive, prosperous, and healthy) are safe ('*d.w*, stative) and well (*wḏꜣ.w*, stative) in all their places (*s.wt=sn nb*)"

(36)   Berlin 1157,11   *ḏr-ntt sḏm nḥsj r ḥr n(j) rꜣ*

"since the Nubian (*nḥsj*) listens to a verbal attack (*ḥr nj rꜣ*, lit. "a fall of mouth")"

A certain number of prepositions can also function as conjunctions, for example *n* "for" > "because," *m* "in" > "when," *n-mrw.t* "for the sake of" > "in order to," *r* "toward" > "so that," and control an embedded verbal sentence converted into an adverbial clause. A particular perfective verb form, the *sḏm.t=f* (section 4.6.3.1), is used only after prepositions implying completion, such as *r* "until" or *ḏr* "since" and as subordinate negative perfective form after the particle *nj* (section 7.8):

(37)   Urk. I 101,4–7   "Never before had one like me heard the secret of the King's harem; but His Majesty made me hear it *n jqr(=j) ḥr jb n(j) ḥm=f r srjw=f nb r s'ḥ=f nb r bꜣk=f nb* because I was worthy (*jqr=j*) in His Majesty's heart more than (*r*) any official of his, more than any noble of his, more than any servant of his"

(38)   Urk. IV 897,11–13   *rḫ.n(=j) qd=k twj m zšj m wn=k m šms.wt jtj=j*

"I knew your character while I was still (*tw=j*, section 6.6) in the nest (*m zšj*), when you were (*m wn=k* "in you-are") in my father's following"

(39)   Sin. B 247   *r pḥ.t=j dmj n(j) jtw* "until I reached (*r pḥ.t=j*) the town of Itju"

Under the control of a conjunction one also finds adverbial or pseudoverbal sentences that have been converted into verbal sentences by means of a verb form from the root *wnn* "to be"; from a pseudoverbal sentence **jw m.w=sn mn.w* "their names are established," we obtain:

(40)   Meir III,11   *jrj.n=j nw n-mrw.t wnn m.w=sn mn(.w) n ḏ.t*

"I did this so that their names (*m.w=sn*) be established (*mn.w*, stative) forever"

In some cases, especially with the prepositions *m* "in" and *m-ḫt* "after," the adverbial clause is topicalized (section 5.4) and dislocated to the left of the main sentence, with or rarely without the introductory particle *jr* "as for":

(41)   Hatnub 22,2   *jr m wn=j m ḥrd wn=j m smr*

"When I was a child (lit.: "as-for in my-being as a child"), I was (already) a Friend"

(42)   West. 8,22–23   *ḥr m-ḫt spr=f w'j r w'j 'ḥ'.n pꜣ smn 'ḥ'.w ḥr gꜣgꜣ*

"And so (*ḥr*), after the one had reached the other (lit. ***"after it reached the one to the one"), the goose stood ('*ḥ'.n pꜣ smn 'ḥ'.w*) cackling (*ḥr gꜣgꜣ*)"

The main function of *jr* "as for," however, is to introduce hypothetical verbal clauses. In Egyptian as well as in many other languages,[16] the protasis of a conditional sentence is treated as an adverbial topicalization of a verbal sentence. Depending on the semantic message conveyed by the hypothetical

sentence,[17] the verbal predicate of the converted protasis can be a preterital *sḏm.n=f* implying an unfulfilled condition (43), an aorist *sḏm=f* conveying the idea of possibility (44), a subjunctive (45) for deontic modality, or a prospective (46) in temporal contexts ("when"):[18]

(43)   Adm. 12,6   *jr znm.n.tw=n nj gmj.n=j tw*
"If we had been fed (passive *sḏm.n=f*), I would not have found you"

(44)   Peas. B1,85–87   *jr hȝj=k r šj n(j) mȝ'.t sqdj=k jm=f m mȝ'.w nn kfj nby.t ḫtȝ=k*
"If you go down (*hȝj=k*) to the sea of righteousness (*mȝ'.t*) and sail on it (*sqdj=k jm=f*) with the right wind (*mȝ'.w*), no storm (*nby.t*) will strip away (*kfj*) your sail"

(45)   pKahun 6,24   *jr grt mȝn=k ḫ.t ḥr jr.wj=sj nn msj=s r nḥḥ*
"If indeed you see (*mȝn=k*, 4.6.3.2c) something on her eyes, she will never (*r nḥḥ*) give birth"

(46)   Pyr. 1252e–f   *jr prj=f m sbȝ pw jȝb.tj n(j) p.t jn n=f sbȝ pw mḥ.t(j) n(j) p.t*
"If/when he comes out (*prj=f*) of this eastern gate of heaven, bring (*jn*) to him this northern gate of heaven"

Adverbial sentences can be converted into hypothetical clauses by transforming them into verbal sentences governed by a grammaticalized form of the verb *wnn* "to be," mostly the "emphatic" *sḏm=f*. For example, the adverbial sentence **jw=k m sšmy* "you are a leader" is converted into the verbal sentence **wnn=k m sšmy* and introduced by *jr* when functioning as adverbial protasis in hypothetical discourse:

(47)   Pt. 264–65   *jr wnn=k m sšmy ḥr sḏm=k mdw sprw*
"If you are a leader, be pleasing (*ḥr*) when you hear (*sḏm=k*) the word of the petitioner"

In other cases, the element indicating the semantic tie to the main sentence, rather than a preposition or a prepositionally derived conjunction, is a "particle," i.e. a morpheme which functions as complementizer outside the sentence boundary.[19] In these cases, one does not deal with syntactic subordination, but rather with a linkage between two main clauses; the clause introduced by the particle provides contextual background information, and is in this respect semantically dependent upon the main clause, but remains syntactically a nominal, adverbial, or verbal main clause. The most important particles indicating contextual dependence are *jsk/sk* (> *jst/st* > *jst/st*),[20] which often follow the foreground segment of discourse, and *jḫr/ḫr*, which usually precede it. Both of them have a temporal or circumstantial meaning:

(48)   Sin. R 22–24   *bjk 'ḥ=f ḥn' šms.w=f* – see example (27) – *nn rḏj.t rḫ st mš'=f jst hȝb.ø r msj.w-nzw wn.w m-ḫt=f m mš' pn*
"The Falcon flies with his followers, without letting (*nn rḏj.t*, section 6.5.2) his army (*mš'=f*) know it. Meanwhile (*jst*), the royal children who were (*wn.w*) with him (*m-*

ḫt=f, lit. "after him") in this army had been informed (*hȝb.ø r msj.w-nzw*, lit. "ø had been sent to the royal children," perfect passive *sḏm.w=f* with omission of the subject pronoun under relevance)"

(49)   Urk. I 101,2–3   *jnk jrj m zḫȝ w'.k(j) ḥn' zȝb jrj-nḫn w'(.w) sṭ jȝ.t=j m jmj-rȝ ḫntj.w-š prw-'ȝ*
"I acted (participial statement, section 5.4.2) as scribe (*m zḫȝ*) alone (*w'.kj*), with a senior (*zȝb*) warden of Nekhen (*jrj-nḫn*) alone, my rank (*jȝ.t=j*) being that of overseer (*jmj-rȝ*) of the royal tenants"

(50)   Urk. I 83,13–14   *jḫr ḥzj wj ḥm=f rḏj ḫm=f 'q=j r ḫnw-'*
"Since His Majesty (*ḥm=f*) praised me, His Majesty caused me to enter (lit. "caused that I enter") the Privy Chamber (*ḫnw-'*)"

and can appear sometimes combined in the same clause:

(51)   Urk. I 41,12–13   *jḫr sk ḥm=f ḥzj=f sw ḥr=s mȝ sw ḥm=f j.sn[=f tȝ]*
"While His Majesty was praising him (*ḥzj=f sw*) for it, His majesty saw him as he was kissing (*j.sn=f*, section 6.3.2) the ground"

The interface between embedded adverbial clauses and non-initial main clauses, for which Egyptian uses identical sentence patterns, becomes especially clear if we turn our attention to the function of the enclitic particle *js*. Etymologically, this morpheme is the basic constituent of the particle *jsk/jst* referred to above (*jsk < *js=k*), and possibly derives from the ending of a proto-Egyptian locative case (section 4.3.1).[21] Its function can be best assessed if we discriminate between three levels of linguistic analysis:

(a) At the semantic level, *js* transforms a "categorical" into a "thetic" sentence (section 5.3),[22] i.e. into a statement in which a state of affairs is presented globally as a simple assertion, and not, as in the case of the ordinary categorical statement, as the compound of a subject qualified by a predicate or a topic followed by a comment. When accompanying an entire sentence, therefore, *js* embeds it as a whole informational unit into the preceding segment of discourse. This is why this particle is used *inter alia* as a metalinguistic operator[23] in explanatory clauses representing the object of verbs of perception such as *ḏd* "to say," *sḏm* "to hear," *rḫ* "to know" or the like, whether or not introduced by the conjunction *ntt/wnt*:

(52)   CT I 28c–29a B₃Bo   *sḏm=sn ḏd.t=s nb.t nfr m hrww [p]n ntt ṯwt js šw.t tw wbn.t m tȝ-nṯr*
"May they hear all the good things she says (*ḏd.t=s nb.t nfr*) on this day, namely (*js*) that you are (or "yours is") this feather which appears (*wbn.t*) in god's land"

(53)   Urk. IV 363,6–7   *jw ḥm.t=j rḫ.tj nṯrr=f jrj.n=j js (s)t ḥr wḏ=f*
"My Majesty (*ḥm.t=j*, fem.) knows (*rḫ.tj*) that he is divine and that I did this according to his order"

In these sentences, *js* presents the explanatory sentence as a "thetic," i.e. global object of the verbal predication, as the metalinguistic content – as it were – of "saying" or "knowing": "My Majesty knows: *jrj.n=j st ḥr wḏ=f* 'I-did-this-according-to-his-order,'" parallel to the use of a nominal *sḏm=f* (section 4.6.3.1b) in the first explanatory clause: "My Majesty knows: *nṯr=f* 'that-he-is-divine'."

(b) At the discourse level, *js* represents a symmetrical counterpart to *jḫr* or *jsk*, in that it grants pragmatic prominence, rather than backgrounding function, to the sentence in which it appears. The utterance marked by *js* does not convey the discourse *topic*, i.e. the background against which the new information is presented as relevant, but rather a contrastive *focus*, i.e. a contextually unexpected argument or state of affairs:

(54)   Sh.S. 149–54   "Then he laughed at me for what I had said as something he deemed foolish, and he said to me: 'You don't have much myrrh, although you now own incense. *jnk js ḥqз pwn.t 'ntjw n=j-jmj sw ḥknw pf ḏd.n=k jn.t=f bw pw wr n jw pn ḫpr js jwd=k ṯw r s.t tn nj zp mз=k jw pn ḫpr(.w) m nwy* I, on the other hand (*js*), am the ruler of Punt! Myrrh – it belongs to me (*n=j-jmj sw*); this oil which you mentioned (*ḏd.n=k*) you were going to send (*jn.t=f*, lit. "to send it") – there's plenty on this island! And (*js*) when it happens (*ḫpr*) that you depart from this place, you'll never see (*nj zp mз=k*) this island again, since it will have turned (*ḫpr.w*, stative) into water"

(55)   Adm. 12,1   *mnjw pw n(j) bw-nb nn bjn m jb=f 'nd jdr=f jrj.n=f js hrww r nw(j.t)=st* "He is the shepherd (*mnjw*) of everyone (*bw-nb*); there is no evil in his heart. His herds (*jdr=f*) are few, but (*js*) he spends the day (*jrj.n=f hrww*) taking care of them (*r nwj.t=st*, lit. "to take care of them")"

The clauses with *js* convey contextually unexpected information: in (54), the first *js* allows the speaker to emphasize the contrast between the interlocutor's powerlessness and his own prominence, whereas the second instance of *js* creates a pragmatic opposition between the present and the future situation; in (55), it is assumed that, if herds are few, the shepherd would not be expected to spend the day herding them – a contrast which attracts the attentional focus of discourse.

(c) At the syntactic level, *js* is a marker of dependency (section 6.4). In early texts, any sentence type (nominal, adverbial, or verbal) accompanied by this particle is converted into a dependent clause, either nominal (in the case of the object clause of verbs of saying, hearing, or knowing) or adverbial (in the other constructions). What follows are examples of nominal (56), adverbial (57)–(58), pseudoverbal (59), and verbal sentences (60) converted into dependent clauses by means of *js*. In the case of adverbial embedding, the clause is often introduced by an explicit marker of subordination, such as a

conjunction (*n*, *ḥr-ntt*, etc.).[24] The translation techniques may vary, but they should aim to render the interplay of semantic theticity, discourse focality, and syntactic dependency that constitute the functional array of this particle.

(56)   Pyr. 543c   *nḏr.n n=f N sd=k n N js pw nṯr зз nṯr*
"The King has seized (*nḏr.n*) for himself your tail, for the King is a god (*nṯr*), son of a god"

The subordinate clause is an embedded nominal sentence introduced by the conjunction *n* "since, for" (= preposition *n* "to, for").

(57)   Pyr. 884   *rḏj(.w) n=k '.wj hзj n=k rwj.t rḏj(.w) n=k ḫfз.t sbḥ n=k mnj.t wr.t wsjr js m s.t '.wj=f(j)*
"Arms ('*.wj*) have been given to you, ritual dances (*rwj.t*) have come down to you, food (*ḫfз.t*) has been given to you; the Great Reviver (*mnj.t wr.t*) has cried (*sbḥ*) for you – Osiris being in the place of his arms!"[25]

Following the pattern observed in section 6.2, when a main adverbial sentence is transformed into a dependent clause accompanied by *js*, it undergoes the usual conversion into a verbal sentence introduced by a topicalized form of *wnn* "to be"; from an underlying adverbial sentence **jw N pn m-'b=sn* "the King is among them," we obtain:

(58)   Pyr. 1489b–90a   *ḏd=k wnn js N <p>n m-'b=sn nṯr.w jmj.w p.t*
"You will say (*ḏd=k*) that this King is among them (*m-'b=sn*), namely the gods who are (*jmj.w*) in heaven"

In pseudoverbal sentences, however, the conversion does not take place:

(59)   CT VII 475i–j   *ḏd.n=sn jw=j js rḫ.k(w) sn m sšm.w=sn*
"They said that I know them in their behavior"

Finally, example (60) shows the particle *js* converting a verbal sentence into a dependent clause. In this case, the contrast between main and dependent clause evoked by *js* is probably best rendered in English by breaking the discourse continuity:

(60)   Pyr. 777c   *jw.n=ṯ sdḫ=ṯ зз=ṯ jw.n=ṯ js ḫnm=ṯ wrj pn*
"You have come (*jw.n=ṯ*, fem.) that you may hide (*sdḫ=ṯ*) your son – you have come that you may join (*ḫnm=ṯ*) this Great One."

6.3.2 Adverbial phrases

As a rule, Egyptian adverbial phrases – whether they represent a pragmatic focus of the utterance or a mere predicative adjunct – follow the main predication. We saw in sections 5.2.1 and 6.3.1, however, that the particle *jr* "as for," etymologically the full form of the preposition *r* "toward," is used for the topicalization of a phrase (*jr* "as for") or of a clause (*jr* "if"); the

resulting AP is dislocated to the left of the main clause. In rare instances, bare adverbial phrases can also be extraposed to the left of the main clause:

(61)   Adm. 14,14   *mj-m jrf zj nb ḥr smȝ sn=f*
"How can any man (*zj nb*) kill (*smȝ*) his fellow?"

In specific semantic environments, a bare noun phrase can be used as adverbial adjunct, as if introduced by a preposition.[26] This pattern is rather frequent with indications of time:

(62)   Pt. 186   *šms jb=k tr n(j) wnn=k*
"Follow (*šms*) your heart as long as you live (*tr nj wnn=k*, lit. "time-of-your-being")"

and in the colophon formula of a literary text:

(63)   Sin. B 311   *jw=f pw ḥȝ.t=f r pḥ(.wj)=fj mj gm.yt m zḥȝ*
"This is how it comes (*jw=f pw*, section 5.3) from its beginning (*ḥȝ.t=f*, lit. "its beginning") to its end (*r pḥ.wj=fj*) as found (*gm.yt*) in writing"

Nominal phrases are not the only syntactic formations capable of acquiring adverbial function. Verbal and pseudoverbal sentences can also appear embedded as AP without overt markers of adverbialization:

(64)   Sin. B 233–34   *mw m jtrw zwr.tw=f mrj=k*
"The water in the river (*mw m jtrw*) is drunk (*zwr.tw=f*) when you wish (*mrj=k*)"

While the semantic meaning of this type of adverbialization (whether temporal "when you wish," causal "because you wish," hypothetical "if you wish," etc.) remains vaguer than in the cases in which the embedding of a sentence into an adverbial clause is explicitly signalled by a conjunction, its adverbial character is shown by its treatment as adjunct under the control of another phrase,[27] for example the verbal phrase *zwr.tw=f* "it is drunk" in (64). In this environment, the adverbialized VP belongs to the same substitutional category of a simple AP, as shown by a comparison of (64) above and (27) below, an example we already considered in the preceding section:

(27)   Sin. R 21–22   *bjk 'ḥ=f ḥn' šms.w=f* "The Falcon flies *with his followers*"

The treatment of a VP as adverbial adjunct occurs frequently, but not exclusively, as oblique complement of verbs of perception such as *mȝȝ* "to see" or *gmj* "to find." In the case of a verbal form, for example the circumstantial *sḏm=f* in (65)–(66), the controlling element, usually the logical object of the main predication, is resumed by the suffix pronoun of the subordinate adverbial VP;[28] in the case of a pseudoverbal sentence, for example *ḥr* + infinitive in (67), the subject is omitted under agreement if coindexed with the subject of the main predication:

(65)   Sin. B 52–53   *prj-' nn twt n=f mȝȝ.tw=f hȝj=f rȝ-pd.tjw ḥ'm=f rȝ-ḏȝj.w*
"He is a fighter (*prj-'* "one whose arm is stretched") without peer (*nn twt n=f* "without likeness to him") when he is seen (*mȝȝ.tw=f*) charging down upon (*hȝj=f*) the Bowmen and approaching (*ḥ'm=f*) the opponents"

(66)   pKahun 30,30   *gmj.n=j nb=j 'nḫ.w wḏȝ.w snb.w ḫntj=f*
"I found (*gmj.n=j*) my Lord (may he be alive, prosperous and healthy) travelling southward (*ḫntj=f*)"

(67)   Adm. 8,5–6   *mtn nfr zj ḥr wnm kȝ.w=f*
"Look, a man is happy (*nfr zj*) when he eats (*ḥr wnm*) his food (*kȝ.w=f*)"

This last example shows that the coreferential subject of a subordinate pseudoverbal clause is omitted when it is not governed by a verb of perception. But when the subject of the adverbial clause is different from the controlling NP, it remains overt, as is demonstrated by the different treatment of the two adverbial phrases in (68); the coreferential second person subject is omitted before the stative *ḏj.tj*, whereas the non-coreferential *jḥ.w*, i.e. the subject of *ḥr* + infinitive, is overt:

(68)   Sin. B 193–9   *p.t ḥr=k ḏj.tj m mstp.t jḥ.w ḥr jtḥ=k*
"The heaven (*p.t*) is above you (*ḥr=k*), while you are placed in the hearse (*ḏj.tj m mstp.t*) and (while) oxen (*jḥ.w*) pull you (*ḥr jtḥ=k*)"

The transformation of a verbal or pseudoverbal sentence into a controlled AP is, therefore, a different phenomenon from the use of a VP in a main clause following a noun, a topicalized verbal form, or an introductory particle (section 6.2):[29] the former is a truly adverbial conversion, the scope of the VP being restricted to the *adverbial phrase*, whereas the latter is a pattern in which the VP functions as the main predicate of a *verbal clause*. This difference is not recognized by the Standard theory.

Instead of an entire clause (section 6.3.2), the particle *js* can also control a lower adverbial node, i.e. a simple adverbial phrase. In (69), the predicative complement introduced by *m* is further expanded in the two APs controlled by *js*, with the preposition *m* omitted under relevance; in (70), the two adverbial adjuncts introduced by *js* convey the emphasized goal of the state of affairs expressed in the main nominal sentence:

(69)   Pyr. 727b–c   *hȝj n=k m zȝb šm'w jnpw js ḥr ḫ.t=f wpjw js ḫnt jwnw*
"Go down for yourself (*n=k*) as Jackal of Upper Egypt (*šm'w*) – as Anubis on his belly (*ḥr ḫ.t=f*), as Opener (*wpjw*) in front of Heliopolis (*jwnw*)"

(70)   Urk. I 222,18–223,2   *jnk wpj w'r.t tn js r sbj.t ḥr jmj ḥr.t-nṯr js r jrj.t mrr.t(=j)*
"I was the one who opened (*wpj*) this area – on the one hand, in order to react against (*r sbj.t ḥr*) whoever was in the Necropolis, on the other hand, in order to do (*r jrj.t*) what I cherish (*mrr.t=j*)"[30]

6.3.3 Converted vs. unconverted relative clauses

Relative clauses are embedded subordinate clauses used to modify a nominal antecedent.[31] Egyptian syntax exhibits two types of relative clause.[32] The more common one, the "true" relative clause, represents the conversion of a main sentence into a subordinate clause. In the case of a verbal sentence, this syntactic transformation is performed by adjectival forms of the verb, i.e. participles and relative forms; the corresponding patterns will be dealt with in section 7.5. In the case of adverbial (71) or pseudoverbal sentences (72), and only very rarely of verbal sentences,[33] the subordinating morpheme is the relative adjective *ntj* or an adjectival conversion of the verb *wnn* "to be":

(71)   Sin. B 33–34   *mtr.n wj rmṯ.w km.t ntj.w jm ḥn'=f*

"The Egyptians (*rmṯ.w km.t*) who (*ntj.w*) were there (*jm*) with him (*ḥn'=f*) having borne witness for me"

(72)   Urk. IV 386,4–10   *ḥw.t-nṯr nb.t qsj wn.t wȝ.tj r fḫ...sḏsr.n=j sj*

"The temple of the lady of Cusae (*nb.t qsj*) which had fallen (*wn.t wȝ.tj* *"which was having-fallen," participle + stative) into ruin... – I rededicated (*sḏsr.n=j*) it"

In these sentences, when the subject of the relative clause is coreferential with the antecedent, it is omitted under agreement and replaced by the relative converter (73); if it differs from it, it is resumed by a pronoun in the relative clause (74):

(73)   Peas. B1,287   *nj rḫ.n.tw wnn.t m jb*
"That which is in the heart (*wnn.t m jb*) cannot be known"

(74)   West. 11,10–11   *pty nȝ ntt n jj.wn* ?
"What (*pty*) is the reason (*nȝ*, lit. "this") for which (*ntt...r=s*) we (*n*) have come (*jj.wn*, stative)?"

The use of these converted relative clauses, however, is limited to *specific* antecedents: non-specific NPs are modified in Egyptian by adverbial clauses. The adverbial pattern which modifies a non-specific antecedent is called *virtual* or *unconverted* relative clause. Any sentence type (verbal, pseudoverbal, adverbial, or nominal) can be embedded into the main clause as an adverbial phrase modifying a non-specific antecedent; syntactically, these clauses behave exactly like the ordinary adjuncts we discussed in section 6.3.2, as is shown by the identical treatment of the pseudoverbal relative clause *jw=f m jj.t* which modifies *ḥfȝw* "a serpent" in (75) and the similar pattern *jw=f ḥr md.t* controlled by the main verbal clause *sḏm.n=j ḫrw=f* "I heard his voice" in (76):

(75)   Sh.S. 61–62   *gmj.n=j ḥfȝw pw jw=f m jj.t*
"I found that it was a serpent *which was coming*"

(76)   Sin. B 1–2   *sḏm.n=j [ḫr]w=f jw=f ḥr md.t*
"I heard his voice *while he was speaking*"

Thus, any unconverted main sentence can be embedded as adverbial adjunct into a higher syntactic node. When the controlling element is a noun, the AP functions as unconverted relative clause modifying the noun; when the controlling node is an entire clause, it functions as adverbial adjunct modifying the predication. That a virtual relative clause is in fact a sentence embedded as AP modifying a noun clause, is shown by the different possible interpretations and translations which can often be given to a sentence in which this pattern appears, depending on whether one takes the embedded AP to modify the noun, in which case it is a "virtual" relative clause, as in (a) in examples (77)–(80), or the entire predication, in which case it functions as ordinary adjunct, as in (b) in the same passages.

(A)   Embedding of a *verbal* sentence:

(77)   pEbers 91,3   *kt n.t msḏr dj=f mw*
lit. "Another (remedy) of an ear it-gives water"

(a) S^a =› [*kt n.t* [*msḏr dj=f mw*]NP]Pred [*pw*]Subj
"(This is) another remedy for an ear that gives off water"

(b) S^b =› [*kt n.t msḏr* [*dj=f mw*]VP]Pred [*pw*]Subj
"(This is) another remedy for an ear if it gives off water"

(B)   Embedding of a *pseudoverbal* sentence:

(78)   Merikare E 51   *m smȝ(.w) zj jw=k rḫ.tj ȝḫ.w=f*
lit. "Do-not kill a-man you-know his-worth"

(a) S^a =› [*m smȝ.w* [*zj jw=k rḫ.tj ȝḫ.w=f*]NP]
"Do not kill a man whose worth you know"

(b) S^b =› [*m smȝ.w zj* [*jw=k rḫ.tj ȝḫ.w=f*]PseudoverbalP]
"Do not kill a man if you know his worth"

(C)   Embedding of an *adverbial* sentence:

(79)   Sh.S. 119–21   *jw dp.t r jj.t m ḥnw sqd.w jm=s rḫ.n=k* ?
lit. "A boat is toward-coming from-the-residence sailors in-it you-know"

(a) S^a =› [*jw* [*dp.t sqd.w jm=s rḫ.n=k*]NP *r jj.t m ḥnw*]
"A boat in which there are sailors whom you know will come from the residence"

(b) S^b =› [*jw dp.t r jj.t m ḥnw* [*sqd.w jm=s rḫ.n=k*]AP]
"A boat will come from the residence, with sailors in it whom you know"

This last sentence offers an example of a "virtual" relative clause (i.e. the unconverted verbal predicate *rḫ.n=k* "you know" with the omission of the resumptive object pronoun *st* "them," see below) embedded into a higher pattern of the same type (*sqd.w jm=s*).

(D)   Embedding of a *nominal* sentence:

(80)   Peas. R 1.1   *zj pw wn(.w) ḫwj.n-jnpw rn=f*
lit. "It is that a man was – Khuienanup his-name"

(a) S^a =› [[*zj ḫwj.n-jnpw rn=f*]$_{NP}$ *wn.w*]$_{Pred}$ [*pw*]$_{Subj}$
"There was a man whose name was Khuienanup"

(b) S^b =› [*zj wn.w* [*ḫwj.n-jnpw rn=f*]$_{NP}$]$_{Pred}$ [*pw*]$_{Subj}$
"There was a man named Khuienanup"

In converted, i.e. true relative clauses, resumptive pronouns are omitted under agreement when they immediately follow the agreement-carrier.[34] This is most often the case when the resumptive element is the *subject* of the relative clause, whether verbal, in which case the agreement is carried by a participle:

(81)   Disp. 78–79   *mḥj=j ḥr msj.w=s sd.w ● m swḥ.t*
"I shall grieve (*mḥj=j*) for her children who have been broken (*sd.w*) in the egg"

or adverbial, in which case one finds a relative converter:

(82)   Sh.S. 170–71   *'ḥ'.n=j ḥr jꜣš n mꜣ' ntj ● m dp.t tn*
"Then I called out to the crew (*mꜣ'*) which was in this boat"

Omission of the resumptive pronoun can also take place, however, when it indicates the *object* of the verbal action, provided it immediately follows the agreement-carrier, as in (79) above as opposed to (83) below, where the resumptive object pronoun (*st*) is overt:

(83)   Sin. B 144–45   *kꜣ.t.n=f jrj.t=s r=j jrj.n=j st r=f*
"That which he had planned (*kꜣ.t.n=f*) to do (*jrj.t=s* "to do it") to me, I did it to him"

"Virtual" relative clauses, on the other hand, are unconverted; they do not display any adjectival element, whether participle, relative form, or converter, as carrier of the agreement. This explains why their subject always needs to be overt: in the abovementioned example (75), the non-specific *ḥfꜣw* "a serpent," which is the predicate of a *pw*-sentence functioning as object of the VP, is resumed by the subject pronoun in the virtual relative clause *jw=f m jj.t* "which was coming":

(75)   Sh.S. 61–62   *gmj.n=j ḥfꜣw pw jw=f m jj.t*
"I found that it was a serpent which was coming"

S =› [*gmj.n=j* [[*ḥfꜣw jw=f m jj.t*][*pw*]]]
*[I found [[serpent it-is-coming] (is) [this]]]

as opposed to the omission of the subject under agreement in (84), where the object of the verbal predication is a specific noun phrase immediately followed by the stative, i.e. by the pseudoverbal predicate:

(84)   Urk. I 125,15–16   *gmj.n=j ḥqꜣ jꜣm šm(.w) r=f r tꜣ-ṯmḥ*
"I found that the ruler of Yam had himself gone to the land of Libya"

S =› [*gmj.n=j ḥqꜣ jꜣm* [*šw šm.w r=f r tꜣ-ṯmḥ*]]
*[I found the ruler of Yam [he had gone to the land of Libya]]

Being unconverted, virtual relative clauses display no morphological signal of subordination. The only link to the main sentence is represented by the resumptive element; in addition to pronouns, words capable of conveying resumption are the so-called "prepositional adverbs," which are prepositions inflected by means of an invariable adverbializing element -*y* or -*w*, possibly the same morpheme found in the circumstantial forms of the stative.[35] An example is offered by *jry* "thereof, thereto" in (85):

(85)   Sin. R 11–12   *jst rf zbj.n ḥm=f mꜣ' r tꜣ-tmḥj.w zꜣ=f smsw m ḥrj jry*
"Meanwhile (*jst rf*, section 6.3.1), His Majesty had sent off (*zbj.n ḥm=f*) to the land of the Libyans an army (*mꜣ'*) whose leader was his elder son," lit. "his elder son as a leader (*m ḥrj*) thereof"

Thus, both converted and unconverted relative clauses exhibit resumptive elements which point back to the noun phrase they modify. When omission of the resumptive element occurs, it is not caused by grammatical *agreement*, but by semantic *relevance*.[36] Unlike mandatory omission under agreement, omission under relevance is an optional device sensitive to the hierarchies of animacy and salience, with subjects that are low on either of these hierarchies more likely to be deleted. An example of optional subject omission under relevance in "true" relative clauses is provided by contrasting (86), where the omitted subject is inanimate, with (87), where it is animate and overt:

(86)   Neferti 26   *nj zr.n=j ntt nj jj=●*
"I cannot foretell (*nj zr.n=j*) that which (*ntt*) has not yet come about (*nj jj=●*)"

(87)   Peas. B2,80   *m pḥ(.w) ntj nj pḥ=f tw*
"Do not attack (*m pḥ.w*) one who (*ntj*) has not attacked you"

The same distribution characterizes the subject omission under relevance in virtual relative clauses; while in both cases the subject is non-specific, which justifies the use of an unconverted relative clause, it is omitted under relevance in (88), where it is inanimate, but maintained in (89), where it is human:

(88)   Adm. 7,1   *mṯn js jrj(.w) ḥ.t nj pꜣ=● ḫpr*
"Look now, things have been done (*jrj.w ḥt*) which did not use (*nj pꜣ=●*) to happen"

(89)   Peas. B1,204–5   *mk tw m ḥrj-šn'w nj rdj.n=f swꜣ šw ḥr-'*
"Look, you are (like) a storehouse supervisor (*ḥrj-šn'w*) who does not let (*nj rdj.n=f*) a poor man (*šw*) pass in (*swꜣ*) at once (*ḥr-'*)"

6.4   Initial vs. non-initial clauses

6.4.1   General features

In our discussion thus far, we have considered examples of adverbial sentences regardless of the function of the proclitic particle by which they are sometimes introduced. The presence or absence of this morpheme, however, is an important feature in the syntax of adverbial sentences, and its function has been the subject of intense discussion among students of Egyptian.

The general rule is that adverbial and pseudoverbal patterns of the type:

$$S \Rightarrow Particle^{37} + NP + AP$$

are *initial* main sentences, whereas bare patterns of the type:

$$S \Rightarrow NP + AP$$

are *non-initial* clauses, either paratactically juxtaposed to the initial predication as non-initial main clauses or controlled as subordinate clauses by another phrase, according to the patterns described in section 6.3 above. This flexibility displayed by sentence patterns, which can appear both as independent main sentence or as subordinate clause, depending on the syntactic environment, is a common feature of Egyptian syntax, being shared by nearly all patterns, whether nominal, adverbial, or verbal.

The dialectics between the initial (main) sentence introduced by a particle and the non-initial (coordinate or subordinate) bare adverbial clause is captured in the following passage:

(90)   Sin. R 8–11   *jw ḥnw m sgr jb.w m gmw rw.tj-wr.tj ḥtm.w [šny.]t m [tp]-ḥr-mзs.t p'.t m jmw*

"The residence was in silence (*sgr*), the hearts in mourning (*gmw*), the Two Great Portals were shut (*ḥtm.w*), the courtiers head-on-knee (*tp-ḥr-mзs.t*), the nobles in grief (*jmw*)"

Here, the past reference is obviously not an inherent quality of the adverbial or pseudoverbal sentence, but rather a feature derived from the preceding context, which in this case is determined by a narrative infinitive (section 4.6.4b), followed by a series of main verbal or pseudoverbal clauses:

(91)   Sin. R 5–8   *mp.t-zp 30 зbd 3 зḥ.t sw 7 'r nṯr r зḥ.t=f nzw-bjt shtp-jb-r'w shr=f r p.t ḥnm(.w) m jtn ḥ'.w-nṯr зbḥ(.w) m jrj sw*

"Regnal year 30, third month of the Inundation, day 7: Ascending ('r) of the god to his horizon (*r зḥ.t=f*); the King of Upper and Lower Egypt (*nzw-bjt*) Sehetepibre' flew (*shr=f*) to heaven, having become united (*ḥnm.w*) with the sun-disk; the god's body (*ḥ'.w-nṯr*) merged (*зbḥ.w*) with the one who created (*jrj*) him"

It is important to appreciate the difference between "initiality" as a property of *discourse* and "independence" vs. "subordination" as syntactic features of the *clause*. In (90), all adverbial and pseudoverbal clauses are main clauses, in the sense that – if taken individually – they all represent well-formed Egyptian sentences paratactically organized within a chain of discourse. Only the first sentence, however, is introduced by a particle of initiality (*jw*), which indicates that the corresponding adverbial sentence (*ḥnw m sgr*) opens a new segment of discourse. In (91), the discourse setting is provided by the date and the narrative infinitive. The following sentences depend on it from the point of view of the narrative sequence; within this context, the verbal sentence with topicalized subject "the King flew to heaven" and the pseudoverbal sentence "the god's body merged with the one who created him" are both non-initial main clauses paratactically linked to the initial form; the pseudoverbal adjunct "having become united with the sun-disk," on the other hand, is controlled by the preceding VP *shr=f r p.t* "he flew to heaven"; not only is it non-initial, but it is also syntactically subordinate.

The difference between the linguistic levels of clause vs. discourse has not played any tangible role in the Standard theory, which – as one will recall – was primarily interested in the sentence level. Thus, scholars working within that frame have oscillated between three positions: (a) considering adverbial and pseudoverbal clauses not introduced by a particle to be subordinate clauses, the initial sentence introduced by the particle being the only main sentence;[38] (b) as a variant thereof, taking the proclitic particle to apply to all subsequent sentences, but to be – as it were – omitted under relevance;[39] (c) taking bare adverbial and pseudoverbal sentences not introduced by an initial particle to be main clauses which in a chain of discourse become hypotactically linked to the initial sentence; in this case, the particle is thought to convey the syntactic/pragmatic "theme" (or "subject," or "figure") of the entire macrosentence and to function, therefore, essentially as a nominal element, similar to the initial verbal forms *sḏm=f* and *sḏm.n=f* in emphatic function (section 4.6.3.1).[40]

None of these analyses, however, is entirely satisfactory. If option (a) were true, Egyptian discourse would display a strikingly low number of main clauses and an equally surprisingly high number of subordinate clauses, which is linguistically rather unlikely. The difficulty with option (b) is that all forms of omission, including omission under relevance, seem to require in Egyptian specific environments or conditions, whereas in this case the scope of the introductory particle would lack clear boundaries; option (c) requires the assumption of a thematic function for a particle, i.e. for the lowest syn-

tactic element in the hierarchy of animacy and salience.[41] This assumption is equally not convincing.

The analysis presented here draws a distinction between the level of *clause* and the level of *discourse*, and thus provides a satisfactory account of adverbial and pseudoverbal syntax. Adverbial and pseudoverbal sentences introduced by a particle are always main clauses; non-initial patterns may be paratactically linked *main* clauses or embedded *subordinate* clauses. The difference between forms with and without introductory particle lies on the discourse level, in that the sentence introduced by an initial proclitic particle opens a segment of *text*.[42] This discourse opening function need not be filled by a particle; it can also be assumed by a temporal setting, as in example (91) above, by an initial noun phrase, as in (92), or by a verbal sentence, as in (93):

(92)   Pt. 7–19   *jty nb=j tnj ḫpr(.w) jȝw hȝj.w wgg jw.w jḥw ḥr mȝw sḏr n=f ḥdr(.w) r'w-nb jr.tj nḏs.w 'nḫ.wj jmr.w pḥ.tj ḥr ȝq n wrḏ-jb rȝ gr(.w) nj mdw.n=f jb tm.w nj sḫȝ.n=f sf qs mn(.w) n=f n-ȝww bw-nfr ḫpr(.w) m bw-bjn dp.t nb.t šm.t(j)*
"Sovereign (*jty*), my lord! Age (*tnj*) has showed up, old age (*jȝw*) has arrived; weakness (*wgg*) has come, feebleness (*jḥw*) grows; if one tries to sleep, one is in discomfort (lit. "the one who sleeps is discomforted") all day; eyes (*jr.tj*) are dim, ears ('*nḫ.wj*) deaf, strength (*pḥ.tj*) is declining because of exhaustion (*wrḏ-jb*); the mouth is silent and cannot speak (*nj mdw.n=f*), the heart (*jb*) is finished and cannot recall (*nj sḫȝ.n=f*) the past (*sf* "yesterday"); bones ache (lit. "the bone has been aching") completely (*n-ȝww*); good has turned (*ḫpr.w*) into evil; all taste is gone (*šm.tj*)"

(93)   B1,135–37   *ḏd.jn sḫ.tj pn ḥȝw n(j) 'ḥ'.w ḥr sjȝ.t n=f mḥ(j) ky ḥr ḥqs hȝ.w=f sšm r hp.w ḥr wḏ 'wȝ.t*
"Then the peasant said: 'He who measures (*ḥȝw*) the corn-heaps cheats (*ḥr sjȝ.t*) for his own interest (*n=f*); he who fills (*mḥ*) for another steals (*ḥr ḥqs*) the other's property; he who should rule (*sšm*) according to the laws (*r hp.w*) orders theft (*ḥr wḏ 'wȝ.t*)'"

The initial vocative phrase "Sovereign my lord" in (92) and the narrative tense "then the peasant said" in (93) both display the feature [+INITIAL]; they open a discourse unit which is expanded by means of main adverbial or pseudoverbal clauses which lack the initiality feature of the first discourse nucleus,[43] but are paratactically annexed to the initial NP or VP. We also saw that in contexts of syntactic dependency, the same bare patterns can appear embedded as subordinate clauses – a flexibility shared by nearly all Egyptian sentence patterns. Example (94) provides a sequence of two statives, the first of which is the predicate of a non-initial main clause paratactically linked to the initial verbal sentence introduced by the particle *mk* "look," whereas the second functions as subordinate adverbial phrase controlled by the first form, which immediately precedes it:

(94)   Sh.S. 2–7   *mk pḥ.n=n ẖnw...jz.wt=n jj.tj 'd.tj*
"Look, we have reached (*pḥ.n=n*) the residence (*ẖnw*)...and our crew (*jz.wt=n*) has arrived (*jj.tj*) safely ('*d.tj* "it being safe")"

Since they provide the discourse setting by opening a new textual unit, initial particles offer an ideal insight into the interface of syntax, pragmatics, and semantics. Most of them can also introduce verbal sentences, following a pattern of syntactic distribution similar to the one we just discussed: sentences introduced by an initial particle are initial main clauses, bare verbal sentences function either as non-initial main clauses or as embedded subordinate clauses.

Thus, all particles, not only markers of initiality such as *jw* or *mk*, but also the hypotactic *jsk*, *jḫr* or *js* referred to in section 6.3.1, are ideal examples of what contemporary X-bar theory calls "complementizers," i.e. constituents added to a bare sentence in order to generate a specific clausal unit.[44] In this respect, rather than operating with the traditional two levels of clausal linkage (parataxis vs. hypotaxis or coordination vs. subordination), it seems particularly suitable to analyze Egyptian syntactic phenomena positing three "cluster points," representing three different stages of grammaticalization:[45]

(a) *Parataxis*, i.e. the linkage between main clauses. This linkage remains usually unexpressed in Egyptian syntax, as in the case of bare adverbial, pseudoverbal or verbal sentences which follow an initial main clause within a chain of discourse. A specimen of paratactic chain was provided in (90):

(90)   Sin. R 8–11   *jw ẖnw m sgr jb.w m gmw rw.tj-wr.tj ḫtm.w [šny.]t m [tp]-ḥr-mȝs.t p'.t m jmw*
"The residence was in silence, the hearts in mourning, the Two Great Portals were shut, the courtiers head-on-knee, the nobles in grief"

(b) *Hypotaxis*, i.e. a semantic, rather than syntactic dependency of a sentence on the discourse nucleus. Hypotactically linked clauses are usually introduced by particles such as *jsk*, *jḫr* or *js*; their semantic scope and their pragmatic setting can be properly understood only in reference to the message conveyed in the textual nucleus, as in (85), the passage which in Sinuhe's text immediately follows (90):

(85)   Sin. R 11–12   *jst rf zbj.n ḥm=f mš' r tȝ-tmḥj.w zȝ=f smsw m ḥrj jry*
"Meanwhile, His Majesty had sent off to the land of the Libyans an army whose leader was his elder son"

(c) *Subordination*, i.e. the syntactic dependency of a clause on a higher node, which itself can be a main or a subordinate clause. Subordination is

usually signalled by morphological markers such as prepositions (for example *m* "in" > "when") governing nominalized verbal phrases, conjunctions (such as *ḥr-ntt* "because"), or particles (*jr* "if"):

(38)   Urk. IV 897,11–13   *rḫ.n(=j) qd=k twj m zšj m wn=k m šms.wt jtj=j*
"I knew your character while still in the nest, when you were in my father's following"

In the absence of an overt marker of dependency, subordination can also be determined by syntactic control. In this case, one speaks of "embedding," as in the case of adverbial or verbal sentences functioning as virtual relative clauses or controlled by a verb of perception:

(66)   pKahun 30,30   *gmj.n=j nb=j 'nḫ.w wḏз.w snb.w ḫntj=f*
"I found my Lord (may he be alive, prosperous and healthy) travelling southward"

In fact, it is well-known that more explicit devices of clause linkage, such as conjunctions, signal a lower degree of syntactic, pragmatic, or semantic integration than less explicit markers, or no markers at all.[46]

I think that this tridimensional approach can account for most of the uncertainties faced by students of Egyptian in dealing with issues of parataxis vs. hypotaxis.[47] The historical development in later Egyptian is for markers of adverbial hypotaxis to become grammaticalized as introductory particles of a main clause pattern or as signals of syntactic subordination.[48] An example of the former is provided by the evolution of the Present I pattern (section 6.6.1), and of the latter by the grammaticalization of conjugational forms of the verb *wnn* "to be" as converters (past *wn*, prospective *wnn*, nominal *wnn*, and relative *wnn*, *wnn.t*, *wnn.w*, section 7.9) or as conjunction (*wnt* "that").

6.4.2 The proclitic particles *jw* and mk

The most important and complex proclitic particle is *jw*, examples of which we already encountered throughout this chapter.[49] Its semantic scope can be defined as an overt assertion of truth ("truly," "indeed," and the like), i.e. as the explicit positive counterpart to a negative statement (section 6.5); pragmatically, it relates the event described in the verbal or adverbial sentence to the speaker's situation or personal experience – without necessarily implying his direct involvement:

(95)   Sin. B 81–84   [Sinuhe describes the beginnings of his stay in Asia and the generosity displayed by the chief of Upper Retjenu. He is allowed to choose for himself the best available land, a place named Yaa]
jw dзb.w jm=f ḥn' jзrr.t...jw jtj jm ḥn' bd.t
"In it (*m=f*), there were figs (*dзb.w*) together with grapes (*jзrr.t*)...and there was barley (*jtj*) together with emmer (*bd.t*)"

(96)   Sin. B 246   [Sinuhe describes his trip back to Egypt, where he and the Asiatics who accompany him are welcomed with gifts which he distributes to his servants]
dm.n=j w'w jm nb m m=f jw wdp.w nb ḥr jrj.t=f
"I called (*dm.n=j*) each and everyone there (*w'w jm nb*) by name (*m m=f*): every servant (*wdp.w*) was performing his task (*ḥr jrj.t=f* "on his task")"

When compared with other initial particles, however, the complexity of *jw* becomes apparent when we consider its two other uses, which will play a key role in conditioning its functional development in later Egyptian (section 6.6). Unlike other particles, *jw* can also function as mere morphological carrier of the subject pronoun in a bare sentence S => Pronoun + AP, i.e. as semantically and syntactically neutral morpheme which only serves to support the subject of a subordinate adverbial clause. Morphologically, such a sentence will look exactly like an initial main clause introduced by the particle *jw*; syntactically, however, it will appear embedded into the sentential nucleus. We have already encountered this use in examples (75), where *jw* functions as carrier of the third person subject in an unconverted relative clause ("who was coming") – since an interpretation as initial main clause would yield no convincing meaning – and (76), where it introduces the subject of an embedded circumstantial clause ("while he was speaking"). Here are two further examples in which the pronominal subject of an embedded clause (in the first case as a free adverbial adjunct, in the second as object of a verb of perception) is carried by what we might call the "void" *jw*:

(97)   Sh.S. 32–33   *d' prj(.w) jw=n m wзd-wrj*
"A storm (*d'*) came (*prj.w*) while we were at sea (*wзd-wrj* "the Great Green")"

(98)   Sh.S. 72–73   *rḏj=j rḫ=k tw jw=k m ss ḫpr.tj m ntj nj mз.t(w)=f*
"I shall cause (*rḏj=j*) that you find yourself (*rḫ=k tw*) in ashes (*jw=k m ss* "you being in ashes"), having turned into (*ḫpr.tj m*) someone who (*ntj*) cannot be seen"

It will be argued in section 6.6 that this particular function of *jw* is at the root of the functional change this particle experiences in later Egyptian.

We saw in section 5.6 that, in extremely rare cases,[50] *jw* can introduce the subject of an absolute existential sentence[51] consisting only of one element:

(99)   CT IV 29e   *jw ● sšp ḏd N jw ● knḥ ḏd N*
"'There is light (*sšp*),' says the Deceased. 'There is darkness (*knḥ*),' says the Deceased"

This seems to prove that, at least historically, the origin of *jw* has to be sought in a verbal lexeme indicating existence: "there is," "it happens that," and the like. This lexeme was grammaticalized as a complementizer already

in the formative period of the language, leaving only sporadic instances of its earlier, semantically fuller use.

The other frequent initial particle is *mk* "look, behold," which we have already met in many passages above. It too can introduce adverbial, pseudo-verbal, or verbal sentences, conveying a "presentative" function (see Hebrew *hinneh*),[52] i.e. relating the event described in the predication not, like *jw*, to the speaker's sphere, but rather to the moment or the situation in which the speech act is performed:

(100)   Sh.S. 106–8   "Then the boat fell apart, and of those who were in it no one was left except me *mk wj r-gs=k* and look, I am now by you"

Etymologically, *mk* and its variants fem. *mt*, pl. *mtn* are grammaticalized prospective forms of a verb meaning "to see" followed by a second person suffix pronoun: "may you see."

6.5   Negation in adverbial and pseudoverbal patterns

6.5.1   *Negation of adverbial and pseudoverbal sentences*

Negative patterns for adverbial and pseudoverbal sentences follow rather closely the syntactic paradigms and the semantic evolution we observed in dealing with nominal sentences (section 5.7). In early periods, the negation of an adverbial sentence was obtained by placing the basic negative particle *nj* before the sentence:

(101)   Pyr. 890b   *nj sw jr t3 jw N jr p.t*
"He is not towards the earth (*t3*): the King is towards heaven (*p.t*)"

In this earliest stage of the language, the scope of the negative particle can also be a sentence introduced by *jw*:

(102)   Harhotep 67–68   *nj jw=k m p.t nj jw=k m t3*
"You are not in heaven, you are not on earth"

or the converted counterpart of the adverbial sentence, which we observed in examples (22)–(24) above:

(103)   BH I 25,98–99   *nj wnn z3=f hr ns.t=f*
"His son will not be (*nj wnn z3=f*) on his seat (*hr ns.t=f*)"

But the situation changes in classical Egyptian. While the pattern with the particle *nj* is kept alive in the Middle Kingdom for the negation of adverbial sentences with a topicalized subject resumed by a coreferential independent pronoun in the comment:

(104)   Sin. B 185   *shr pn jnj n=f jb=k nj ntf m jb(=j) r=k*
"This plan (*shr*) which took away to itself (*jnj n=f*) your heart – it was not in my heart against you (*r=k*)"

(105)   Sin. B 255   *h3.tj=j nj ntf m h.t=j*
"And my heart (*h3.tj=j*) – it was no longer part of myself (*m h.t=j* "in my body")"

the basic morpheme for the negation of adverbial sentences becomes now the operator of denial $\overset{\wedge}{\smile}$ *nn*, etymologically the result of the addition of an intensifier to the basic particle *nj* (section 5.7). Rather than simply negate the propositional nexus, the predicative operator *nn* affects the "verifiability" of the state of affairs described in the sentence, which is the reason for the use of this particle in the negation of prospective verbal forms as well (section 6.4). Thus, together with the replacement of the contradictory *nj* by the existential *nn*, classical Egyptian documents the exclusion from the scope of negative adverbial and pseudoverbal sentences of the particle *jw*, i.e. the morpheme which conveys an explicit assertion of truth:

(106)   Sh.S. 100–1   *nn wh3 m-hr-jb=sn* "There was no fool among them"

the negative counterpart of **jw (wn) wh3 m-hr-jb=sn* "there was a fool among them," or

(107)   Sh.S. 131   *nn wj m-hr-jb=sn* "I was not among them"

the negative equivalent of a sentence **jw=j m-hr-jb=sn* "I was among them." Similarly, pseudoverbal patterns are also negated by *nn*:

(108)   Sh.S. 73–75   *jw mdw=k n=j nn wj hr sdm=s*
"You talk to me (*jw mdw=k*) to me, but I am not hearing it"

(109)   Merikare E 48   *m sqr(.w) nn st 3h(.w) n=k*
"Do not kill: it is not useful (*nn st 3h.w*) to you"[53]

These constructions, however, are rare in classical Middle Egyptian, the usual form for the negation of a pseudoverbal construction being a negative verbal form:

(110)   Peas. B2,113–14   *mk wj hr spr n=k nj sdm.n=k st*
"Look, I petition you, but you do not hear it"

Only by the end of the classical period, with the syntactic reorganization of the function of *jw*, the pseudoverbal patterns develop full-fledged negative paradigms corresponding to the positive forms *jw=f hr sdm* and *jw=f r sdm*: *nn sw hr sdm* > *nn jw=f hr sdm* "he is not hearing," *nn sw r sdm* > *nn jw=f r sdm* "he will not hear."[54]

(111)   Paheri 7   *mt nn jw=j r w3h=t* "Look (*mt*), I am not going to leave you"

6.5.2 Negation of adverbial phrases

Rather than an entire adverbial sentence, however, negation can also invest an adverbial phrase as one of the syntactic constituents of a sentence. As we observed in section 6.3.2, an adverbial phrase can function in Egyptian either as pragmatic focus, enjoying informational prominence within the utterance, or as adverbial adjunct, providing background information for the understanding of the main predication.

(A) If the adverbial phrase represents the pragmatic *focus* of the utterance, negation is conveyed – as in the case of nominal phrases, see section 5.7c – by the morpheme _⌐⌐ ꜣ_ *nj-js*, which immediately precedes the phrase it refers to, or by its discontinuous counterpart *nj...js*, which wraps the first prosodic unit of the sentence. Rather than the predicative "contradiction" conveyed by the simple *nj*, negative patterns involving *js* indicate "contrariety": the negation does not affect the predicative nexus of the sentence, but is internal to the proposition, the scope of the negation being limited to a *phrase*. The continuous *nj-js* is used with true adverbial phrases involving sharp contrast and is immediately prefixed to the scope of the negation:

(112) Peas. B1,291–92   *jw=k sbꜣ.t(j) jw=k ḥmw.t(j) jw=k t(w)t(.tj) nj-js n 'wn*
"You are educated, you are skilled, you are accomplished, but not (*nj-js*) for the purpose of (*n*) robbing!"

(113) West. 8,12–17   "Then His Majesty said: 'Is the rumor true that you can join a severed head?' And Djedi answered: 'Yes, I can, O sovereign my Lord.' Then His Majesty said: 'Have a prisoner brought to me from the prison, that he may be executed!' And Djedi said: *nj-js n rmṯ.w* 'Not to people, O sovereign my Lord! Look, it is forbidden to do such a thing to the Noble Cattle'"

Unlike its continuous form *nj-js*, the discontinuous *nj...js* does not follow the positive portion of the sentence, but rather surrounds it, with the particle *js* located before the scope of the negation. Besides being of regular use in the negation of a nominal focus (section 5.7), *nj...js* can refer to simple adverbial phrases:

(114) Pyr. 475b–c   *zḫꜣ N m ḏb' wrj nj zḫꜣ=f js m ḏb' šrr*
"The King writes (*zḫꜣ N*) with a big finger; it is not with a little finger (*m ḏb' šrr*) that he writes"

(115) Pyr. 333a–c   *mk N prj.w mk N jwj=f nj jw.n=f js ḏs=f jn jpw.wt =ṯn jnj.t sw*
"Look, the King has arrived! Look, the King is coming! But he has not come (*jw.n=f*) by himself (*ḏs=f*): it is your messages (*jpw.wt =ṯn*) that have fetched (*jnj.t*) him!"

or to pseudoverbal and verbal phrases embedded according to the patterns discussed in section 6.3.2: as predicative complement, such as the *sḏm=f* or the stative in (116)–(116'), and of the complementary infinitive in (117):

(116) Pyr. 833a   *šm.n=k 'nḫ=k nj šm.n=k js m(w)t=k*
(116') CT I 187e   *šm.n=k 'nḫ.t(j) nj šm.n=k js m(w)t(.tj)*
"You have gone away alive ('*nḫ=k/'nḫ.tj*), you haven't gone away dead (*mwt=k/mwt.tj*)"

(117) Pyr. *1947 Ntᵇ   *nj m(w)t.n=k js m(w)t.t 'nḫ.n=k 'nḫ.t m-'b=sn j.ḥm.w-sk(j.w)*
"You haven't really (*mwt.t*, section 4.6.4b) died; you have become alive ('*nḫ.n=k 'nḫ.t*) with them – the Imperishable Stars"

or as "virtual" relative clause with circumstantial *sḏm=f*:

(118) CT II 160b–c   *nj jnk js wꜣḏ swꜣj=f jnk wꜣḏ prj m nb.t*
"I am not a *wꜣḏ*-amulet which passes by (*swꜣj=f*); I am the *wꜣḏ*-amulet which came forth (*prj*) from mankind"

We observed in section 5.7 the impact of the so-called O > E drift,[55] i.e. the tendency for "weak" *contradictory* negations to move toward the "strong" *contrary* pole of semantic oppositions. The same trend is documented in adverbial and pseudoverbal patterns as well: just as the simple *nj* is functionally superseded by its intensified counterpart *nn* in the language of classical literature (section 6.5.1), in non-literary or more recent Middle Egyptian the patterns *nj-js/nj...js* tend to be replaced by *nn-js/nn...js*. Examples of *nn-js* are already found in non-literary texts of the First Intermediate Period (119), and the discontinuous *nn...js* is documented in a Dyn. XVIII copy of a literary text of the Middle Kingdom (120):

(119) Nag' ed-Dér 84, A6–7   "I am successful citizen who lives out of his own wealth *nn-js m gmj.t.n=j m-' jtj=j* and *not* out of (*m*) what was bequeathed me by (*gmj.t.n=j m-'* "what I found from") my father (*jtj=j*)"

(120) Pt. 213–14 (L₂)   *nn zꜣ=k js pw nn msj.n.tw=f js n=k*
"He is not *your* son; he wasn't born (*nn msj.n.tw=f js*) to *you*"

This evolution leads in later Egyptian (section 6.6.1) to a generalized use of *nn...js > bn...jwnꜣ > ⲛ̄...ⲁⲛ* for the negation of all adverbial patterns.

(B) If the negation affects an adverbial adjunct deprived of pragmatic prominence, functioning as background information for the understanding of the main predication, the older phases of earlier Egyptian make use of a negative circumstantial operator *ny*[56] before the embedded verbal phrase:

(121) Pyr. 244b–c   *ḫnd.n N ḥr zbn ḥrw ny rḫ=f*
"The King trod (*ḫnd.n N*) unknowingly (*ny rḫ=f*) on the glideway of Horus (*ḥr zbn ḥrw*)."

(122) Urk. I 232,10–11   *sk ḏd.n ḥm=f mry n(j) ḥm(=j) wḏꜣ=f wr.t ny sqr.n=f*
"Meanwhile (*sk*), His Majesty said: 'It is My Majesty's wish (*mry nj ḥm=j* "the-desired-one of My Majesty"[57]) that he be very prosperous (*wḏꜣ=f wr.t*), without having conducted military actions (*ny sqr.n=f* "while-not he-made-warfare")'"