EGYPTIAN*

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1 INTRODUCTION

The Egyptian language was spoken for over four thousand years, from approximately 3000 BCE to 1300 CE. It is traditionally separated into five distinct stages: Old Egyptian (3000-2000 BCE), Middle Egyptian (2000-1300 BCE), Late Egyptian (1300-700 BCE), Demotic (7th century BCE to 5th century CE) and Coptic (4th to 14th century CE).[1] Written records are attested for each stage, providing a wealth of data on the course of the language over time. However, the fact that the language is no longer spoken poses challenges for the linguist. Phonological and phonetic investigations are based on indirect methodology at best (reconstruction from Coptic, loan words, transcription of Egyptian words into other languages, etc.; see Kammerzell 1998a for extensive discussion). The relation between the text and the spoken language of the time may be distant or distorted, especially considering that many texts from older periods are highly formal in register. Finally, since there are no more speakers of the language, we can never determine whether a given sentence or phrase was ungrammatical in Egyptian, which is key in determining a language's grammatical system.

Nevertheless, despite these difficulties, the dedicated work of Egyptologists for over a century has led to a substantial body of knowledge about the language. Thorough and insightful grammars exist for each stage (see e.g., Edel 1955-64 for Old Egyptian, Gardiner 1957 for Middle Egyptian, Černý and Groll 1993 for Late Egyptian, Johnson 2000 for Demotic, and Layton 2000 and Reintges 2004 for Coptic; among many outstanding others). Diachronic investigations have led to a developed picture of the phonological system (see e.g., Fecht 1960, Osing 1976, Schenkel 1983ab and Peust 1999). There are also several excellent linguistic overviews of the language, including Schenkel 1990 and Loprieno 1995. The reader is directed to these last two sources in particular (as well as Satzinger 2002) for further bibliography on specific topics.

The present work is intended as a bird's eye view of the language for the informed non-specialist, especially those familiar with Semitic languages. There are many controversies within Egyptological linguistics, but the goal here is to present a relatively neutral and universally comprehensible introduction (with bibliographic references provided for those interested in exploring the issues raised).

The chapter is divided into two main parts: a grammatical sketch of Old Egyptian and Middle Egyptian, and a grammatical sketch of Late Egyptian, Demotic and Coptic. As expected, Egyptian underwent significant changes over the four thousand years it was spoken, and the most severe shift occurred between Middle Egyptian and Late Egyptian. Old Egyptian and Middle Egyptian are thus grouped together as "Earlier Egyptian" whereas Late Egyptian, Demotic and Coptic are grouped together as "Later Egyptian." Following discussion of the individual stages is a general discussion of the connections between Egyptian and Semitic and a comparison of the Egyptian and Semitic word stocks (i.e., lexicons). The chapter concludes with four text samples: a Middle Egyptian literary work, a formal Late Egyptian text, an informal Late Egyptian text, and an excerpt from the Coptic translation of the Bible.

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[1] All dates are from Loprieno 1995 and are approximate.

2 EARLIER EGYPTIAN

2.1 Overview and Script

Earlier Egyptian is a cover term for the stages of Egyptian known as Old Egyptian and Middle Egyptian. Old Egyptian was spoken from approximately 3000-2000 BCE during the Old Kingdom and the First Intermediate Period. It is primarily attested in highly formal written records, including the religious lore of the Pyramid Texts (see e.g., Sethe 1908-22, translation in Allen 2005) and laudatory autobiographical inscriptions on the rock-cut tombs (e.g., the autobiography of Harkhuf; Sethe 1932:120-31, translation in Simpson 2003).

Middle Egyptian was spoken from approximately 2000-1300 BCE from the Middle Kingdom to the end of Dynasty XVIII. It is the stage of Egyptian taught in almost all introductory hieroglyphs courses and textbooks, and it is considered the "classical" language of Egypt. It displays a much variety of text types than Old Egyptian, although it also has a significant religious corpus (the Coffin Texts; de Buck 1936-1961, translation in Faulkner 2004). There are also several narrative works of literature, didactic works (often compendiums of sayings), hymns, administrative documents, and a handful of letter archives representing informal speech (see Lichtheim 1973 and Simpson 2003 for significant collections of these works in translation and references to where they were originally published).

There were two scripts used to write Earlier Egyptian: hieroglyphs and hieratic. Hieroglyphs are the instantly recognizable, highly pictorial script strongly associated with Ancient Egypt in popular culture. The script uses pictures of real world items as its graphemic units, as opposed to abstract letters or symbols in the vast majority of writing systems. However, it is not always the case that a picture of an item is meant to represent that item. Very often the rebus principle was used, that is, the picture for word A is used to represent word B that sounds like word A (e.g. in English, a picture of a knight (word A) used to represent the word 'night' (word B)). The rebus principle was relied on so heavily that certain pictures (more technically, signs) became associated more strongly with certain sounds than with what they literally represented. This led to a robust set of signs that were used almost always for their phonological value than for their pictorial value. They differed in whether they stood for one, two or three consonants (called monoliteral, biliteral and triliteral signs, traditionally). The rebus principle, though, is far from the only organizational principle of the hieroglyphic writing system; see Davies 1987, Loprieno 1995:Chapter 2, and Schenkel 1984 for further discussion of its properties.

Hieroglyphs were mostly written on stone media – tomb walls, monuments and the like. Hieratic is a cursivized version of hieroglyphs that was most often written on papyrus for less formal documents like administrative records, letters, and narratives. Möller 1909-36 contains tables of hieroglyphic signs and their cursivized, hieratic equivalents. Both hieratic and hieroglyphs can be transliterated into the Roman alphabet according to Egyptology-particular conventions that were originally proposed in Brugsch and Erman 1889. All examples in this chapter appear in transliteration; however, it should be noted that dashes are used to separate morphemes (as per the Leipzig glossing conventions) instead of the dots and equal signs of Egyptological convention.

2.2 Phonology

An approximation of the consonantal inventory of earlier Egyptian is represented in the chart below, adapted from Loprieno 1995. The typical transliteration corresponding to each phoneme is in parentheses.

Table 1 : Consonants of Earlier Egyptian

	Bilabial		Alveolar		Postalveolar	Palatal		Velar		Uvular	Pharyngeal		Glottal
Stops	p (*p*)	b (*b*)	t (*t*)	t' (*d*)		c (*ṯ*)	c' (*ḏ*)	k (*k*)	k' (*g*)	q' (*ḳ*)			ʔ (none)
Nasal	m (*m*)		n (*n*)										
Trill										ʀ (*ꜣ*)			
Tap/flap			ɾ (*r*)										
Fricative	f (*f*)		s (*s*)	s' (*z* or *s*)	ʃ (*š*)	ç (*ẖ*)				χ (*ḫ*)	ħ (*ḥ*)	ʕ (*ꜥ*)²	h (*h*)
Approximant	w (*w*)					j (*j*)							
Lateral approximant			l (none)										

One of the greatest controversies in earlier Egyptian phonology is the difference between each pair of alveolar, palatal and velar stops. There are two major theories: the difference is voicing (e.g., /t/ and /d/) and the difference is emphasis (e.g., /t/ and /t'/).³ Traditionally, they have been transliterated as if they differ in voice, but this was not meant as a phonological judgment call (see Peust 1999:80). Hoch (1994) vigorously defends the voicing hypothesis, but there is substantial evidence from etymologies, loan words and consonantal incompatibilities for the emphasis hypothesis (collected notably by Rössler (1971); see Schenkel 1990:45ff for detailed discussion). Additionally, if the stops are not emphatic, Egyptian would be the only branch of Afroasiatic that lacks emphatics (as previously believed by e.g., Diakonoff 1965, cited in Satzinger 2002). There have been some attempts to combine the competing hypotheses, including Schenkel 1993 and Loprieno 1995. I have tentatively identified the opposition as emphatic above, but the issue remains open.

Earlier Egyptian had a rich system of fricatives. The mapping between Afroasiatic sibilants and Egyptian sibilants is complex and to some extent unclear (see Loprieno 1995:34). However, what is clear is that the two alveolar sibilants in the chart above were neutralized by the time Middle Egyptian was spoken (although what sound resulted is uncertain). It is difficult to determine what the difference between the two was in Old Egyptian, and the chart follows Loprieno's (1995) suggestion of emphasis (see Peust 1999:126 for a list of alternatives). In contrast, there are fairly clear connections between the further back fricatives and Afroasiatic fricatives (see e.g., Loprieno 1995:35 for a list and Peust 1999: Chapter 3 for general discussion), with the exception of the phoneme /h/ which has no Afroasiatic counterpart.

There are two phonemes that have no corresponding transliteration: the glottal stop and the alveolar lateral approximant. The phonemic status of both is unclear. There is evidence that, during the later parts of earlier Egyptian, the glottal stop started to be used instead of the uvular trill (which itself corresponds to Afroasiatic *r). As for the alveolar lateral approximant, there are no consistent correspondences between it and Afroasiatic *l. Loprieno (1995:31) advances the theory that *l merged with other sonorants in the standard dialect, but was retained in non-standard varieties (see also Peust 1999:128-9). In later stages of the language, /l/ seems to "re-emerge" and a graphemic unit is created for it (See Section 3.2.2).

The stressed vowels of earlier Egyptian were the standard Afroasiatic /i/, /u/ and /a/ (it is more difficult to reconstruct unstressed vowels). Each stressed vowel had a short and long allophone, and the allophony was conditioned by syllable structure (for the relevant rules, see Edgerton 1947, Schenkel 1983a, Loprieno 1995:36-37, among many others; for an alternative view on the vowel system of earlier Egyptian

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² There is some controversy over whether the sign transcribed as ꜥ corresponds to Semitic ꜥ, with some maintaining that Egyptian ꜥ patterns like a dental stop; see Satzinger 2002 for some discussion and further references.

³ A more minor theory is that the difference is one of aspiration, i.e., (/t/ vs. /tʰ/); see e.g., Vergote 1945, Peust 1999:83 and Loprieno 1995:32-35.

and the syllable structure rules, see Peust 1999). There is also evidence that earlier Egyptian, like some other Afroasiatic languages (see e.g., McCarthy and Prince 1990 on Arabic) allowed for extrametrical consonants syllable-finally (Loprieno 1995:36). Stress is conventionally understood as falling on either the final or penultimate syllable, suggesting that earlier Egyptian prefers to have its metrical feet to aligned to the right edge of the prosodic word (see Selkirk 1986 on prosodic words).

2.3 Morphology

2.3.1 General Remarks

Like many Afroasiatic languages, and particularly Semitic languages, earlier Egyptian relied heavily on root and pattern morphology (also known as nonconcatenative morphology). That is, a primary method of word formation in the language was to combine a consonantal root with a series of vowels, intercalating the vowels between the root consonants. The resulting stem could then be combined with additional affixes (mostly suffixes) for further inflection or derivation.

Consonantal roots varied from two to six consonants, the vast majority having either two or three consonants. Roots with a final glide (often *j*) are classed as weak verbs (more specifically, third weak or tertiae infirmae/III.inf for those with three consonants) and they have somewhat different forms when inflected for various grammatical categories. Roots with five or more consonants all involve partial or total reduplication. Some examples of roots are in (1).

(1)   <u>Some Earlier Egyptian Roots</u>

ḏd	'say' (biliteral)
ḥtp	'be pleased, satisfy' (triliteral)
ḥsj	'praise' (weak)
wstn	'stride' (quadriliteral)
nhmhm	'yell' (quinquiliteral, with partial reduplication)
nḏdnḏd	'endure' (six root consonants, with total reduplication)[4]

As in the Semitic languages, there are co-occurrence restrictions on phonologically similar consonants occurring in the same root (also known as the 'Obligatory Contour Principle' (McCarthy 1986); see Reintges 1994 for its application to Egyptian).

Hieroglyphics (and accordingly hieratic) is a purely consonantal script, similar to many Semitic writing systems. Because the vowels were not written, it is more difficult to determine the patterns in use in the language than the roots. Nevertheless, the following table (adapted from Loprieno 1995) should give a sense of the system. The leftmost column provides the consonantal root, the next column the resulting stem when the root is combined with a vocalic pattern, and the next column showing the addition of any affixes. The following column shows the gloss for the affix (or just for the stem if there is no affix), and the final column the translation of the resulting, fully-inflected word.

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[4] This root is found in Old Egyptian. Middle Egyptian mainly used only the partly reduplicated form *nḏdd*. See Allen 2000:153.

Table 2 : Root and Pattern Morphology in Earlier Egyptian

Root	Stem	Affix	Gloss	Word
/s n/ 'sibling'	*san		m.s.	'brother'
		-at	f.s.	'sister'
	*sansan		infinitive	'to be friendly with'
/s ḏ m/ 'to hear'	*saḏam		infinitive	'to hear'
	*saḏim	-na	past tense	'[Subject] heard'
/m n/ 'to be stable'	*man		infinitive	'to be stable'
	*min	si-, -t	causative⁵, causative infinitive suffix	'to establish'

Roots could also undergo morphological processes themselves via reduplication. Total or near-total reduplication was often used to create semantically related words (e.g., *san* 'brother' and *sansan* 'to be friendly with' in Table 2). Reduplication of the final consonant of a root could also express a grammatical category, e.g., that the verb is a participle.

In terms of typological approaches to morphology, earlier Egyptian is fusional (also known as flectional or synthetic; see Comrie 1981:39ff.). That is, it tends to express grammatical categories by adding affixes (including vocalic patterns) to a lexical base (= the root), as opposed to having each grammatical category instantiated as a separate word. These affixes also tend to express multiple grammatical categories at the same time (portmanteau morphemes). One of the most interesting areas of diachronic change in Egyptian is in morphological type, and the language did not remain purely fusional much beyond Middle Egyptian.

2.3.2 Nominal and Adjectival Morphology

In earlier Egyptian, nouns were inflected for number and gender. There were two genders: masculine and feminine (as usual in Afroasiatic languages). Masculine nouns were unmarked for almost all nouns, and feminine nouns take a *–t* suffix (this suffix was preceded by a vowel , most often surfacing as *–at*; see Loprieno 1995:57 and sources cited therein). The feminine *–t* suffix is recognizable as a common feature across Afroasiatic (see e.g., Zaborski 1992:36). Some examples of nouns of each gender are below.

(2)   Masculine   Feminine
        sn 'brother'   *snt* 'sister'
        jtj 'father'   *mwt* 'mother'
        rꜥ 'sun'   *njwt* 'town'

There were three numbers: singular, dual and plural (cf. number in Semitic languages). Singular is unsurprisingly unmarked (at least in the hieroglyphic script). The dual was of limited productivity by the time of Middle Egyptian, occurring only with the number two, paired body parts (e.g., lips) and fixed expressions (e.g., *tꜣ-wj* land-DU 'the two lands = Egypt'). The dual was realized by a suffix, *-wj* for masculine nouns and *–tj* for feminine nouns. The plural was also realized by a suffix, *-w* for masculine nouns, and *–wt* for feminine nouns. Some basic examples of each category are below, with a dot between the root and any following suffixes (as per Egyptological convention).

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⁵ Cf. the Proto-Semitic causative *š-* prefix (as described in e.g., Bergsträsser 1928).

Table 3 : Nominal Inflection for Gender and Number in Earlier Egyptian

	Singular	Dual	Plural	Gloss
Masculine	*sn*	*sn-wj*	*sn-w*	'brother'
Feminine	*sn-t*	*sn-tj*	*sn-wt*	'sister'

Plural formation also caused complicated stem-internal changes in syllable structure and voweling, similar to broken plurals in Semitic. However, as Loprieno 1995 notes, the Egyptian plurals always involve the addition of a suffix as well and never involve just stem modification. See Osing 1976 and Schenkel 1983a (as well as Loprieno 1995: 58ff.) for detailed investigations and voweling of the plural endings.

Earlier Egyptian had no morphological indications of case, i.e., there are no obvious graphemic units that can be identified as case markers on nominals. Pronouns do vary formally depending on position, but their distribution does not map easily onto any standard case alignment (as noted in Satzinger 2002; see Section 2.3.5). Many researchers, though, have identified traces of the standard Afroasiatic (and Semitic) case endings (nominative *-u, accusative *-a, genitive *-i) when nominals are inflected for e.g., plural. See Loprieno 1995:55-56 for an overview of the potential reconstructions as well as Callender 1975b, Zeidler 1992 and Satzinger 2002.

As for adjectives, they generally agree in gender and number with the nouns they modify – taking the same set of endings as Table 3 in the singular, a masculine plural ending of –*w* and a feminine plural ending of –*t* (i.e., there is no number distinction in the feminine agreement markers). Earlier Egyptian also has *nisba* (noun-derived) adjectives, similar to *nisba* adjectives in Arabic. An –*j* suffix could be added to a noun or preposition to make it adjectival, e.g., *jmn.t* 'the right side' *jmn.tj* 'west' (see Loprieno 1995:56 for further examples). Ray (1999) derives the vocalization patterns of adjectives in Egyptian, and compares them briefly to those in Semitic.

2.3.3 Verbal Morphology : Finite Verbs

The verbal system is one of the most complex aspects of the Egyptian language. It underwent upheaval throughout the history of the language -- even between Old Egyptian and Middle Egyptian various paradigms collapsed, as discussed below. It is also more difficult to reconstruct than nominal morphology because diachronic changes often obscured the original forms. Additionally, many of the alleged alternations are only detectable through the formal alternations in the weak verbs, which may in fact be purely orthographic adjustments. The number of different alleged forms can be dizzying and the semantic distinctions between them vague. There has also been much controversy within Egyptology over how the system as a whole should be analyzed (especially concerning the 'Standard' theory developed by Polotsky (1976)). Here the verbal system is boiled down to essentials using terms familiar from cross-linguistic descriptive linguistics (primarily tense, aspect, mood, and voice) so that its overall structure can be grasped more easily. For detailed treatments of the verbal system of earlier Egyptian, see Allen 1984, Doret 1986, and Loprieno 1986a among others. For cogent summaries of the system and thorough references, see Loprieno 1995:72ff. and Schenkel 1990:Chapter 3 as well as Eyre 1989. The description below largely follows Loprieno 1995 in structure and content.

Like most languages, earlier Egyptian had two main types of verbs: finite and non-finite. Finite verbs are inflected for tense, whereas non-finite verbs are not. This section describes the finite verbal morphology, and the following section describes the non-finite verbal morphology. The two main detectable points of variation across paradigms are (a) the presence or absence of a given suffix (almost always located immediately after the verb root) and (b) the presence or absence of reduplication of a root consonant.

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In earlier Egyptian, past tense was indicated by an *–n* suffix on the verb, resulting in what is traditionally called the *sḏm-n-f* form 'he heard': *sḏm* 'to hear' is the traditional verb used to exemplify a paradigm, *-n* is the past tense suffix, and *–f* is the third person masculine singular pronominal suffix (see Section 2.3.5 on pronouns).[6] The suffixal pronominal subject on most Egyptian verbs has led to Egyptian being identified as having a 'suffix conjugation,' as opposed to the prefix conjugation in other branches of Afroasiatic (Satzinger 2002).[7] In the *sḏm-n-f*, there is reduplication of the final consonant of a couple of subclasses of roots (e.g., the 'second geminating' roots), but not most.

Loprieno (1995:77) identifies two additional past tense forms in Old Egyptian: the 'indicative' *sḏm-f* and the stative *sḏm-w*(the latter also known as the old perfective or pseudoparticiple). The indicative *sḏm-f* was no longer used by the time of Middle Egyptian, but the stative remained. The stative was, however, more limited in use in Middle Egyptian than the *sḏm-n-f* -- it was used only with verbs of motion or in contexts of secondary predication (e.g., the underlined phrase in *She found the teacher occupied with grading*). Morphologically, the stative is most recognizable by the agreement suffixes that follow it; the *–w* is a third person masculine singular agreement suffix (see Table 4 below for the full paradigm). The stative also involves some stem alternations, e.g., reduplication for the causative of the second geminating roots. It is also uniquely preceded by its subject (see Section 2.4).

Nonpast tense was indicated by using the unmarked *sḏm-f* form 'he hears,' consisting of just the verbal stem and the subject. Only second geminating roots reduplicate in the *sḏm-f*. Different verb forms in Egyptian vary in whether they can be the initial element in a sentence, and the *sḏm-f* is non-initial since it must be preceded by a particle or by a topicalized phrase. In the Standard theory of Egyptological linguistics (Polotsky 1976), the *sḏm-f* is called the "circumstantial *sḏm-f*" and identified as adverbial due to its ability to form part of a clausal adjunct. However, as argued in Collier 1990, these forms are in fact verbal (in terms of their syntactic category) and are commonly used as main verbs in canonical sentences.

A related verb form is the *sḏm-f* with reduplication in third weak verbs (e.g., *ḥss=f* from the root *ḥsj* 'to praise'). This form is often called the "nominal" or "emphatic" form due to its use as a complement to verbs and in cleft sentences to indicate emphasis on the predicate. This form is often compared to other Semitic verb forms (e.g., the Akkadian *iparras*) because of the reduplication and its nominal source; see discussion in Loprieno 1995:79.

The stative could also be used to convey nonpast meaning, most often with adjectival verbs.[8] In general, it should be noted that, the interpretation of tense on embedded verbs is often contextually determined -- past tense indicates previous to the main clause and present tense indicates contemporaneousness with the main clause (see discussion in Loprieno 1995:190).[9]

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[6]It is possible that the *sḏm-n-f* has more of a present perfect flavor than a true past tense. The relative roles of tense and grammatical aspect (imperfect vs. perfect) are one of the areas of controversy within Egyptological linguistics. Here I follow Loprieno 1995 in opting primarily for a tense-based description. Satzinger (2002) suggests that the historical origin of *–n* is possibly the homophonous preposition *n* 'of' that is used to express genitival relations, perhaps putting the past tense *n-* more on a par with the perfect auxiliary 'have' in Western European languages.

[7] Some Semitic languages have developed suffix conjugations later, e.g., verbal nouns in the adverbial accusative in Ge'ez and the 'new perfect' in Syriac. See Satzinger 2002 for examples and discussion.

[8] It has been argued that the two uses of the stative (very roughly, nonpast meaning with adjectival verbs, past tense with verbs of motion) actually correspond to two subtly different verb forms. See Schenkel 1994, Satzinger 1998 and Satzinger 2002 for argumentation. The nonpast use in particular has been argued to take the form **saḏm-V:-kVw* (for the first person singular) where the capital v's are unspecified vowels and ':' indicates length. This renders the nonpast use similar to the statives in Akkadian, making the stative/perfect distinction perhaps a proto-Afroasiatic feature. See also Oreal 2009 on the connection between statives in Egyptian and statives in Akkadian.

[9]Earlier Egyptian also featured a set of 'contingent' verb forms that convey dependence on the previous event in a narrative. These forms vary in tense (and/or mood) – they are *sḏm-jn-f* 'then he heard,' *sḏm-ḫr-f* 'then he hears,' and *sḏm-k3-f* 'then he will hear.' See Depuydt 1993a for a detailed investigation.

Mood is perhaps one of the slipperiest categories to identify in the Egyptian verbal system. Easiest to pick out is the imperative which took the form *sdm* for the typical triliteral root and *ḥsj* with third weak roots, with plural suffix −*w* and −*j* respectively. In Old Egyptian, there were two main forms that convey additional distinctions in mood: the prospective and the subjunctive. The prospective was used in a variety of contexts (see the list in Loprieno 1995:81), most notably for mood in the antecedent of conditionals and after verbs which convey expectation, wish or desire (e.g., 'want'). The subjunctive is described as the mood of 'command' (often best translated with 'shall' or as a future tense) and it was also used after the predicate for 'to allow.'

The prospective and subjunctive collapse into a single form in Middle Egyptian which is typically referred to as just the prospective. In Middle Egyptian, the prospective is most often used as a main verb with future tense or after predicates of wish or command, and is capable of appearing clause-initially (i.e., without an initial particle).

So far, no single grammatical category has mapped neatly onto one single form, and voice is no exception. There are three main passive forms in earlier Egyptian, although they differ in frequency and (slightly) in use between Old Egyptian and Middle Egyptian. They are the stative (again), the *sdm(w)-f* and the *sdm-tj/tw-f* (*tj* in Old Egyptian, *tw* in Middle Egyptian).[10] In Old Egyptian, the stative and the *sdm(w)-f* form were used to passivize (non-initial) *sdm-n-f* forms – the stative for states and the *sdm(w)-f* for eventive verbs. In Middle Egyptian, the distinction between the two became syntactic instead of semantic: the stative was used for pronominal subjects and the *sdm(w)-f* for full noun subjects. The *sdm-tw-f* was used throughout to passivize nearly all the other verb forms, including the contingent verbs (see fn. 9).

Earlier Egyptian also contained a set of finite 'relative' verb forms. These verb forms are used in relative clauses with definite (and/or specific) head nouns where the relativized category is not the subject of the relative clause (e.g., *the coffee which I drank, the coffee which you put on the table, the coffee whose flavor is strong*, etc.). There are three identifiable forms, exemplified here with the third weak verb *jrj* 'to do/make': past form *jrj-n-f* 'which he made', present form *jrr-f* 'which he makes', and prospective *jrjw-f* 'which he will make.' These forms agree in gender and number with the head noun, taking a null suffix generally for masculine, a −*t* suffix for feminine and a −*w* suffix for plural.

Finally, it should be noted that only the stative among all the (non-relative) verb forms shows overt agreement. It agrees with the subject. Its agreement suffixes are below; there were some minor changes in the endings from Old Egyptian to Middle Egyptian, and the forms in the table are for Middle Egyptian (see Loprieno 1995:65).

Table 4 : Middle Egyptian Agreement Suffixes on Stative Verbs

	Singular	Plural
First Person	-*kw*	-*w*(*j*)*n*
Second Person	-*tj*	-*tw*(*j*)*n*
Third Person	-*w* / ∅ (masc.), -*tj* (fem.)	-*wj* (masc.), *tj* (fem.)

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[10] Other passive forms include the prospective passive which is the passive of (unsurprisingly) the prospective. See Loprieno 1995:84-85.

2.3.4 Verbal Morphology: Non-Finite Verbs

There are two main types of non-finite verbs in earlier Egyptian: participles and infinitives. The participles are the syntactic counterparts of the relative verb forms (see above) in that they are used in relative clauses with definite (and/or specific) head nouns, but those where the relativized category is the subject of the relative clause (e.g., *the coffee which spilled on the desk*). They come in two types, traditionally called perfective and imperfective, with active and passive voice forms attested for both types. The perfective participles have reduplication of the final consonant for certain roots in the passive (but are otherwise of the general form *sḏm*), and the imperfective participles have reduplication of the final consonant in both voices for certain roots with an additional –*w* suffix for some forms in the passive. In Old Egyptian, there was an additional prospective participle that was morphologically similar to the other types, but it is rare in Middle Egyptian. Middle Egyptian instead uses the form *sḏm-tj-fj* as the future participle. Like the relative verb forms, all participles agree in gender and number with the head noun of the relative clause.

Infinitives in earlier Egyptian are roughly similar to infinitives cross-linguistically --- nominalized forms of a verbal root. They do not generally convey voice, tense or aspect distinctions (but see Loprieno 1995:88 for a few potential counterexamples). Their main formal distinction is a –*t* suffix for certain roots (third weak, causatives) and a reduplication of the final consonant of a subset of the biliteral roots (second geminating). Syntactically, they have the same distribution as nominals.

One of the most common uses of infinitives is in periphrastic expressions to convey progressive aspect or future tense: the preposition "upon" (*ḥr*) plus an infinitive can serve as a main clause predication with progressive aspect, whereas the preposition "at" (*r*) followed by the infinitive can serve as a main clause predication with future tense. These constructions (along with clauses with stative verbs) are sometimes called the "pseudoverbal" constructions within Egyptological linguistics. An example of a *ḥr* plus infinitive construction is in **Error! Reference source not found.** and a *r* plus infinitive example is in (4) (both in Middle Egyptian). Note that the segmentation of the transliteration departs from Egyptological convention in order to have as clear a relationship as possible between the transliteration and the gloss. Parentheses indicate an unwritten letter that has been put back in to the text for grammatical clarity.[11]

(3)   *ḫt-w   ḥr   gmgm*
       tree-PL PROG break.INF
       'The trees were breaking.' (Sh. S, 59; see Middle Egyptian text below)

(4)   *jw   dp-t   r   jj-t   m   ẖnw*
       PCLE boat-F FUT come-INF from home
       'A boat will come from home.' (Sh. S, 119-120; Gardiner 1957:253)

2.3.5 Pronouns, Demonstratives and Prepositions

Earlier Egyptian had three series of pronouns, traditionally referred to as the suffix pronouns, the dependent pronouns and the independent pronouns. See Kammerzell 1991 for a study of the pronouns in their Afroasiatic context (as well as Loprieno 1995:63-71). The suffix pronouns were suffixes, and they had three main uses: subjects of sentences with verbal predicates, possessors and objects of prepositions. Their paradigm is in the table below.

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[11] All glosses are in accordance with the Leipzig Glossing Rules: http://www.eva.mpg.de/lingua/resources/glossing-rules.php. Additional abbreviations used are: 2 – second tense, ADJV – adjectival verb prefix, AGENT – marker of the semantic Agent, EMPH – emphatic verb, LINK – linker, PCLE – particle, PCPLE – participle, PROS – prospective verb, REL – relative verb, RELPRES – relative present, STAT – stative verb

Table 5: Middle Egyptian Suffix Pronouns

	Singular	Plural
First Person	*-j*	*-n*
Second Person	*-k* (masc.)*, -t̲* (fem.)	*-t̲n*
Third Person	*-f* (masc.), *-s* (fem.)	*-sn*

The dependent pronouns are sometimes called the enclitic pronouns due to their status as second position (Wackernagel) clitics. They serve as direct objects, as well as subjects of clauses with adjectival predication and copular clauses with prepositional phrase predicates (sometimes called adverbial predication). Their paradigm is below. The third person singular pronoun *st*, which was first used in Middle Egyptian, can be either singular or plural and most often refers to inanimate entities.

Table 6: Dependent Pronouns in Middle Egyptian

	Singular	Plural
First Person	*wj*	*n*
Second Person	*t̲w* (masc.) *,t̲n*(fem.)	*t̲n*
Third Person	*sw* (masc)*, sj* (fem.), *st*	*sn, st*

The independent pronouns have the most restricted set of uses: subjects of copular clauses with nominal predicates, subjects of clefts where the subject is focused, and, in Old Egyptian, as the subject of a copular clause with a prepositional phrase predicate.

Table 7: Independent Pronouns in Middle Egyptian

	Singular	Plural
First Person	*jnk*	*jnn*
Second Person	*ntk* (masc.)*, ntt̲* (fem.)	*ntt̲n*
Third Person	*ntf* (masc.)*, nts*(fem.)	*ntsn*

In all the pronominal paradigms, note that there are separate gender forms in the second person singular, a standard Afroasiatic trait.

As for demonstratives, each demonstrative in earlier Egyptian is decomposable into a morpheme that expresses phi features (person, number, gender) and a morpheme that expresses deixis. The basic paradigm for Middle Egyptian is below.

Table 8: Demonstratives in Middle Egyptian

	Masculine Singular	Feminine Singular	Plural
This (formal/archaic)	*pw*	*tw*	*nw*
This	*pn*	*tn*	*nn*
That	*pf*	*tf*	*nf*
This, the	*p3*	*t3*	*n3*

The morpheme *p-* is masculine singular, *t-* is feminine singular, and *n-* is plural, whereas *−w* is a formal/archaic proxal demonstrative, *-n* is the typical proxal demonstrative, and *-f* is the distal demonstrative. The meaning of the series of demonstratives ending in *−3* can be difficult to nail down; they are usually best translated as 'this' or, with even more semantic bleaching, as a definite article (which the language otherwise

lacked).[12] Old Egyptian had a different series of plural demonstratives (*jpn, jpf, jpw* for masculine, *jptn, jptf* and *jptw* for feminine). They are almost never used in Middle Egyptian, with the *n-* series taking over. Technically, the entire *n-* series of demonstratives are pronouns. Instead of following the noun like the *p-* and *t-* series (see Section 2.4), they stand in a genitive relationship to it (e.g., *nn n sjrw-w* 'these of official-PL' = 'these officials'). See Gardiner 1957:85-87 and Loprieno 1995:68-69.

Earlier Egyptian contained a large number of prepositions, which could be followed by a full noun or a suffix pronoun. A list is below, including their potential Semitic correspondences based on Loprieno 1995 (100).

Table 9 : Common Prepositions in Earlier Egyptian

Preposition	Gloss	Semitic correspondence
m	'in, by, with, at'	**b*
r	'toward, more than'	**'l*
n	'to, for'	**l*
jn	'by (agentive)'	Arabic *'inna*
ḥr	'on, because, through'	**'al*
ḥnᶜ	'together with'	Arabic *'inda*

Nisba adjectives were also commonly derived from prepositions, e.g., *jmj* 'which is in' derived from the preposition *m* 'in.'

2.4 Basic Clause Structure

Earlier Egyptian had canonical VSO word order.

(5) *jsṯ   gm-n   ḥm-f   r-pr   pn m ḏb-t*
PCLE find-PST Majesty-3MSG temple this in brick-F
'His Majesty found this temple in brick.' (Urk IV, 879, Gardiner 1957:330)

It shares certain typological characteristics with other verb initial languages including: having prepositions, lacking a verb 'have,' copular clauses that lack verbs, and adverbial subordinators ('when,' 'because') preceding the clause they subordinate (see Dryer 2007, Carnie and Guilfoyle 2000 for how these properties are correlated with verb initiality, although see Carnie, Harley and Dooley 2005 for an alternative perspective). Indirect objects and adjoined prepositional phrases follow the direct object, in that order (Callender 1975a:65). An example showing the relative ordering of direct object and indirect object is in (6).[13]

(6)   *rdj-n-j   ḥknw n mntw*
give-PST-1SG praise to Montu
'I gave praise to Montu.' (Sin. B 41-42, Allen 2000:226)

Many earlier Egyptian sentences begin with *jw*, a member of a syntactic category traditionally called 'particles' and also including *mk*, *jḫ*, *jsṯ* and others (see Gardiner 1957:175-182). I follow Loprieno 1995 in

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[12] Loprieno 1995:68 suggests that they are used for vocative reference: *p3 mrjj* 'O beloved one!'
[13] These word order facts hold when all verbal arguments are non-pronominal. When the direct object is a dependent pronoun, it cliticizes to the verb and thus precedes the subject. The same goes for an indirect object when it is a pronoun (or more specifically, a preposition and a pronoun). When both the direct object and the indirect object are pronominal, the indirect object precedes the direct object. Whenever the subject is pronominal, though, it is a suffix on the verb and thus remains the closest element to the verb. (see the suffix pronouns in Section 2.3.5). See Gardiner 1957:54ff. for description and examples.

considering these particles discourse or textual markers of some kind, used to mark the beginning of a textual unit like a paragraph (although with certain verb forms, e.g., the prospective, their presence is not required even when the verb starts a textual unit). Their analysis, and accordingly the analysis of earlier Egyptian narrative, has been heavily researched and remains an area of dispute. See Loprieno 1995:162-168 for a review of the most prominent analyses and justification of a discourse-related viewpoint.

Earlier Egyptian had an alternate SVO word order obligatorily used with stative verbs (see Section 2.3.3 for more information on stative verbs).

(7)   *jw   ntr   pn   wdꜣ-Ø   m   ḥtp*
        PCLE god this proceed.STAT-3MSG in peace
        'This god has proceeded in peace.' (Mar. Abyd. ii, 29, 16, Callender 1975a:39)

Stative verbs also must agree overtly with their subjects, and see Kramer 2009 for an analysis of earlier Egyptian word order that connects the presence of agreement to SVO word order.

Earlier Egyptian displays a great richness in the syntax of copular clauses depending on the type of predicate: a nominal phrase, an adjective phrase or a prepositional phrase/adverb. Nominal predicate clauses have two main patterns: [Predicate *pw* Subject] and [Subject *pw* Predicate]. An example with the former order is in (8).

(8)   *dmj-t   pw   jmn-t*
        residence-F pw   west-F
        'The West is a place of residence.' (Disp. 38, Loprieno 1995:105)

If the subject is a first or second person pronoun, the independent pronouns are used. The order is [Pronoun Predicate] and *pw* is not present.

(9)   *ntk   jtj   n   nmḥw*
        2MSG father to orphan
        'You are a father to the orphan.' (Peas. B1, 93, Loprieno 1995:105)

If the subject is a third person pronoun, there is no independent pronoun and the order is [Predicate *pw*].

(10)   *ḥḳꜣ-f   pw*
        ruler-3MSG pw
        'He is its ruler.' (CT VI 155f B₁Bo, Loprieno 1995:104)

The element *pw* in (8) may appear to be a copula, but given its absence in (9) and its obligatory presence in (10), it seems to be best analyzed as a third person demonstrative pronoun (as it is elsewhere in the language, see Section 2.3.4). Gardiner (1957:102ff.) argues that *pw* is a demonstrative pronoun even in (8), and that the subject stands in apposition to *pw* at the end of the sentence. In contrast, Loprieno (1995:105) states that *pw* is a copula only for examples like (8).

Further evidence that *pw* is not a (universally used) copula is that it is not attested in any of the other types of copular clauses. Adjectival predicate clauses tend to display the order [Predicate Subject] and never have *pw*.

(11)   *nfr   mtn-j*
        good   path-1SG
        'My path is good.' (El. P., B, 1, Callender 1975a:68)

Adjectival predicate clauses also use dependent pronouns for all pronominal subjects (instead of a mixture of *pw* and independent pronouns).

(12) *nfr tw¹⁴   ḥnꜥ-j*
      good 2MSG with-1SG
      'You are well off with me.' (Sin. R, 31, Callender 1975a:68)

Adjectival predicates do not agree with their subjects (Loprieno 1995:113).[15]

    Adverbial or prepositional phrase predicates (traditionally all called 'adverbial') display a [Subject Predicate] word order, again without *pw*.

(13) *jw dꜣb-w jm-f   ḥnꜥ j3rrt*
      PCLE fig-PL in-3MSG with grapes
      'Figs were in it, along with grapes.' (Sin. B 81, Callender 1975a:69)

The 'pseudoverbal' constructions in **Error! Reference source not found.** and **Error! Reference source not found.** from Section 2.3.4 above are a type of prepositional phrase predicate as well. Clauses with stative verbs (e.g., (7)) are also traditionally called pseudoverbal, and as a whole the adverbial and pseudoverbal clauses pattern together in Egyptian grammar (e.g., they form the 'first present' verbal form in Late Egyptian; see Section 3.3.3). . In having a separate syntactic pattern for copular clauses with prepositional phrase/adverbial predicates, Egyptian deviates from Semitic but is in accord with many other African languages (see e.g., Satzinger 1997:40-41).

2.5 The Structure of Nominal Phrases

    Within the nominal phrase, the noun is generally the first element. It can be followed by demonstratives, quantifiers, adjectives, possessive phrases, adjuncts and/or relative clauses, in that order (Callender 1975a:63). The only two types of elements that can precede the noun are the quantifier/adjective *kj/kt* 'other' and the weak demonstrative/definite article *p3/t3/n3* (see Section 2.3.5). Two complex noun phrases are in (14) and (15), illustrating some of the ordering principles above.

(14) *n3 n jt   ntj   m p3 mẖrw*
      this of barley which in the storehouse
      'this barley which is in the storehouse' (El. P. R, 4, Callender 1975a:64)

(15) *jnw   nb nfr n Sẖtẖm3t*
      produce all good of Wadi.Natrun
      'all good produce of the Wadi Natrun' (El. P. R, 35, Callender 1975a:64)

Demonstratives and adjectives agree with the noun in number and gender (see Sections 2.3.2 and 2.3.5 respectively for the morphological details).

    The possessive phrase 'of Wadi Natrun' in (15) contains the morpheme *n*, traditionally called the "genitival adjective" since it agrees in gender and number with the possessum. It is usually best translated as 'of.' Similar 'agreeing' genitive prepositions can be found in Hausa (Tuller 1986) and many Bantu languages

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[14] The second person singular masculine dependent pronoun *ṯw* is sometimes written as *tw*.
[15] An alternative way to form an adjectival predicate is by making the adjective a stative verb (Section 2.3.3). This most often occurred when the subject of the clause was syntactically or prosodically heavy; see Loprieno 1995:113.

(Carstens 2000, Baker 2008:20-21). This possession strategy is often called the 'indirect genitive' and contrasts with the so-called 'direct genitive' where the possessor immediately follows the possessor.

(16)   *ḥm*   *ntr*
       servant god
       'servant of god' = 'priest'

The direct genitive is a kind of construct state (e.g., the possessor and possessum cannot be separated; Gardiner 1957:65), although it was not as frequently used in earlier Egyptian as it is in the Semitic languages. The direct genitive was used most often for inalienable possession (*s3-nsw* 'son of the king' = 'prince') and for fixed phrases like titles. See Loprieno 1995:56-57 for some discussion of the stress pattern of direct genitives, which tended to be stressed as if they were one prosodic word.

        As for relative clauses, they can be sorted into two main types depending on the specificity and/or definiteness of the head noun. If the head noun is non-specific, then it is modified by a 'virtual relative clause' i.e., a clausal adjunct which may be best analyzed as a correlative (Kramer 2008). If the head noun is specific, then there are three main strategies: participles (Section 2.3.4), relative verbs (Section 2.3.3), or the complementizer *ntj*. The participles and relative verbs are generally used when the relative clause is verbal, whereas *ntj* is generally used when the relative clause is a copular clause. Furthermore, as noted above, participles are used when the subject of the relative clause is the same as the head noun, whereas relative verb forms are used when the subject of the relative clause is different from the head noun. Examples are below.

(17)   *Stj-w*   *jw-w*   *m-s3-j*   **Participle**
       Asiatic-PL come.PCPLE-PL in-back-1SG
       'the Asiatics who had come in my company' (Sin. B245, Gardiner 1957:282)

(18)   *mḫ3-t*   *tw*   *n-t*   *rꜥ*   *f33-t-f*   *m3ꜥ-t*   *jm-s*   **Relative Verb**
       scale-F that.F of-F Ra carry.REL-F-3MSG truth-F in-3FSG
       'that scale of Ra in which he carries truth (= uses truth as a weight)'
       (Lac. TR 37,3, Callender 1975a:80)

(19)   *ḫntj-f*   *ntj*   *m*   *ḥwt-ntr*   ***Ntj* Complementizer**
       statue-3MSG COMP in temple
       'his statue which is in the temple' (Siut I, 290, Callender 1975a:82)

Participles, relative verbs and *ntj* agree in gender and number with the head noun, e.g., the relative verb has a feminine marker *–t* when it modifies the feminine head noun *mḫ3t* 'scale' in (18) (see Sections 2.3.3 and 2.3.4 for the morphological details). The internal structure of all relative clauses is the same as the structure of the corresponding main clause (Callender 1975a:67). Relative clauses contain gaps in the position of the relativized category if it is a subject or direct object (as in (17) and (19)), but have resumptive pronouns in all other positions (indirect object, genitive, object of a preposition, etc.; see (18) and Callender 1975a:80).

2.6 Subordination, Coordination, Negation, Interrogatives

2.6.1 Subordination

        There are two primary ways to subordinate a clause cross-linguistically: (a) as an argument of a main verb (e.g., *I know that you went to the theater yesterday*) or (b) as a modifier of a main clause, i.e. as an adjoined adverbial phrase (e.g., *I went to the theater yesterday while/after/since/although you went to the zoo*). As for (a), the subordinated clauses often can differ within a language as to whether they are finite (see example above) or non-finite (*I want to go to the zoo*). Earlier Egyptian makes use of this distinction in finiteness, although non-

finite subordinated clauses are more common. Verbs can select as an argument either a non-finite clause (containing an infinitive) or a finite clause (often containing a prospective or emphatic verb). See Callender 1975a:72-3 for a list of verbs and the types of clauses they select for. In (20) is a verb that takes a non-finite clausal argument and in (21) a verb that takes a finite clausal argument.

(20) *m mrr-k   m3-j   snb-kwj*
      if wish.EMPH-2SG see.INF-1SG be.healthy.STAT-1SG
      'If you wish to see me healthy…' (Peas B. 1, 78, Callender 1975a:73)

(21) *d(j)-j   sdm-tn*
      cause.PROS-1SG hear.PROS-2PL
      'I will cause that you (all) hear…' (Cairo 20538, Callender 1975a:73)

In English and many other languages, subordinate clauses that are arguments of a main verb are preceded by a subordinator called a complementizer in formal linguistics: *that* in English, *que* in French, *dass* in German, etc. Earlier Egyptian also had a complementizer (*ntt*, and in earlier texts *wnt*) but it was used only rarely.

(22) *rh-kwj   ntt htp-f   hr-s*
      know.STAT-1SG that be.content.PROS-3MSG on-3FSG
      'I know that he will be content with it.' (Urk. IV, 835, 16, Callender 1975a:74)

It is very common in earlier Egyptian to embed a clause as an adverbial modifier. Most often, such clauses were not marked with a subordinator but followed the main clause directly.

(23) *nhs   Wsjr hr st-f   jp-n-f   d-t-f*
      awaken.PROS Osiris on throne-3MSG count-PST-3MSG body-F-3SG
      'Let Osiris awaken on his throne, after he has recovered his senses (lit. counted his body).'
      (Lac. TR, 12, 7, Gardiner 1957:330)

However, there was a small set of words like 'while,' 'after', 'until,' and 'because' (mostly built from prepositions) that could be used to clearly indicate the modification relationship.

(24) *mdw-k   hft   wšd-f   tw*
      speak.PROS-2MSG according.to address-3MSG 2MSG
      'You should speak when he addresses you.' (Pt. 129, Gardiner 1957:118)

As noted in Section 2.3.3, subordinate (i.e., embedded) clauses convey tense distinctions relative to the tense of the main clause.

2.6.2 Coordination

There is no overt conjunction 'and' in earlier Egyptian. Nominals, adjectives verb phrases and sentences could be conjoined simply by placing one directly after the other. In (25), two *nisba* adjectives are directly conjoined.

(25) *t3š-f   rs-j   mht-j*
      boundary-3MSG south-NISBA north-NISBA
      'its southern and northern boundary' (BH. I 8, 20, Gardiner 1957:68)

Occasionally, nominals were joined by *hr* 'upon' or *hnꜥ* 'with.'

(26)   *ms-w-j*   *ḥnꜥ* *sn-w-j*
       child-PL-1SG with brother-PL-1SG
       'my children and my brothers' (Sh. S. 128, Gardiner 1957:69)

Disjunction can also be left unexpressed, although the phrase/word *r-pw* is sometimes found at the end of a series of disjoined nominals.

2.6.3 Negation

There are three main negation strategies in earlier Egyptian: the negative particle *n*, the negative particle *nn* and the use of a negative verb. The negative particle *n* is used directly before the *sḏm-f* and the *sḏm-n-f* verb forms, with one quirk. The sequence *n sḏm-f* conveys past tense (see (27) whereas *n sḏm-n-f* conveys present tense (see (28)), the opposite of their tense values in positive contexts.

(27)   *n*   *jṯ-j*   *s3-t*   *s*
       NEG seize-1SG child-F man
       'I did not carry off the daughter of any man.' (Cairo 20001, b 2-4, Callender 1975a:102)

(28)   *n*   *mdw-n-f*
       NEG speak-PST-3MSG
       'It (one's mouth) does not speak.' (Pt. 13, Gardiner 1957:80)

This negation/tense polarity was first discovered by Gunn 1924; see Loprieno 1995:209 for further discussion and citations to various explanations.

The particle *nn* is used to negate pseudoverbal constructions and nominals, among other forms. An example with a pseudoverbal construction is in (29).

(29)   *nn*   *wj*   *ḥr*   *sḏm*   *st*
       NEG I   PROG hear.INF 3FSG
       'I do not hear it.' (Sh. S. 74-5, Gardiner 1957:254)

The main negative verb was *tm* 'to not do, to fail' (see Semitic *tmm; Loprieno 1995:89). It was used to negate non-finite verbs (infinitives and participles) as well as relative verbs, emphatic *sḏm-f* verb forms, and several other forms which can be characterized as forms where the verb is functioning non-verbally (e.g., as an adjective instead; see Loprieno 1995:90 for a thorough list). The negative verb was conjugated as if it were a main verb, and the lexical verb follows in a form traditionally called the negatival complement (*sḏm(-w)*). It negates an emphatic verb in (30).

(30)   *tm-t*   *ẖn*   *ḥr*   *m*
       NEG.V-2FSG row upon what
       'Why do you not row?' (Westc. 6, 5, Gardiner 1957:264)

This basic description does not exhaust the possibilities for negation in earlier Egyptian, and the reader interested in particulars is directed to Gunn 1924 and Loprieno 1995:125-131 and 209-220.

2.6.4 Interrogatives

There are two types of interrogative clauses (questions) across languages: polar questions (also known as yes-no questions) like *Are you going to the zoo?* and *wh*-questions like *Who went to the zoo?* and *Which exhibit did you see*? Polar questions can be unmarked with respect to declarative clauses in Middle Egyptian,

bearing no special morphological indication that they are questions. However, sometimes they have an initial particle *jn* (or, later, *jnjw*), as in (31).

(31)　　*jn nn　rf　dj-k*　　　　　*sw3-j*
　　　　　Q NEG PCLE cause.PROS-2SG pass-1SG
　　　　　'Will you not let me pass?' (El. P. R 59, Gardner 1957:404)

See Silverman 1980 for a discussion of polar questions in earlier Egyptian.

　　　　All wh-questions in earlier Egyptian are clefts where the wh-word is focused (Callender 1975a:96). Their structure varies depending on the type of wh-word because different clefting strategies were employed to focus different types of phrases. For example, when an agentive subject is focused, the structure of the cleft is as below.

(32)　　*jn　　ḥm-f　　rdj　　　jr-t(w)-f*
　　　　　AGENT   Majesty.his cause.PCPLE   do-PASS-3MSG
　　　　　It is His Majesty who caused that it be done (Sin. B308)

When an agentive subject is a wh-word, the same structure is attested.

(33)　　*(j)n　　m　　jn　　　tw　　nds*
　　　　　AGENT who bring.PCPLE you little.person
　　　　　It is who who brought you, little one? = Who brought you, little one?
　　　　　(Sh. S. 69-70; see Middle Egyptian text below)

When a prepositional phrase or other adverbial is focused, the 'emphatic' form of the verb is used, and similarly, when a prepositional phrase or other adverbial is questioned, the verb is always emphatic.

(34)　　*jrr.t*　　　　　*p3 jb*　　*ḥr-m*
　　　　　make.EMPH-2FSG this heart　　because.of-what
　　　　　Why do you make this heart? (Westcar 12, 21)

See Gardner 1957:404-408 and Callender 1975a:96-98 for further descriptive details.

3 LATER EGYPTIAN

3.1 Overview

　　　　Later Egyptian encompasses the following stages of Egyptian: Late Egyptian, Demotic, and Coptic. Late Egyptian was spoken from approximately 1300-700 BCE during the latter part of the New Kingdom (and is accordingly known as *Neuägyptisch* in German). It includes such text types as narratives, love poetry, hymns, letters, and administrative documents, among many others (see the detailed list in Junge 2001:18-20; translations in Simpson 2003 and Lichtheim 1976). The transition from Middle Egyptian to Late Egyptian was not sharply defined. Depending on genre and formality, there is Middle Egyptian 'interference' in many texts written during the time of Late Egyptian (see e.g., the formal Late Egyptian text below).[16] In terms of script, Late Egyptian was written in hieroglyphs or hieratic, although there are often redundant signs and/or deviant writings (see Junge 2001:33ff.)

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[16] Late Egyptian can be broken down even further into various stages of influence from Middle Egyptian; see Junge 2001:23.

Demotic was spoken during the Late Period, from the seventh century BCE to the fifth century CE. Like Late Egyptian, it features a variety of text types – particularly business and legal documents, letters, religious and medical texts, and literary texts (see again translations in Simpson 2003 and Lichtheim 1980). It is fairly similar to Late Egyptian in terms of grammatical structure, but it has its own script derived from hieratic (see Johnson 2000 for a detailed study of one scribe's handwriting). The middle portion of the famous Rosetta Stone is written in Demotic.

Finally, Coptic was spoken from about the fourth the fourteenth century CE, although it is debatable how natively it was spoken by the end of that timespan. It is the language of the Christian Coptic church, and accordingly many of the major texts are religious, including the Bible. Even though it was superseded by Arabic after the Arab conquest of Egypt, it remains in use liturgically. It has two major dialects: Sahidic, the standard dialect, and Bohairic, which survives as the liturgical language. In a dramatic break from previous forms of Egyptian, Coptic is written using the Greek alphabet. In addition, it made use of six extra signs (derived from Demotic) for uniquely Egyptian phonemes. Coptic also features a large number of loanwords from Greek. See the Introduction to Layton 2000 for a discussion of the history of the language and text types, and *The Coptic Encyclopedia* (Atiya 1991) for information on the many specific genres and authors.

3.2 Phonology

The phonology of later Egyptian is better known than the phonology of earlier Egyptian – partially because there are cuneiform transcriptions of Egyptian from this era and partially because Coptic was written in a script with an established phonology.[17] The section begins with a summary of the phonological changes from Middle Egyptian to Late Egyptian and Demotic. Coptic phonology has been investigated in depth, and is accordingly treated in a separate, subsequent section.

3.2.1 Phonology of Late Egyptian and Demotic

There were major changes in the consonantal, vowel and syllable structure of Egyptian from Middle Egyptian to Late Egyptian and Demotic. The discussion here is mostly based on Loprieno 1995 (Section 3.5), but see Osing 1976, Schenkel 1990 and Peust 1999 for more details (and dissenting opinions). In terms of consonantal change, there are four major shifts from Middle Egyptian to Later Egyptian.

(35)   a. Several phonemes (*t, r, j, w*) weakened to a glottal stop syllable-finally, and ultimately were deleted. (see Loprieno 1995:56 for specific examples, also Peust 1999:141-160)
         b. The palatal phonemes in some cases are depalatalized, changing to a postalveolar or alveolar place of articulation (see Peust 1999:123-125 on 'palatal fronting').
         c. The uvular trill completed its change and became a glottal stop. (See Section 2.2.1)

In terms of the vowels, there was a significant reorganization of the system, somewhat similar to the Canaanite vowel shift in the Semitic languages (Fox 1996, Kammerzell 1998b). A chain shift occurred, such that when one vowel changed, it 'pushed' the others along to maintain contrast (more specifically, this is a push chain; see Hock 1986:156-158). For example, long stressed /a:/ moved back and changed to /o:/, and subsequently long stressed /u:/ (a back vowel) centralized to /e:/. In addition to the push chain, there was a merger among the short vowels: short stressed /i/ became /e/, and subsequently /u/ also became /e/ (see e.g., Schenkel 1990:87-88). There is also mounting evidence for the development of a schwa vowel in unstressed position (see e.g., Osing 1976). Finally, due to the loss of many final consonants ((35)a), there were more unstressed open final syllables; see Loprieno 1995:-39-40 for a list of additional syllable types also made available in later Egyptian.

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[17] Although it is never wise to assume exact equivalence between a Greek and a Coptic sound, the Greek at least provides a phonological starting place.

3.2.2 Coptic Phonology

An approximation of the consonantal inventory of Coptic is represented in the chart below, adapted from Loprieno 1995. The typical letter corresponding to each phoneme is in parentheses. For further information on Coptic phonology, see the classic Worrell 1934, the overview in Satzinger 1979, the generative treatment in Hintze 1980, and the suggestions in Depuydt 1993b.

Table 10: Consonants of Coptic

	Bilabial		Alveolar		Postalveolar	Palatal		Velar			Glottal
Stops	p (Π)		t (Τ)	t' (Τ)		c (Ϫ)	c' (Ϫ)	k (Κ)	k' (Κ)	kʲ (Ϭ)	ʔ (none)
Nasal	m (Μ)		n (Ν)								
Tap/flap			/r/ (Ρ)[18]								
Fricative	β (Β)	f (Ϥ)	s (Ϲ)	z (Ⲍ)	ʃ (Ϣ)			x (ⳉ in Bohairic)[19]			h (Ϩ)
Approximant	w ((Ο)Υ)					j ((Ε)Ι)					
Lateral approximant			l (ⲗ)								

Due to the neutralization of the contrasts in the stop series described in Section 3.2.1, the native vocabulary now lacked phonemic voiced stops. However, voiced stops were found in Greek words borrowed into Coptic. Note that the ejective/non-ejective phonemic contrast was maintained in the stops, despite the lack of separate letters for ejective and non-ejective pairs (see extensive argumentation in Loprieno 1995:42-44; for an alternative perspective, see Junge 2001:37, Peust 1999:84-85). The voiceless stops also had aspirated allophones that were not written in most dialects, with the exception being Bohairic where they were recorded using the Greek aspirate letters (ϕ, ϴ, and ⲭ; for details, see Loprieno 1995:42).

The bilabial pair of stops from earlier diverged in that the voiced bilabial stop changed to be a voiced bilabial fricative in most cases. Note also that the glottal stop remained without a letter in most Coptic dialects, although its distribution is traditionally constrained to the beginnings and ends of vowel-initial and vowel-final words, respectively, and between doubly-written vowels (see Peust 1999:96-97 for an alternative perspective). The uvular and pharyngeal voiceless fricatives from earlier Egyptian merge into either the postalveolar fricative or the glottal fricative, although certain dialects are more conservative in this merger than others (see Loprieno 1995:141 for a list of the variations).

A notable feature of the consonants of Coptic is their ability to serve as syllable nuclei, similar to consonants in Berber. Although it is controversial, it has been claimed that any consonant in Coptic can in fact be a syllable nucleus. There is even a particular diacritic called the superlinear stroke that is claimed to notate when a consonantal nucleus is used. See Peust 1999:61-65 for a summary of research on this issue.

The Coptic vocalic system was mostly conservative – unstressed schwa is retained from Late Egyptian/Demotic, as are short stressed /e/, /a/, and /o/. Late Egyptian /e/ becomes /a/ in Sahidic and Bohairic, but is maintained in the other, minority dialects (although see Loprieno 1995:46-47 for a list of exceptions). The major additions to the system are the long stressed vowel /u:/ and a second unstressed vowel /a/.

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[18] The exactly quality of the /r/ in Coptic was unspecified (tap/flap or true approximant) in the sources consulted by this author.

[19] This phoneme was also written as Ⳉ in the Akhmimic dialect, but it had no letter in Sahidic.

A central controversy concerning Coptic vowels is whether or not vowel length was phonemic. Traditionally, it has been assumed that the pairs of letters Є and H, and O and ω, contrasted in vowel length, similar to their Greek counterparts. In this theory, Є corresponds to /e/ and H corresponds to /e:/, and O corresponds to /o/ and ω corresponds to /o:/. See the vowel chart in Loprieno 1995:46 for an example of this approach. However, several recent works (Peust 1999, Reintges 2004) have argued that these vowels contrast in quality and not quantity; in this view, Є corresponds to /e/, H corresponds to /ɛ/, O corresponds to /o/ and ω corresponds to /ɔ/.

As for syllable structure, Coptic is similar to Late Egyptian and Demotic (see Loprieno 1995:49 for a complete list) and extrametricality is retained (i.e., syllables of type (C)CV:C or (C)CVCC are only attested in stressed final position). Coptic had no secondary stress, and there was one primary stress per word. Heavy syllables required stress (i.e., Coptic was quantity sensitive). See Worrell 1934, Peust 1999 and Reintges 2004 for the specific rules that guide placement of Coptic stress.

3.3 Morphology

3.3.1 General Remarks

Recall that earlier Egyptian expressed many grammatical categories by affixation, e.g., the -*n* past tense suffix and the –*t* feminine suffix. In Late Egyptian and Demotic, there is a major morphological shift: grammatical categories are most often expressed via independent words, e.g., tense encoded via an auxiliary and gender encoded via gender alternations on a definite article. This is often referred as the shift from synthetic to analytic morphology. Junge (2001:49-50) and Loprieno (1995:91) provide some illustrative, schematic examples. Compare the Middle Egyptian phrases in (36) to their later Egyptian counterparts in (37).

(36)   a. *sḏm-n-f*   b. *s*   **Earlier Egyptian : Synthetic**
           hear-PST-3MSG   man (MSG)
           'he heard'   'a/the man'

(37)   a. *jr-f*   *sḏm*   b. *pꜣ*   *s*   **Later Egyptian : Analytic**
           AUX-3MSG   hear   the.MSG   man
           'he heard'   'the man'

Comparing (36)a and (37)a, the Middle Egyptian past tense suffix –*n* is replaced with the auxiliary *jr* 'do.'[20] Comparing (36)b and (37)b, the null morpheme(s) for gender, number and definiteness on a masculine singular noun are replaced with a definite article that expresses gender and number. Further examples of this analytic tendency in Later Egyptian will be seen below.

The analytic tendency of Late Egyptian and Demotic persists into Coptic. The Coptic counterpart to (36) and (37) is in (38). Note that examples in the Coptic script are dashed and do not have the superlinear stroke; the transliteration into the Roman alphabet is dashed so as to match the gloss.

(38)   a. ⲁϥ-ⲤⲰⲦⲘ   b. ⲠⲢⲰⲘⲈ   **Coptic**
           a-f-sōtm   p-rōme
           PST-3MSG-hear   the.MSG-man
           'he heard'   'the man'

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[20] This change occurred during Demotic, not Late Egyptian.

Past tense is still expressed via an auxiliary (see Reintges 2004: Section 7.1 for argumentation that *a* 'PAST' is an auxiliary), and gender and number are reflected on a definite article and not the nominal stem itself.

Coptic also made use of root and pattern morphology (see discussion in e.g., Layton 2000:152). Since vowels were written, the changes in vowel patterns across roots are directly observable in the language for the first time. Each Coptic root was capable of appearing as four different types of stems, shown schematically for the verb 'to give birth' in Table 11 (based on Reintges 2004:Table 6.2)

Table 11 : Root and Pattern Morphology in Coptic

Coptic	Transliterated	Traditional Name	Function	Gloss
ⲘⲒⳞ�404 MICЄ	mise	absolute state	infinitive	'to give birth'
ⲘⲞⳞⳞ MOCЄ	mose	stative or qualitative	stative	'to nurture'[21]
MЄC–	mes-	nominal state	when verb is followed immediately by direct object	'give birth to'
MЄCT=	mest-	pronominal state	when verb is followed immediately by pronoun	'give birth to'

Although root and pattern morphology persists into Coptic, the majority of grammatical categories were expressed via independent words (see Section 3.3.3).

3.3.2 Nominal and Adjectival Morphology

Later Egyptian makes use of two genders (masculine and feminine) and two numbers (singular and plural). Nouns generally retain their same gender from earlier Egyptian. Note that there are no longer separate morphological forms for dual in later Egyptian, except for occasional archaisms in Middle Egyptian-influenced texts (e.g., *t3-wj* land-DU 'the two lands' = Egypt).

In earlier Egyptian, gender was marked on the noun stem with an affix: mostly null for masculine and a *–t* suffix for feminine. Similarly, plural was marked with a suffix *–w* or *–wt* for feminine nouns. However, phonological changes (see (35)a) caused these suffixes to be lost during later Egyptian, although they were often retained in the (conservative) writing system (on this latter point, see e.g., Johnson 2000:9). In later Egyptian, then, number and gender are thus primarily marked through inflection of an article or a demonstrative associated with the noun. Table 12 (based loosely on Junge 2001:53) shows the inflection of the articles in Late Egyptian. Note that the nominal suffixes are still written in conventional transliterations of Late Egyptian (and Demotic) to reflect their retention in the writing system.

Table 12 : Nominal Inflection for Gender and Number in Late Egyptian

	Singular		Plural	
Definite Masculine	*p3 sn*	'the brother'	*n3 sn.w* 'the siblings'	
Definite Feminine	*t3 sn.t*	'the sister'	same as above	
Indefinite	*wᶜ sn/sn.t*	'a brother/sister'	*nhj sn.w* 'some siblings'	

Note that in the table above, it is clear how gender distinctions are more neutralized in later Egyptian than in earlier Egyptian -- there is no longer a distinct feminine plural form, and gender distinctions are non-existent for indefinite nominals.

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[21] See Polotsky 1971 for this interpretation, *pace* Crum 1939.

The loss of inflection on the nominal stem persists into Coptic. There is clearly no trace left of the old feminine −*t* for most nouns (*sn-t* > **ⲤⲰⲚⲈ** [sōne] 'sister,' *mw-t* > **ⲘⲀⲀⲨ** [maau] 'mother'). Loprieno (1995:60) also points out that many feminine nouns were indistinguishable morphologically from masculine nouns and even other categories (compare **ⲤⲰⲚⲈ** 'sister' with **ⲢⲰⲘⲈ** [rōme] 'man' and **ⲔⲰⲦⲈ** [kōte] 'to turn').

Similarly, most nouns did not carry any inflection for plural number on the nominal stem (compare **ⲠⲢⲰⲘⲈ** [p-rōme] 'the man' with **Ⲛ̄ⲢⲰⲘⲈ** [n-rōme] 'the people'). A limited number of nouns (Layton 2000:87 estimates about 100) did have morphologically marked plural forms, with methods of marking including: a plural suffix −**ⲞⲞⲨⲈ** [-owe] which is a descendant of the old −*w* plural suffix, internal vocalic changes (e.g., **ⲌⲂⲞⲤ** [hbos] 'garment' and **ⲌⲂⲰⲰⲤ** [hbōōs] 'garments') or both a suffix and internal vocalic changes. These nominals bear a distinct resemblance to broken plurals in Semitic languages, and they also suggest that vocalic changes as a pluralization strategy may have been productive in earlier Egyptian. See Loprieno 1995:61-63 for relevant discussion.

Later Egyptian is generally assumed to lack case morphology just as in earlier Egyptian. However, in Coptic, some direct objects are marked by the preposition **N̄**, which Reintges (2004) analyzes as an accusative case marker. See Reintges 2004:217ff. and Layton 2000:131-133for detailed discussion of the distribution of the accusative case marking.

As for adjectives, they do not agree in gender and number with the noun in later Egyptian, unlike in earlier Egyptian (although again, the endings may be retained in writing in Late Egyptian and Demotic). The formation of adjectives from nouns (*nisba* adjectives) is also no longer productive already in Late Egyptian, although some lexicalized *nisba* adjectives are retained (Junge 2001:65). Note also that Egyptian as a whole never displays definite marking on adjectives, unlike Hebrew.

In Coptic, adjectives follow the noun, and an **N̄** [n] must come in-between them, e.g., **ⲠⲢⲰⲘⲈ Ⲛ̄ⲚⲞϬ** [p-rōme n-nokʲ] 'the great man' (Loprieno 1995:56). The [n] is etymologically related to the genitival *n* from earlier Egyptian and is still used for some genitival relations in Coptic (see Section 3.5). Cross-linguistically, similar elements connecting nouns and adjectives have been called 'linkers' (see e.g., Newman 2000:30 on Hausa, Creissels 2010 on Tswana, Adelaar and Himmelman 2005 on Austronesian languages), and see Reintges 2004 for an analysis of the Coptic [n] as such.

3.3.3 Verbal Morphology

This section cannot attempt to do justice to the complexity of the verbal systems of Late Egyptian, Demotic and especially Coptic. Instead of recreating each stage's arrangement of verbal morphemes, the focus here will be on noting basic trends and describing the major changes from earlier Egyptian. In general, similar to how the nominal stem is no longer inflected for gender and number, verbal stems no longer were directly inflected for grammatical categories in later Egyptian. For further information on the verbal system of later Egyptian, see Frandsen 1974 and Winand 1992 on Late Egyptian, Johnson 1976 on Demotic, and Polotsky 1987-90, Layton 2000 and Reintges 2004 on Coptic. For an overview, see Loprieno 1995:90-99, 220-225; this discussion largely follows the exposition there.

The past tense verbal form *sḏm-n-f* from earlier Egyptian is no longer used in later Egyptian. It is replaced with the bare preterital *sḏm-f* or the analytic construction *jr-f sḏm* (which surfaces in Coptic as **ⲀϤ- ⲤⲰⲦⲘ** [a-f-sōtm]; see (38)). In a narrative, past tense events following an initial event were in the *sḏm-n-f*

form in earlier Egyptian, but a new verb form is used in this context in later Egyptian – the 'sequential' form *jw-f ḥr sḏm* (see Loprieno 1980a for the connections between this verb form and Semitic verb forms).

As for present tense, again, there is a break from the earlier Egyptian form (*sḏm-f*), using instead the pseudoverbal construction *sw ḥr sḏm/sḏm(w)*. The initial pronoun *sw* is a third person masculine singular dependent pronoun, and it is followed either by *ḥr sḏm* (*ḥr* + the infinitive) or the stative *sḏm(w)*.[22] In Coptic, the present tense is even more simple: suffix pronoun followed by the bare (infinitival) form of the verb, e.g., **ϥⲤⲰⲦⲘ** [f-sōtm] 'he hears.'[23]

Future tense forms remained roughly as in earlier Egyptian for Late Egyptian and Demotic; both stages make use of the pseudoverbal form *jw-f r sḏm* 'he will hear.' However, the correspondent of this form in Coptic is used for prospective mood, not future tense (see immediately below). Instead, Coptic uses an auxiliary **Ⲛⲁ** [na] to express future tense (**ϥ-Ⲛⲁ-ⲤⲰⲦⲘ** [f-na-sōtm] 'he will hear') which originates from the verb *nꜥj* 'to go' from Late Egyptian.

Turning next to mood, imperatives are marked by a *j*- prefix in Late Egyptian, but by Demotic and Coptic mostly just the bare (infinitival) form of the verb is used. Coptic also has a separate jussive form used for first and third person: **ⲘⲁⲢⲉϥ-ⲤⲰⲦⲘ** [mare-f-sōtm] 'let him hear.' The earlier Egyptian prospective form persists into Late Egyptian and Demotic with the same approximate range of meanings, but it is lost in Coptic. Instead, Coptic uses a descendent of the pseudoverbal future tense *jw-f r sḏm* for the prospective range of modal meanings: **ⲉϥⲉ-ⲤⲰⲦⲘ** [e-f-e-sōtm] 'he shall hear' (both the *jw* and the *r* are reduced to **ⲉ** in Coptic). There is one final verb form that expresses mood worth mentioning: the **ⲦⲁⲢⲉϥ-ⲤⲰⲦⲘ** [tare-f-sōtm]. The exact meaning of this form is unclear; Loprieno (1995) classes it as optative, but Reintges (2004) considers it 'inferential' mood (a kind of evidential).

In terms of voice, Late Egyptian had a vast array of passives, mostly inherited from earlier Egyptian (see the list in Loprieno 1995:97). The only major innovation is the use of an indefinite pronoun *tw* 'one' to express passive voice: *sḏm.tw-f* 'one hears X = X is heard.' In Demotic and Coptic, the third person plural pronoun is used instead of an indefinite pronoun.

There is a verbal form in later Egyptian that has neither temporal, aspectual, modal or voice meaning – the conjunctive 'and he heard'. It has the form *mtw-f sḏm* in Late Egyptian and Demotic, and **Ⲛϥ-ⲤⲰⲦⲘ** [nf-sōtm] in Coptic. It marks a clause as a (non-initial) member of a coordinate structure, and it often has a discourse function in that it notates that a clause is one of a chain of events dependent on an initial form. The italicized verbs in this translation of a Coptic text are in the conjunctive: 'After that he (Jesus Christ) will ascend on a cross *and will die* for the whole [world] *and rise* on the third day *and destroy* hell *and take* humanity away from the hands of the enemy' (Reintges 2004:297). See Borghouts 1979, Loprieno 1980a, Loprieno 1995:95-96, and especially Depuydt 1993a and Reintges 2004:295-308 for further examples and analysis.[24]

Finally, the relative verbs and participles of earlier Egyptian are almost entirely replaced. Their territory is taken over by the descendent of the earlier Egyptian complementizer *ntj* which was originally just used for relative clauses that are copular clauses. However, its uses generalize until it can appear before all types of clauses in later Egyptian.

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[22] Although the stative is retained all the way through Coptic, it underwent a major morphological change. Its agreement suffixes (see Section 2.3.3) were gradually lost so that by the time of Coptic, the stative as a grammatical category was expressed solely through vocalic changes, e.g., **ⲤⲰⲦⲘ** [sōtm] 'to hear' **ⲤⲞⲦⲘ** [sotm] 'hear.STAT.'

[23] See also Loprieno 1995:93-94 for the aorist present *ḥr=f sḏm*, descendent of   the contingent verb form *sḏm.ḥr=f* from Earlier Egyptian.

[24] Note that Loprieno (1995) and Junge (2001) consider the conjunctive essentially a mood marker.

The infinitive undergoes some phonological change from earlier Egyptian to later Egyptian, mainly losing the final *−t* associated with certain roots. To complicate the picture, the *−t* was retained in certain phonological environments and also occasionally overapplied to infinitives that did not originally take a *−t* (Loprieno 1995:99).

3.3.4 Pronouns, Demonstratives and Prepositions

There were series of pronouns in earlier Egyptian: suffix pronouns, dependent pronouns and independent pronouns (see Section 2.3.5). The suffix pronouns remained fairly consistent in terms of their morphophonological form and their syntactic uses throughout the stages of Egyptian. The only major change is in the form of the third plural pronoun, which is *−sn* in earlier Egyptian but changes to *−w* during Late Egyptian. The table below of the suffix pronouns in Coptic differs minimally from Table 5 of the Middle Egyptian suffix pronouns, especially considering the amount of time that had elapsed.

Table 13: Coptic Suffix Pronouns (Reintges 2004:71)

	Singular	Plural
First Person	−I[i], −T[t], -∅	−N [n]
Second Person	−K[k] (masc.), −TE [te], −E [e], -∅ (fem.)	−TN [tn], −THYTN [tēutn]
Third Person	−ч [f] (masc.), −C [s] (fem.)	−OY [u], −COY[sou], −(O)Y[(o)u]

The independent pronouns also did not undergo much change in terms of form or function from earlier Egyptian to Coptic, modulo language-wide phonetic/phonological changes that they were affected by (e.g., earlier Egyptian /i/ > Late Egyptian /e/ > Sahidic Coptic /a/). Similarly to the suffix pronouns, the third person plural pronoun changes from *ntsn* in earlier Egyptian to *ntw* in later Egyptian. Below is their paradigm for Coptic.

Table 14: Independent Pronouns in Coptic (Reintges 2004:75)

	Singular	Plural
First Person	ⲀNOK [anok]	ⲀNON [anon]
Second Person	NTOK [ntok] (masc.), NTO [nto] (fem.)	NTⲰTN [ntōtn]
Third Person	NTOч [ntof] (masc.), NTOC [ntos] (fem.)	NTOOY [ntow]

Unlike the other series, the dependent pronouns underwent upheaval during later Egyptian. During Late Egyptian and Demotic, they were used in a smaller and smaller subset of contexts, until they fell out of use altogether. To express pronominal direct objects, a new series of pronouns was innovated that begin with *tw-* (ideas about the origin of the *tw-* vary; see Borghouts 1980, Loprieno 1995:99 and Junge 2001:211 for various theories). Their forms in Late Egyptian are shown below.

Table 15: *tw* Pronouns in Late Egyptian (Černý and Groll 1993:32)

	Singular	Plural
First Person	*tw(.j)*	*tw.n*
Second Person	*tw.k* (masc.), *tw.t* (fem.)	*tw.tn*
Third Person	*tw.f* (masc), *tw.s* (fem.)	*tw.w*

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Coptic did not retain the new, *tw*-based pronoun series. Instead, direct objects are expressed in Coptic by suffix pronouns.

One of the most noticeable changes in later Egyptian is that it has a definite article, developed from (and formally identical to) the lesser-used *p3* series of demonstratives in earlier Egyptian (see Section 2.3.5 and Section 3.3.2). The exact point at which the series became more broadly used as definite articles, and not demonstratives, is uncertain. It is highly likely that the shift had begun already in at least some informal varieties of Middle Egyptian. See Loprieno 1980b and Junge 2001:51 for further discussion

The proxal demonstrative series with *pn* from earlier Egyptian is not retained. Instead, a new series of proxal demonstratives is derived by adding a *–j* suffix to the definite article: *p3j* 'this (masc. sing.),' *t3j* 'this (fem. sing.)' and *n3j* 'this (pl.).' This series persists into Coptic as ⲠⲈⲒ [pei], ⲦⲈⲒ [tei], and ⲚⲈⲒ [nei]. In Late Egyptian and Demotic, *p3j* combined with a suffix pronoun indicated possession before a nominal, e.g., *p3j=s hj* 'her husband(=*hj*)' (Johnson 2000:49). The demonstrative portion agrees in gender and number with the possessum (in this example, masculine singular).

In Coptic, the possessive articles are still in use, although generally reduced to ⲠⲈ [pe], ⲦⲈ [te], and ⲚⲈ [ne] with a following suffix pronoun, e.g., ⲦⲈϤ-ⲘⲀⲀⲨ [te-f-maau] 'his mother' (Layton 2000:46; the exception is the first person singular series which is ⲠⲀ [pa], ⲦⲀ [ta], and ⲚⲀ [na]). Coptic also has a separate series of possessive pronouns (*mine, yours, ours,* etc.) which combine ⲠⲰ/ⲦⲰ/ⲚⲞⲨ [pō/tō/nou] with a suffix pronoun, e.g., ⲠⲰ-Ⲕ [pō-k] 'yours' where the possessum is masculine singular and the possessor is second person masculine singular.

The distal demonstrative series with *pf* is also lost from earlier Egyptian. By the time of Demotic, a periphrastic relative clause expression was used to express distal deixis. A noun phrase like 'that man' is literally expressed as 'the man who is there' (in Demotic, *p3 rmṯ nt n-im=w*, following Johnson's (2000) transliteration, word for word 'the man that there'). The use of a relative clause to express distal deixis continues in Coptic, e.g., ⲠⲢⲰⲘⲈ ⲈⲦ-Ⲙ̄ⲘⲀⲨ [p-rōme et-mmau] 'the man who is there' = 'that man' (word for word 'the-man that-there').

A major change in the prepositional system from earlier Egyptian to late Egyptian was the development of distinct allomorphs for each preposition when they precede a suffix pronoun. Often these allomorphs furnish etymological evidence, e.g., the preposition Ⲉ [e] 'to, towards' in Coptic is a descendent of earlier Egyptian *r*, and its pre-pronominal allomorph is ⲈⲢⲞ [ero]. Some of the most common prepositions are shown for Coptic below, along with correspondences to Middle Egyptian prepositions. The table is roughly adapted from Reintges 2004:100.

Table 16 : Common Prepositions in Coptic

Preposition	Pre-pronominal allomorph	Gloss	Middle Egyptian correspondence
Ⲉ	ⲈⲢⲞ	'to, towards'	*r*
Ⲛ	ⲚⲀ	'for'	*n*
Ⲛ	ⲘⲘⲞ	'in, from'	*m*
ⲘⲚ	ⲚⲘⲘⲀ	'with, and'	none
ⲢⲒ	ⲢⲒⲰⲰ	'on'	*ḥr*
ⲢⲀ	ⲢⲀⲢⲞ	'under, for'	*ẖr*

3.4 Word Order

Later Egyptian transitioned from canonical VSO word order to canonical SVO word order. Late Egyptian displayed mixed word order: VSO in the past tense, SVO in the present and future tenses. A past tense example is in (39), and a present tense example in (40).

(39)   *ḏd   p3j   ḫ3tj-ꜥ   n   njwt   nh3j   n   md-w-t*
        speak   this.MSG   mayor   of   Thebes   some   of   charge-PL-F
        'This mayor of Thebes made certain charges.' (Abb, 7, 8-9; Černý and Groll 1993:215)

(40)   *st   ḥr   jr-t   n3j-sn   jp-t   db-t   m mn-t*
        they   PROG   make-INF   this.PL-they   quota-F   brick-F   in day-F
        'They make their quota of bricks daily.' (pAnast. III vs. 3,2; Junge 2001:114)

Demotic retained this pattern (see e.g., Johnson 2000:19 on VSO past tense; Johnson 2000: 37, 39 on SVO present and future tense). In Coptic, however, SVO emerges as the canonical word order for past, present and future tense sentences (see Reintges 2004:371-373 for argumentation that SVO is the canonical word order of Coptic). A past tense example is in (41) and a present tense example is in (42).

(41)   ⲁ   ⲞⲨ–ⲤⲞⲚ   ϪⲚⲈ   ⲀⲠⲀ   ⲤⲀⲢⲀⲠⲒⲞⲚ
        a   ou-son   čne   apa   sarapion
        PST   a-brother   ask   Apa   Sarapion
        'A brother asked Apa Sarapion…' (AP Chaîne no. 28, 5:24; Reintges 2004:371)

(42)   ⲠⲤⲰⲦⲎⲢ   ⲄⲀⲢ   ⲠⲀⲢⲀⲄⲄⲈⲒⲖⲈ   ⲚⲀⲚ   ⳞⲘ   ⲠⲈⲨⲀⲄⲄⲈⲖⲒⲞⲚ
        p-sōtēr   gar   parangeile   na-n   hm   p-euangelion
        the-savior   for   summon   to-us   through   the-gospel
         'For the savior summons us through the gospel.' (V. Pach. 89:14-15, Reintges 2004:262)[25]

Recall that in earlier Egyptian, the order of non-subject elements in the sentence is: direct object, indirect object, adjoined prepositional phrase. This order is retained into Coptic (Reintges 2004:373ff.); an example is below with a direct object, an indirect object and a prepositional phrase.

(43)   ϤⲚⲀⲬⲀⲢⲒⳌⲈ   ⲘⲠⲦⲀⲖϬⲞ   ⲚⲦⲀϢⲈⲈⲢⲈ   ⳞⲒⲦⲚ   ⲚⲈⲦⲚϢⲖⲎⲖ
        f-na-čarize   m-p-talkʲo   n-ta-šeere   hitn   ne-tn-šlēl
        he-FUT-grant   ACC-the-healing   to-my.F-daughter   through   the.PL-2PL-prayer
        'He will grant healing to my daughter through your prayers.' (Hil. 8:12-13, Reintges 2004:374)

Turning now to word order within copular clauses, there is very little use in later Egyptian of the tripartite [Subject *pw* Predicate] or [Predicate *pw* Subject] patterns from earlier Egyptian. Instead, in Late Egyptian and Demotic, the subject and predicate are generally immediately next to one another, with no *pw* present. The example below is Late Egyptian.

(44)   *Jnpw   rn   p3   ꜥ3*
        Anubis   name   the   older
        [In re: two brothers] 'Anubis was the name of the older.' (pD'Orb 1,1; Junge 2001:169)

If the subject is a pronoun, an independent pronoun is used and the pronoun is initial. However, if the subject is a third person pronoun, a demonstrative with appropriate gender and number comes after the

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[25] *gar* 'for' is a Wackernagel (second position) clitic (see e.g., Layton 2000-181-182).

predicate, similar to the [Predicate *pw*] bipartite pattern from earlier Egyptian.[26] The example below is Late Egyptian.

(45)   *pȝj-kk   jtj   pȝj*
　　　your　father　this.MSG
　　　'He is your father.' (Blinding of Truth 5, 7-8; Junge 2001:174)

　　　In Coptic, the tripartite pattern returns. Nominal copular clauses generally take the form [Predicate ⲡⲉ Subject] where the form of ⲡⲉ [pe] varies depending on the phi features of the subject.

(46)　ⲚⲀϨⲢⲞⲞⲨ ⲠⲈ ⲠⲀⲢⲀⲚ
　　　nahrow　　pe　pa-ran
　　　Nahrow　　pe　my.MSG-name
　　　'My name is Nahrow.' (KHML I 3:6-7, Reintges 2004:182)

Traditionally, ⲡⲉ [pe] is described as a copula, but see Reintges 2004:182ff. for an alternative perspective. As in the other stages of Egyptian, (i) when the subject of such a sentence is a first or second person pronoun, an independent pronoun is used and the pronoun is clause-initial and (ii) when the subject is a third person pronoun, a demonstrative(-related) pronoun is used. An example of the latter is below.

(47)　ⲔⲀⲚ ⲞⲨⲤϨⲒⲘⲈ ⲦⲈ
　　　kan　ou-shime　te
　　　be.it　a-woman　this.FSG
　　　'Be it (that) she is a woman…' (Sh. IV 154:12, Reintges 2004:172)

　　　Clauses with adjectival predicates generally retain [Predicate Subject] word order throughout later Egyptian (see e.g., Junge 2001:169-173, Johnson 2000:47-48, Reintges 2004:394-396). However, in Demotic, it becomes clear that adjectival predicates have become in fact verbal predicates (a type of *sḏm-f*) and even have their own morphological marking, the prefix *nȝ-*. This prefix is kept in Coptic, and realized as ⲚⲀ [na], as in the example below.

(48)　ⲚⲀ–ⲚⲞⲨ　　ⲠϨⲰⲂ
　　　na-nou　　　p-hōb
　　　ADJV-excellent　the-matter
　　　'The matter is excellent…' (AP Elanskaya 13a:27, Reintges 2004:395)

　　　Adverbial or prepositional phrase predicates still display a [Subject Predicate] word order in later Egyptian. In Late Egyptian and Demotic, they are classed as part of the 'First Present' verbal conjugation, i.e., the pseudoverbal construction from earlier Egyptian that becomes the present tense of later Egyptian (see Section 3.3.3).

(49)　*dwȝw　　ḥr ꜥ-wj　pȝ ntr*
　　　tomorrow　in　arm-DU the god
　　　'Tomorrow is in the arms of the god.' (LRL 1,5-6, Junge 2001:114)

In Coptic, [Subject Predicate] examples are attested (see Loprieno 1995:174, (135)), but prepositional phrases could also be the predicate of the copular constructions described above for nominal predicates (see examples in Layton 2000:229).

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[26] See also Loprieno 1995:131-133 on the tendency to topicalize the subjects of copular clauses.

3.5 The Syntax of Nominals

Later Egyptian displays a generally consistent word order within nominal phrases: determiner/demonstrative, noun, adjective, possessive phrase, and then relative clause (see e.g., Junge 2001:65ff on Late Egyptian.). Late Egyptian and Coptic noun phrases are below that each have a determiner, a possessive phrase and a relative clause.

(50)   *pꜣ ḫtm   n nbw ntj m ḏr-t(-j)*
          the signet.ring of gold that in hand-F-1SG
          'the golden signet ring that is in my hand' (Hor Seth 6, 1; Junge 2001:68)

(51)   ⲦⲈⲬⲀⲢⲒⲤ ⲘⲠⲚⲞⲨⲦⲈ ⲈⲦ ⲔⲰⲦⲈ ⲈⲢⲞϤ
          te-charis m-p-noute et   kōte   ero-f
          the-grace of-the-god that surround to-him
          'the grace of god that surrounded him' (KMHL II 35:12-13, Reintges 2004:415)

Demonstratives and determiners agree with the noun in number and gender (see Sections 3.3.2 and 3.3.5), but adjectives do not. Note that in Coptic, there is an alternative word order: the adjective may precede the nominal, coming between it and the determiner. In this case, a linker Ⲛ [n] comes between the adjective and the noun (see Section 3.3.2).

(52)   ⲦⲚⲞϬ ⲚϬⲞⲘ
          t-noki̯   n-ki̯om
          the-great LINK-power
          'the great power' (Acts 8:10, Layton 2000:83)

In (50) and (51), there are possessive phrases linked to the head noun with the 'indirect genitive' *n* from earlier Egyptian (in (51), it has undergone nasal place assimilation, becoming [m] in the context of [p]). The indirect genitive thus persists through all the stages of Egyptian (Loprieno 1995:56; see e.g., Reintges 2004:92-95 for details on its use in Coptic).

The direct genitive, however, gradually loses ground during later Egyptian. It is attested in Late Egyptian and Demotic, but not as frequently or as productively as in earlier Egyptian (see Junge 2001:61-63 and Johnson 2000:14 for examples; the phrase *jp.t db.t* 'quota of bricks' from (40) is a direct genitive in Late Egyptian). It is no longer present in Coptic per se, with many earlier direct genitives lexicalized as monomorphemic words (e.g., *ḥm nṯr* 'servant of god' > ϨⲞⲚⲦ [hont]). However, there are productive compounding processes in Coptic (see e.g., Reintges 2004:87-89) and it can be difficult to determine where to draw the line between compounding and the direct genitive/construct state, even in Semitic languages (see e.g., Borer 1988).

Moving now to relative clauses, recall that in earlier Egyptian there are two main types depending on the definiteness/specificity of the head noun. If the head noun is non-specific, it is modified by a virtual relative clause which resembles a clausal adjunct. If it is specific, then a variety of other strategies come into play. This fundamental bifurcation remains in play throughout all the stages of Egyptian. Virtual relative clauses are attested in Late Egyptian (Junge 2001:94), Demotic (Johnson 2000:62-64) and Coptic (Reintges 2004:413).

As for relative clauses that modify definite/specific head nouns, there is a general trend towards les use of the participles and relative verbs, and more use of the complementizer *ntj*. In Late Egyptian and

Demotic, participles and relative clauses are only used for past tense relative clauses (and according to the restrictions of earlier Egyptian: participles when the relativized category is the subject of the relative clause, relative verb when it is the object). The complementizer *ntj* is used for relativizing all other types of clauses, and is thus often called the relative clause 'converter.' For a careful breakdown of the relative clause system in e.g., Demotic, see Johnson 2000:64-69.

The participles and relative verbs are completely gone by the time of Coptic. The only way to form a relative clause in Coptic is by using some allomorph of the complementizer ⲈⲦ [et], the descendent of *ntj*. This complementizer displays a large degree of allomorphy depending on what is immediately to its right in the relative clause. If there is a gap immediately to its right (i.e., if the relativized category is the subject of the relative clause), the complementizer is realized as ⲈⲦ. If there is a nominal phrase immediately to its right, it surfaces as ⲈⲦⲈⲢⲈ [etere]. It also has various forms depending on whether it is followed by a pronoun, varying depending on the phi features of the pronoun (see table in Reintges 2004:415). Finally, it has various forms depending on whether it is followed by a tense, aspect or mood marker, varying depending on the features of the marker (see table in Reintges 2004:415). A couple of examples illustrating the contrast in the form of the complementizer when it precedes a gap and when it precedes a nominal phrase are below.

(53)   **ⲠⲀⲄⲄⲈⲖⲞⲤ ⲈⲦⲆⲒⲀⲔⲞⲚⲈⲒ ⲈⲠⲈⲔⲈⲒⲰⲦ ⲀⲂⲢⲀϨⲀⲘ**   **Comp Before Gap**
     p-angelos   et-diakonei   e-pek-eiwt   abraham
     the-angel   that-serve   to-your-father   Abraham
     'the angel that served your father Abraham' (Test. Is 229:18-19, Reintges 2004:414)

(54)   **ⲠϢⲀϪⲈ ⲈⲦⲈⲢⲈ ⲠⲢⲘⲚⲎⲒ   ⲚⲀϪⲞⲞⲤ**   **Comp Before Nominal**
     p-šače   etere   p-rmnēi   na-čoo-s
     the-word   that   the-superintendant   FUT-say-it
     'the word that the superintendant will say ' (praec. Pach. 122, Reintges 2004:415)

Throughout later Egyptian, participles, relative verbs and complementizers no longer agree in gender or number with the head noun, as they did in earlier Egyptian. As for resumption patterns, the number of contexts where resumptive pronouns must be used increases, culminating in Coptic where there must be resumptive pronouns in all positions but the highest subject in the relative clause. This so-called 'highest subject restriction' is also found in Semitic languages (Hebrew and North Palestinian Arabic; Shlonsky 1992); see Reintges 1998 for details on its manifestation in Coptic.

3.6 Subordination, Coordination, Negation, Interrogatives

3.6.1 Subordination

Recall that clauses may be subordinated as arguments of a main verb or as modifiers of a main clause. Starting with the former case, in Late Egyptian, it was common to find clauses subordinated as arguments of the verb *dj* 'cause,' often in the prospective verb form (Junge 2001:216-217). There was also a general trend to embed clauses under various verbs of perception using either (a) the complementizer *r-ḏd* or (b) no complementizer with the subject of the clause expressed as a dependent pronoun. An example of strategy (a) is below.

(55)   *sdm(=j)*   *r-ḏd*   *nꜣ rmṯ*   *ḥn*   *r jr-t*   *hꜣw*   *m pꜣj*   *pr- n-stꜣ*
     hear.PST(-1SG)   that   the people   proceed.STAT   to take-INF   possession   in this.MSG   portable.chest
     'I noted that the people proceeded to take possession of this portable chest (i.e., funerary equipment).' (pMayer A rt. 1, 14-15, Junge 2001:219)

Demotic displays a similar pattern, with a *sḏm-f* verb form common after the verb *tj* 'cause' and a complementizer (*ḏ*) used before indirect (and direct) speech.

In Coptic, causative constructions consist of a causative morpheme ⲦⲢⲀ [tra] that attaches to a lexical verb (see e.g., Reintges 2004:233-236), and not embedding of a clause under a main verb 'to cause.' However, Coptic does often embed clauses under verbs of cognition, perception and speech, generally using the complementizer ⲬⲈ [če].

(56) ⲦⲠⲒⲤⲦⲈⲨⲈ ⲬⲈ ⲠⲚⲞⲨⲦⲈ ⲚⲀ[ⲞⲂⲰϤ]   ⲀⲚ   ⲈⲢⲞⲚ
      ti-pisteue   če   p-noute   na-obš-f   an   ero-n
      1SG-believe   that the-god   FUT-neglect-3S NEG   to-1PL
      'I believe that god will not neglect us.' (V.Pach. 137:13-14, Reintges 2004:466[27])

As for subordinating clauses as modifiers, the most versatile means of doing so in later Egyptian was by adding the 'circumstantial converter' *jw* to the front of any clause.[28] This was an all-purpose subordinator, capable of corresponding to a range of different meanings (including simple coordination). Junge (2001:190) argues that its clearest equivalent in English is a gerund, and an example of a translation in this style follows.

(57) *ptr*   *st*   *jw-w*   *nꜥ-j*   *r*   *ḳbḥw*
      look.IMP 3PL PCLE-3PL go.STAT-3PL to cool.water
      'Look at them, travelling to the cool water!'
      (Wenamun 2,66; Junge 2001:191, translation from Lichtheim 1976:229)

This construction survived into Coptic as the 'relative present' ⲈϤ–ⲤⲰⲦⲘ [ef-sōtm] 'when/while he hears.'

(58) ⲀⲨⲀⲠⲀⲚⲦⲀ   ⲈⲠ�२ⲎⲄⲈⲘⲰⲚ   ⲈϤⲂⲎⲔ   ⲈⲠⲂⲎⲘⲀ
      a-u-apanta   e-p-hēgemōn   e-f-bēk   e-p-bēma
      PST-3PL-meet   to-the-governor   RELPRES-3MSG-go.STAT   to-the-tribunal
      'They met the governor while he was going to the tribunal.'
      (Ac. A&P 208:171-172, Reintges 2004:313)

It should be stressed that this is just the tip of the iceberg in terms of subordination strategies for later Egyptian, though. For further details, see Junge 2001:Chapter 5, Reintges 2004:Chapter 12, and Loprieno 1995.

3.6.2 Coordination

Coordination in later Egyptian starts out similar to coordination in earlier Egyptian with the exception of the special conjunctive verb forms (see Section 3.3.3). There is still no overt conjunction 'and;' nominals, verb phrases and sentences could be conjoined simply by placing one directly after the other. An example with nouns is below.

(59) *n3 rwḏ-w*   *rmṯ-jst* *n p3 ḫr*
      the controller-PL workmen of the tomb
      'the controllers and workmen of the Tomb Building Administration' (pAbbott 7, 8-9, Junge 2001:55)

Also as in earlier Egyptian, occasionally, nominals were joined by *ḥr* 'upon' or *ḥnꜥ* 'with.'

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[27] Translation amended as per a suggestion of Leo Depuydt, p.c.
[28] In effect, *jw* serves the opposite function here as it did in earlier Egyptian (see Section 2.4). See Loprieno 1995 for discussion of how this came to be.

(60)   *t3   ḥm.t-nsw   ḥr   ẖrd.w=s*
        the wife-F-king upon child-PL-3FSG
        'the queen and her children' (Amarna boundary Stela U, Line 10, see formal Late Egyptian text below)

By the time of Coptic, however, Egyptian had the conjunction ⲀⲨⲰ [auō] 'and' which was used mostly to conjoin clauses but could also conjoin nominals.

(61)   **ⲚⲀⲤⲚⲎⲨ   ⲀⲨⲰ   ⲚⲀϢⲎⲢⲈ**
        na-snēu   auō   na-šēre
        my-brother.PL and   my-child.PL
        'my brothers and my children' (V. Pach. 88:23-24, Reintges 2004:97)

3.6.3 Negation

        The negation system underwent some change -- both from earlier Egyptian to later Egyptian and within later Egyptian. Recall that earlier Egyptian made use of three negation strategies: the particle *n*, the particle *nn*, and the negative verb *tm*. Late Egyptian uses a different set of particles (although this could be partially graphic; see Junge 2001:100), but retains *tm* as the negative verb. The bare preterit *sḏm-f* is negated with the construction *bwpw-f sḏm* (where *sḏm* is an infinitive) or occasionally *bw sḏm-f*. This form is the descendent of *n sḏm-f* of earlier Egyptian.

(62)   *bwpwj-w dj-t   n-j   dnj-t*
        NEG-3PL   give-INF to-1S share-F
        'They did not give me a share.' (BM 10052, 8, 12-13, Černý and Groll 1993:235)

The first present and third future verbal forms originally stem from pseudoverbal constructions (including the stative) in earlier Egyptian. These forms were negated in earlier Egyptian with the particle *nn*, and they are negated with *bn* in Late Egyptian. An example with the first present is below.

(63)   *bn   st   dj   mdj-n*
        NEG they here with-us
        'They are not here with us.' (pLeiden I 265, 7, Junge 2001:113)

Occasionally, the first present could also be negated using a discontinuous negation *bn…jwn3* (Junge 2001:113, Černý and Groll 1993:207). The negative verb *tm* is used to negate infinitives, participles, and conjunctive verbs, among others (Junge 2001:85). The 'negatival complement' (the special verb form that follows *tm*) is no longer used in Late Egyptian; *tm* is simply followed by an infinitive.

        Demotic displays roughly the same patterns as Late Egyptian (see e.g., Johnson 2000: Chapter 11). The major difference is that the negation of the first present requires a discontinuous morpheme: *bn…jn*, descendent of *bn…jwn3*. Discontinuous negation morphemes are used even more in Coptic, where **Ⲛ...ⲀⲚ** [n…an] negates the first present, the relative present, the future tense and other verb forms (see Reintges 2004:339).

(64)   **ⲚϤⲘⲠⲈⲒⲘⲀ   ⲀⲚ**
        n-f-mpeima   an
        NEG-3MSG-here NEG
        'He is not here.' (Luke 24:6, Layton 2000:193)

Coptic also had special negative allomorphs for several of the main auxiliaries, e.g., **ⲙⲡⲉ** [mpe] for the first perfect (typically **ⲁ** [a]), and uses the negative verb **ⲧⲙ** [tm] for the remainder of the verb forms (e.g., the conjunctive; see Reintges 2004:340). For an overview of the changes in the negation system in later Egyptian from the perspective of the theory of negation, see Loprieno 1995:180-182.

2.6.4 Interrogatives

Polar questions in all of later Egyptian are roughly similar to those in earlier Egyptian – either they are unmarked or they take an initial interrogative particle *jn* in Late Egyptian and Demotic and **ⲉⲛⲉ** [ene] in Coptic. An example with *jn* from Late Egyptian is below.

(65)　*(j)n pḥ-w　　r-k*
　　　Q　reach-3PL　to-2MSG
　　　'Have they reached you?' (LRL, 17, 14, Černý and Groll 1993:553)

Coptic had several additional interrogative particles that impart different shades of meaning (and perhaps bias) to the question. Reintges (2004:150-151) notes that the particle **ⲙⲏ** [mē] demonstrates a bias of the asker towards an answer that has the opposite polarity of the question, i.e., for a positive response if the question is negative, and for a negative response if the question is positive. In that it represents bias for a positive response if the question is negative, the marker is similar to a 'high negation' question in English, e.g., *Didn't you go to the zoo yesterday*? (on which, see Ladd 1981, Romero and Han 2004). An example is below.

(66)　**ⲙⲏ ⲙⲡⲉⲥⲛⲁⲩ　　ⲉⲣⲟⲟⲩ ⲙⲡⲉⲥⲛⲁⲩ**
　　　mē mpe-s-nau　　　ero-w　m-pe-snau
　　　Q　NEG.PF-2FSG-see　to-1PL　in-the-two
　　　'Haven't you seen them both?' (AP Chaîne no. 210, 56:16-17, Reintges 2004:151)

As for wh-questions, Late Egyptian and Demotic were similar to earlier Egyptian in that questions were often formed using clefts, e.g., using the 'emphatic' form of the verb to question prepositional phrases and adverbials.

(67)　*jjr-k　　　　　jtȝ　ȝḥ.t=j　　　ḥr　jḥ*
　　　AUX.EMPH-2MSG　take　property-F-1SG　upon　what
　　　'Why did you take my property?' (lit. 'it is why that you took my property')'
　　　(oDM 580 rt. 4-5, Junge 2001:132)

When wh-questions were not clefted, the wh-word was left in situ (see e.g., Johnson 2000:115, Černý and Groll 1993:Chapter 61). In Coptic, the 'second tense' (the descendent of the emphatic verb form) is always used when the wh-word is left in situ, for all types of wh-words.

(68)　**ⲛⲧⲁ　　ⲛⲓⲙ　ϫⲡⲟ　ⲛⲁϥ　　ⲛⲧⲉⲓϩⲩⲡⲟⲙⲟⲛⲏ**
　　　nta　　nim　čpo　na-f　　n-tei-hupomonē
　　　AUX.PRF2　who　achieve　for-3MSG　ACC-this-endurance
　　　'Who has achieved for himself such endurance?' (Hil. 12:29, Reintges 2004:254)

However, in Sahidic Coptic, the wh-word can be clause-initial, in which case a non-second (i.e., non-emphatic) tense is used.

(69) **NIM ⲁϥⲈⲚⲦⲔ   ⲈⲠⲈⲒⲘⲀ**
       who   a-f-ent-k   e-pei-ma
       who   PST-3MSG-bring-2MSG to-this-place
       'Who has brought you to this place?' (KHML I 3:7-8, Reintges 2004:254)

4 THE EGYPTIAN AND SEMITIC LEXICONS, COMPARED

The connection between Egyptian and the Semitic languages has long been a popular topic of research, starting with Erman's classic paper from 1892. In the grammatical sketch above, connections to Semitic are mentioned wherever appropriate, and in this section, the history of Egypto-Semitic research is briefly discussed and then the languages compared in terms of their word stock. One of the most comprehensive recent papers on the Semitic-Egyptian connection is Satzinger 2002, and the discussion here owes much to it.

It is almost universally accepted that Egyptian is not itself a Semitic language (exceptions include Vergote 1965 and Rössler 1971). In terms of its status within the Afroasiatic family, Egyptian is conventionally understood as roughly on a par with the Semitic languages (and the other language families in Afroasiatic), as shown in (70).

(70)

Afroasiatic

Egyptian   Semitic Berber Cushitic   Chadic   Omotic
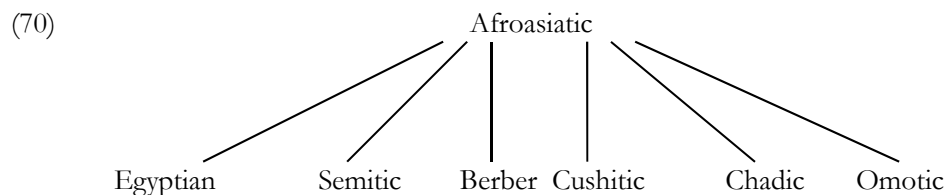
That said, there are significant similarities between Egyptian and Semitic. For example, they have much the same word order, they both have some kind of construct state to indicate possession, and they both make three distinctions in number (although all of these traits hold more for earlier Egyptian than later Egyptian). Ehret 1995 goes so far as to class Egyptian and Semitic (along with Berber) into a subgroup of Afroasiatic, called Boreafraisan.

However, Egyptian and Semitic also differ along fundamental lines, including different pronominal systems (Semitic lacks the equivalent of the dependent pronouns), different approaches to verbal conjugation (prefix in Semitic, suffix in Egyptian), and different ways of treating adverbial predicates. Moreover, as Satzinger (2002) notes, various factors muddy the waters when comparing Semitic and Egyptian, including the depth of time between Egyptian and most Semitic languages and the extent of areal contact between Egyptian and Semitic (which may never be able to be accurately estimated). These differences and considerations have given rise to a general consensus that Egyptian and Semitic, while certainly genetically related, are probably no closer than as represented in the tree in (70).

Previous research on the connections between Egyptian and Semitic has tended to focus either on etymologies (see e.g., Calice 1936, Vycichl, 1958 and Leslau 1962) or on the verbal system (see e.g., Rössler 1950, Thacker 1954, Janssens 1972, and Loprieno 1986a), although see Vergote 1965 focuses on the nominal system. A small body of work focuses on Semitic words in Egyptian texts and vice versa, including notably Hoch 1994 and Muchiki 1999. More recent studies on a variety of grammatical topics include Depuydt 2001 (on the Coptic enclitic particle ⲢⲰ [rō]), Jansen-Winkeln 2002 (on pronouns), and Breyer 2003 (on Egyptian-Semitic connections in general).

In terms of their word stocks, Semitic and Egyptian do not show a large amount of overlap. This may be part of a general trend, though – the lexicon of Egyptian does not overlap greatly with the lexicon of

any other Afroasiatic language (Satzinger 2002). Hodge 1976 and Satzinger 2002 both put forward attempts to calculate specifically Egyptian-Semitic cognates (see also the etymological dictionary of Takacs 1999-2008). Hodge takes as his starting point the list of common Semitic words in Bergsträsser (1928:181-192), and finds that about 42 percent have Egyptian cognates. He concludes that Semitic and Egyptian are related, but Egyptian is not a Semitic language.

Satzinger (2002) uses the Swadesh 100-word list, developed by Morris Swadesh in the 1920's to help determine the degree of relatedness between languages by examining their basic vocabulary. Some of the best-established cognates that Satzinger finds are listed below.

Table 17 : Examples of Egyptian-Semitic Cognates from the Swadesh List (Satzinger 2002)

Semitic	Egyptian	Gloss
*m-w-t	*mwt* > **ⲘⲞⲨ** [mu]	'to die'
*š-m-ᶜ	*sḏm* > **ⲤⲰⲦⲘ** [sōtm]	'to hear' (metathesis of the final two consonants)
*libb	*jb*	'heart'
*'anāku	*jnk* > **ⲀⲚⲞⲔ** [anok]	'I' (independent pronoun series)
*lā	*n* > **Ⲛ** [n]	'not'
*lišān	*ns* > **ⲖⲀⲤ** [las]	'tongue
*ḫāmm	*šm(m)*, var. *ḥmm* > **ϨⲘⲞⲘ** [hmom]	'(to) warm'
*man	*m*	'what'

Overall, Satzinger (2002) locates 19 out of 100 cognates (even including doubtful correspondences), lower than Hodge's 42 percent.

Numerals are often a diachronically conservative category, and Loprieno (1995:71-72) summarizes Loprieno 1986b and Schenkel 1990:53-57 on the etymology of Egyptian numerals; he identifies six connections between Egyptian and Semitic for the numerals 1-10 and one among the higher numerals (specifically, in the word for 100,000).

Table 18: Examples of Egyptian-Semitic Numeral Cognates (Loprieno 1995: 71; Table 4.8)

Semitic	Egyptian	Gloss
wḥd	*wᶜw* > **ⲞⲨⲀ** [wa]	'one'
ṯny	*sn.wj* > **ⲤⲚⲀⲨ** [snau]	'two'
šdš	*sjsw* > **ⲤⲞⲞⲨ** [sow]	'six'
šbᶜ	*sfḫw* > **ⲰϤⲈ** [šfe]	'seven'
ṯmny	*ḫmnw* > **ϨⲘⲈⲚⲈ** [hmene]	'eight'
tšᶜ	*psḏw* > **ⲮⲒⲦ** [psit]	'nine'
ʔlp	*ḥfn*	'100,000'

It is difficult to draw generalizations about the similarity of Semitic and Egyptian across work conducted on different data sets and under different phonological assumptions. The interested reader is directed to the sources above for detailed treatment of individual-word correspondences between Egyptian and Semitic. However, impressionistically, it seems safe to say that overlap in word stock between Egyptian and Semitic is much more than coincidental, but significantly less than for closely related languages.

5 CONCLUSION

Over the 4,000 year history of Egyptian, there was remarkable change within the language. The language underwent a major change from verb-initial (VSO) to verb-medial (SVO) order, the verbal system was fundamentally reorganized to make greater use of auxiliaries, and the nominal system became dependent on definite articles instead of nominal stems to express number and gender distinctions. Still, various parts of the language remained fairly consistent: indirect genitives, polar questions, stative verbs, and most of the pronouns, to name just a few areas. It is hoped that the description here will help make the basic properties of the language available to historical linguists to tap this goldmine of diachronic information, but also to linguists of related languages, to theoretical linguists, and to all non-Egyptologists interested in learning about more about ancient Egyptian.

6 TEXT SAMPLES

As in the rest of the chapter, all glosses are in accordance with the Leipzig Glossing Rules. Additional abbreviations used (below and in the main text of the chapter) are: 2 – second tense, 3FUT – third future tense, ADJV – adjectival verb prefix, AGENT – marker of the semantic Agent, CIRCUM – circumstantial, CONJ –conjunctive verb, EMPH – emphatic verb, LINK – linker, NISBA – nisba adjective, PCLE – particle, PCPLE – participle, PRET – preterit, PROS – prospective verb, REL – relative verb, RELPRES – relative present tense, RELPFCT – relative perfect tense, RELTEMP – temporal relative tense (Reintges 2004:291-293), STAT – stative verb, TERM – terminative (Junge 2001:228-229).

As in the main text, the transliteration of Middle and Late Egyptian uses dashes instead of Egyptological conventions so that it can be aligned with the gloss. Transliterated letters in parentheses were not written in the text, but are supplied for grammatical clarity. Transliterated letters in brackets are lacunae that have been plausibly filled in.

Text Sample 1: The Shipwrecked Sailor (Middle Egyptian)

The Shipwrecked Sailor is a work of Middle Egyptian literature from somewhat later than 2000 BCE. The original hieroglyphics can be found in Blackman 1972. Additional translations in Lichtheim 1973 and Simpson 2003, among many others. The excerpt begins about 21 lines into the story, when the narrator begins telling the main tale to his interlocutor.

s-ḏd-j   *rf*   *n-k*   *mjt-t*   *jrj*   *ḫpr-Ø*   *mˤ-j*   *ḏs-j*
CAUS-say.PROS-1SG   PCLE   to-2MSG likeness-FEM   thereof.NISBA   happen.STAT-3MSG   to-1SG self-1SG
'I will recount to you something like it which happened to me myself. (21-23)

šm-kwj   *r*   *bj3w*   *n*   *jtj*
go.STAT-1SG   to   mining.region   of   sovereign
I went down to the mining region of the sovereign. (23-24)

h3-kwj   *r*   *w3ḏ-wr*   *m dp-t*   *n-t*   *mḥ 120 m 3w-s*
descend.STAT-1SG   to   green-great   in boat-F   of-F   cubit 120 in length-3FS
'I descended to the sea in a boat 120 cubits in length, (24-26)

mḥ   *40 m wsḫ-s*   *sḳd*   *120 jm-s*   *stpw*   *n km-t*
cubit 40 in width-3FS   sailor 120   in-3FS choicest of Egypt-F
40 cubits in width, with 120 sailors in it – the choicest of Egypt. (26-28)

m3-sn   *p-t*   *m3-sn*   *t3*   *mˤk3*   *jb-sn*   *r*   *m3w-w*
look.PROS-3PL sky-FEM look.PROS-3PL land brave heart-3PL than lion-PL
Whether they looked at the sky or whether they looked at the land, their hearts were as brave as lions. (28-30)

sr-sn   *dˤ*   *n*   *jj-t(-f)*   *nšnj*   *n*   *ḫpr-t-f*
predict-3PL storm NEG arrive-t-3MS tempest NEG come-t-3MS
They could predict a storm when it had not yet arrived, a tempest when it had not yet come.[29](30-32)

dˤ   *pr-Ø*   *jw-n*   *m*   *w3ḏ-wr*   *tp-ˤ*   *s3ḥ-n*   *t3*
storm ariseSTAT-3MSG PCLE-1PL at green-great before reach.PROS-1PL land
A storm came up while we were at sea, before we could reach land.

f3-t   *t̠3w*   *jr-f*   *wḥmj-t*   *nwj-t*   *jm-f*   *n-t*   *mḥ 8*
rise-INF wind make-3MSG cry-F wave-F in-3MSG of-F cubit 8
The rising of the wind, it made a cry (?), a wave being in it of 8 cubits.[30] (34-36)

jn   *ḫt*   *ḥḥ*   *n-j*   *s*
by wood break.PCPLE for-1SG it
It was a piece of wood which broke it for me.[31]

ˤhˤn   *dp-t*   *mt(-tj)*   *ntj-w*   *jm-s*   *n*   *sp*   *wˤ*   *jm*
then[32] boat-F die.STAT-3FSG C-3PL in-3FGS NEG remain one therein
Then the boat was dead. Those who were in it, not one remained. (37-39)

ˤhˤn-j   *rdj-kwj*   *r*   *jw*   *n*   *w3w*   *n*   *w3ḏ-wr*
then-1S place.STAT-1SG at island by wave of green-great
Then I was placed on an island by a wave of the sea. (39-41)

jr-n-j   *ḥrw-w 3*   *wˤ-kwj*   *jb-j*   *m*   *snw-j*
spend.time.EMPH-PST-1SG day-PL 3 be.alone.STAT-1SG heart-1SG as companion-1SG
I spent three days alone, my heart as my companion. (41-42)

sḏr-kwj   *m*   *ẖnw*   *n*   *k3p n ḫt*   *ḳnj-n-j*   *šwj-t*
sleep.STAT-1SG in inside of hut of wood embrace-PAST-1SG shade-F
I slept inside a hut of wood, having embraced the shade.[33] (42-45)

ˤhˤn   *dwn-n-j*   *rd-wj-j*   *r*   *rḫ*   *dj-t-j*   *m*   *r-j*
then stretch-PST-1SG foot-DU-1S in.order.to learn.INF put.REL-F-1SG in mouth-1SG
Then I stretched my legs in order to figure out something to eat (lit. to learn what to put in my mouth) (45-46).

gm-n-j   *d3b j3rr-t*   *jm*   *j3ḳ-t*   *nb-t*   *šps-t…*
find.EMPH-PST-1SG figs grapes-F therein vegetables-F all-FEM useful-F
Therein I found figs, grapes, all kinds of useful vegetables… (47-48)

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[29] The negation marker *n* followed by a *sḏm-t-f* verb form has a meaning of 'not yet.' It is unclear what piece of meaning the –*t* suffix in the verb corresponds to, so I have simply glossed it as –*t*.

[30] Alternative translation: 'As we sailed, it made a swell and in it a wave 8 cubits tall.'

[31] Alternative translation (Lichtheim 1973): 'The mast – it (the wave) struck it.'

[32] Technically, this is not like *then* in English, but a narrative verbal form. See Allen 2000:178 for basic description.

[33] Alternative translation (Lichtheim 1973): 'Lying in the shelter of trees, I hugged the shade.'

[The narrator continues to describe the amazing bounty of food on the island, which he promptly satiates his hunger with and then makes a burnt offering to the gods. But then…]

ꜥḥꜥn sḏm-n-j   ḫrw   ḳrj   jb-kwj   wꜣw pw   n wꜣḏ-wr
then hear-PST-1SG sound thunder think.STAT-1SG wave this.MSG of green-great
Then I heard the sound of thunder. I thought it was a wave of the sea. (56-59)

ḫt-w   ḥr   gmgm   tꜣ   ḥr   mnmn
tree-PL PROG break.INF earth PROG shake.INF
The trees were breaking and the earth was shaking. (59-60)

kf-n-j   ḥr-j   gm-n-j   ḥfꜣw pw   jw=f   m   jj-t
uncover-PST-1SG face-1SG find.EMPH-PAST-1SG snake this.MSG PCLE-3MSG PROG come-INF
Uncovering my face, I found that it was a snake which was coming. (60-62)

nj-sw   mḥ   30 ḫbsw-t-f   wr   s r   mḥ 2
of-him cubit 30 beard-F-3MSG be.great it than cubit 2
He was 30 cubits long. His beard was longer than 2 cubits. (63-64)

ḥꜥ-f   sḫr-w   m   nbw jn-wj-fj   m   ḥsbd   mꜣꜥ
body-3MSG overlay.STAT-3MSG with gold eyebrow-DU-3MDU with lapis.lazuli real
His body was overlaid with gold, and his eyebrows were of real lapis lazuli… (64-66)

[The snake then addresses the sailor.]

nm jn   tw sp sn nḏs   nm jn   tw
who bring.PCPLE you time two little.person who bring.PCPLE you
"Who brought you, who brought you, little one? Who brought you? (69-70)

jr wdf-k   m ḏd   n-j jn   tw r jw   pn
if delay.PROS-2MSG in tell.INF to-1SG bring.PCPLE you to island this
If you delay in telling me who brought you to this island, (70-71)

rdj-j   rḫ-k   tw jw-k   m ss
cause.PROS-1SG know.PROS-2MSG you PCLE-2MSG as ash
I will make you into ashes. (lit. I will make you know yourself when you are as ashes.)'" (71-72)

Text Sample 2: Amarna Boundary Stela U (Formal Late Egyptian)

The monotheistic pharaoh Akhenaten (reigning from 1365-1349 BCE) established a new capital city called Akhetaten, and he commissioned a set of stelae to mark its boundaries. The stelae contained the foundation decree for the city of Akhetaten, but they are not well preserved. A year later, another set of boundary stelae were commissioned containing a later decree, and Stela U is among this better-preserved set. The language of the stelae is Medio-Late Egyptian as identified by Junge 2001 – mostly Late Egyptian sentence structure with some not inconsiderable lingering influence from Middle Egyptian. The hieroglyphic text here can be found in Davies 1903 (Volume V), and translations of stelae from the later set in general are in Breasted 1962, Lichtheim 1976 and Murnane 1995. The excerpt here begins about 4 lines into the stela, after some extensive royal titulary, and essentially follows the transliteration in Junge 2001.

ḥrww pn jw-tw m Ꜣḫtjtn m pꜢ jmw n psš-t
day this PCLE-one in Akhetaten in the tent of woven.material-F
'On this day, one (i.e., the king) was in Akhetaten in the carpeted tent (4)

[*jr*]-*j n ḥm-f m Ꜣḫtjtn ntj rn-f r pꜢ-jtn-ḥr-Ø*
make-PASS.PCPLE for majesty-3MSG in Akhetaten COMP name-3MSG as The-Aten-be.content.STAT-3MSG
which was made for his Majesty in Akhetaten whose name is 'Aten-is-content.' (4-5)

ḫꜥj-t jn ḥm-f ḥr ssm ḥr wr[rj]-t ꜥꜢ-t n-t dꜥm
appear-INF by majesty-3MSG PROG mount.INF on chariot-F great-F of-F electrum
'His Majesty appeared mounted on a large chariot of electrum[34] (5)

mj jtn wbn-f m Ꜣḫ-t mḥ-n-f tꜢ-wj m mrw-t-f
like Aten rise-3MSG in horizon-F fill-PST-3MS land-DU with love-F-3MSG
like Aten when he rises in the horizon, having filled the two lands with his love. (5)

šsp tp-wꜢ-t nfr-t r Ꜣḫtjtn m sp [*tpj*]
start.INF journey-F good-F to Akhetaten on time first
The starting of a good journey to Akhenaten on the first anniversary (of visiting it)[35] (5-6)

jrj-n [*ḥm-f*] *r sntj-s m mnw n pꜢ jtn*
do.REL-PST majesty-3MSG in.order.to found.INF-3FSG as monument to the Aten
which his Majesty did in order to found it as a monument to the Aten (6)

mj wḏ-t-n jtj-f Rꜥw-ḥrwꜢḫtj ḫꜥj-m-Ꜣḫ-t
like command.REL-F-PST father-3MSG Re-Harakhti rejoice.PCPLE-in-horizon-F
according to the command of his father,[36] Re-Harakhti-who-rejoices-in-the-horizon (6)

m -rn-f- m-Šw ntj-m-jtn dj ꜥnḫ ḏ-t nḥḥ
in-name-3SG -as-Shu COMP-as-Aten give.PCPLE life forever-F forever
In-his-name-Shu-who-is-Aten (who gives life forever and ever) (6)

r jr-t n-f mnw m ḫnw-s
in.order.to make for-3MSG monument in inside-3FSG
in order to make for him a monument in its midst. (6)

dj-mꜢꜥ ꜥꜢb-t ꜥꜢ-t m [*t ḥnḳ-t*] *jwꜢ-w wnḏw-w*
make-be.true.INF[37] offering-F great-F of bread beer-F long.horn.cattle-PL short.horn.cattle-PL
A great offering was made of bread and beer, long-horned and short horned cattle, (6)

kꜢ-w Ꜣpd-w jrp dḳr sntr rnp-w-t nb-t nfr-t
cattle-PL fowl-PL wine fruit incense herb-PL-F all-F good-F
(other) cattle, fowl, wine, fruit incense, all kinds of good herbs (7)

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[34] Junge (2001) and Breasted (1962) treat *ssm* as the noun *ssm.t* 'horse' and translate 'appeared with horse and chariot.' I follow Lichtheim 1976 in taking it as an infinitive for 'to mount.'

[35] See notes on this translation in Lichtheim 1976, p. 51 n.3.

[36] Literally 'as his father commanded.'

[37] I follow Junge 2001:73, note line 6, in treating this as an infinitive. The verb *rdj-mꜢꜥ* has an idiomatic meaning 'to make (an offering).'

m hrww n sntj ꜣḫtjtn n pꜣ jtn Ꜥnḫ
on day of found.INF Akhetaten for the Aten live.PCPLE
on the day of founding Akhetaten for the living Aten, (7)

šsp ḥsw mrw ḥr-tp Ꜥnḫ wḏꜣ snb nsw-bjt…
receive.PCPLE praise love on-behalf life prosperity health king.Upper.Egypt-Lower.Egypt
who receives praise and love on the behalf of (l.p.h.) the king of Upper and Lower Egypt… (7)

[The titulary and multiple royal names of Akhenaten finish out Line 7.]

šm-t m ḫnt-j-t smn-t jn ḥm-f [ḥr] wrrj-t m-bꜣḥ jtj-f
go-INF in front-NISBA-F halt-INF by majesty-3MSG on chariot-F in-presence father-3MSG
Having gone southward, his Majesty halted on his chariot before his father … (8)

[The royal names of Akhenaten's father follow; see above.]

ḥr pꜣ ḏw rsj-jꜣbtj n ꜣḫtjtn st-w-t jtn ḥr-f
at the mountain south-eastern of Akhetaten ray-PL-F Aten upon-3MSG
at the southeastern mountain of Akhetaten, the rays of Aten being upon him (8)

m Ꜥnḫ wꜣs ḥr rnpj ḥꜤ-f rꜤw nb
with life power for renewal body-3MSG day every
with life and power for the renewal of his body every day. (8)

Ꜥnḫ ḏd-t-n nsw-bjt
Oath speak.REL.PASS-F-PST King.Upper.Egypt-Lower.Egypt
Oath spoken by the King of Upper and Lower Egypt: (9)… [titulary of Akhenaten follows]

Ꜥnḫ jtj-j [Re-Harakhti etc.] nḏm ḫꜣtj-j ḥr tꜣ ḥm-t-nsw ḥr ḫrd-w-s
live father-1SG [Re-Harakhti etc.] be.joyful heart-1SG on the wife-F-king and child-PL-3FSG
"As my father (Re-Harakhti etc.) lives, and as my heart rejoices in the queen and her children (9-10)

ntj rdj-t jꜣwj ḥm-t-nsw wr-t Nfrnfrwjtn Nfrtjtj Ꜥnḫ-tj ḏ-t nḥḥ
COMP grant-PASS old.age wife-F-king great-F Nefernefruaten Nefertiti live.STAT-3FS forever-F forever
for the old age which the great queen Nefernefruaten Nefertiti, living forever and ever, is granted (10)

m pꜣj ḥḥ n [rnp-w-t] jw-s ḥr ḏr-t Pr-Ꜥꜣ Ꜥnḫ wḏꜣ snb
in this million of year-PL-F CIRCUM-3FSG under hand-F Pharaoh life prosperity health
in these millions of years, she being in the care of the Pharaoh, (life, prosperity, health) (10)

rdj-t jꜣwj sꜣ-t-nsw Mrtjtn sꜣ-t -nsw Mktjtn nꜣj-s [ḫrd-w]
grant-PASS old.age child-F-king Meretaten child-F-king Meketaten this.PL-3FSG child-PL
and old age be granted to the princess Meretaten and to the princess Meketaten and her children, (10-11)

jw-w ḥr ḏr-t tꜣ ḥm-t-nsw tꜣj-sn mw-t r nḥḥ ḏ-t
CIRCUM-3PL under hand-F the.FSG wife-F-king this.FSG-3PL mother-F for forever forever-F
they being under the care of the queen and their mother forever and ever. (11)

p3j-j   ʿnḫ   n m3ʿ-t ntj   jb-j   r   ḏd-f
this.MSG-1SG oath of truth-F COMP heart-1SG FUT speak.INF-3MSG
My oath is truth[38] which my heart will speak (11)

ntj   bn   ḏd-j   sw m ʿd3w   r   nḥḥ   ḏ-t
COMP NEG speak.PROS-1SG   it in falseness at forever forever-F
and which I will not say falsely ever."' (11-12)

Text Sample 3: The Report of Wenamon (Vernacular Late Egyptian)

The Report of Wenamon is dated from 1090-1080 BCE, during the decline of Egyptian centralized authority and regional power. It is not clear whether the report is a factual recounting of a mission, or a fictional invention, but its sophisticated style and literary accomplishment are undeniable. The language is vernacular Late Egyptian, with less Middle Egyptian influence. It has been published in Gardiner 1932 and translations are in Lichtheim 1976 and Simpson 2003. The story picks up with the narrator (Wenamon) having traveled by ship to Dor (a port town in Palestine); some of the goods of the ship have been stolen while it was in the harbor overnight and he goes to talk to the local authority about it.

jw-j   ḏd n-f   twj t3j-tw   n t3j-k   mr
PCLE-1SG   say to-3MSG I   rob-STAT in this.FSG-2MSG harbor
'I said to him: "I have been robbed in your harbor. (1,13)

ḥr   mntk p3   wr   n p3j   t3
now you   the prince of this.MSG land
Now you are the prince of this land. (1,13)

ḥr   mntk p3j-f   smtj   wḫ3   p3j-j   ḥḏ
Now you   this.MSG-3MSG investigator search.for.IMP this.MSG-1SG money
Now you are its investigator. Search for my money! (1,13-1,14)

j3   jr   p3   ḥḏ   nj-sw Jmn-rʿ nsw nṯr-w p3 nb   n n3   t3-wj
indeed as.for the.MSG money of-him Amun-Ra king god-PL the lord of the.PL land-DU
Indeed, as for the money, it belongs to Amun-Ra, king of the gods, the lord of the two lands (1,14-1,15)

nj-sw Bʿnbḏd nj-sw ḥr(j)-ḥr p3j   nb n3   ktḫ-w ʿ3j-w   n kmt
of-him Smendes of-him Herihor this.MSG.1SG lord the.PL other-PL great-PL of Egypt
It belongs to Smendes. It belongs to Herihor, my lord, and the other magnates of Egypt. (1,15-1,16)

mntk sw nj-st w3rtj   nj-st mʿk3mʿrw nj-st t̲ʿk3rw-bʿr p3   wr   n kpn3
you   it of-it Weret of-it Mekmer   of-it Tjekerbaal the prince of Byblos
It belongs to you. It belongs to Weret. It belongs to Mekmer. It belongs to Tjekerbaal, the prince of Byblos."
(1,16-1,17)

jw-f   ḏd-n-f   n-j
PCLE-3MSG say-PAST-3MSG to-1SG
He said to me… (1,17)

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[38] See notes on this translation in Junge 2001:74.

ẖr   ptrj   bw   jrw-j   ꜥm   n   tꜣj   wšb-t   j-ḏd-k   n-j
Now look.IMP NEG AUX-1SG understand of this.FSG answer-F REL-say-2MSG to-1SG
"…Now look I cannot understand this answer which you say to me. (1,17-1,18)

hn jtꜣj   jw   nj-sw pꜣj-j   tꜣ
if thief CIRCUM of-it this.MSG-1SG land
If a thief who belonged to my land (1,18)

pꜣ   hꜣj   r   tꜣj-k   br   mtw-f   tꜣj   pꜣj-k   ḥḏ
the.MSG go.down.PCLE to the.FSG-2MSG ship CONJ-3MSG steal this.MSG-2MSG money
had been the one who went down to your ship and stole your money (1,18-1,19)

wn   jw-j   ḏbꜣ-f   n-k   m   pꜣj-j   wḏꜣ
PRET PCLE-1SG replace-3MSG for-2MSG from this.MSG-1SG storehouse
I would replace it for you from my storehouse. (1,19)

šꜣꜥ   jjrtw-w   gm pꜣj-k   jtꜣj   n rn-f
until TERM.AUX-3PL find this.MSG-2SG thief in name-3SG
until they find your thief whatever his name is. (1,19-1,20)

jꜣ   jr   pꜣ jtꜣj   jtꜣj   tw
indeed as.for the thief rob.PCPLE you
Indeed, as for the thief who robbed you, (1,20)

mntk sw nj-sw tꜣj-k   br
you him of-him this.FSG-2MSG ship
he belongs to you. He belongs to your ship."' (1,20-1,21)

Text Sample 4: Mark 16:1-7 (Coptic)

This Coptic text is from the New Testament of the Bible, from the Coptic edition Quecke 1972. Mary Magdalene and two other women go to Jesus's tomb, and there they find a man dressed in white who informs them of Jesus's resurrection. Superlinear strokes are provided as found in the original text, unlike in the main text of this chapter. Dashing is as per the original text in the Coptic script, and as per the gloss in the transliteration.

ⲀⲨⲰ ⲚⲦⲈⲢⲈ-ⲠⲤⲀⲂⲂⲀⲦⲞⲚ   ⲞⲨⲈⲒⲚⲈ
auw   ntere-p-sabbaton   weine
and   RELTEMP-the.MSG-sabbath   pass.by
'And when the sabbath passed, (1)

ⲘⲀⲢⲒⲀ ⲦⲘⲀⲄⲆⲀⲖⲎⲚⲎ   ⲀⲨⲰ ⲘⲀⲢⲒⲀ ⲦⲀ-Ⲓ̈ⲀⲔⲰⲂⲞⲤ ⲘⲚ-ⲤⲀⲖⲰⲘⲎⲚ
maria   t-magdalēnē   auw   maria   ta-iakōbos   mn-salōmēn
Mary   the.FSG-Magdalene   and   Mary   3FSG.POSS-James with-Salome
Mary Magdalene and Mary she-of-James and Salome (1)

ⲁⲩ-ϣⲉⲡ-ⲍⲉⲛ-ϩⲏⲛⲉ   ⲭⲉⲕⲁⲁⲥ   ⲉⲩⲉ-ⲉⲓ   ⲛ̄ⲥⲉ-ⲧⲁϩⲥ-ϥ

a-u-šep-hen-hēne   čekaas   e-u-e-ei   n-se-tahs-f

PST-3PL-receive-some-spice.PL   in.order.that   3FUT-3PL-3FUT-come   CONJ-3PL-anoint-3MSG

bought some spices so that they might come and anoint him (i.e., Jesus). (1)

ⲁⲩⲱ ϩⲧⲟⲟⲩⲉⲙⲁⲧⲉ   ⲙ̄ⲡⲟⲩⲁ   ⲛ̄-ⲛ̄ⲥⲁⲃⲃⲁⲧⲟⲛ   ⲁⲩ-ⲉⲓ

auw   htoouemate   m-p-oua   n-nsabbaton   a-u-ei

and   at.first.light   on-the.MSG-one   of-week   PST-3PL-go

And at first light on the first day of the week, they went (2)

ⲉϩⲣⲁⲓ̈   ⲉ-ⲡⲉⲙϩⲁⲟⲩ   ⲉ-ⲁ-ⲡⲣⲏ   ϣⲁ

ehrai   e-pe-mhaou   ea-p-rē   ša

down   to-the.MSG-tomb   RELPFCT-the.MSG-sun   rise

down to the tomb when the sun had risen. (2)

ⲁⲩⲱ ⲛⲉⲩ-ⲭⲱ   ⲙ̄ⲙⲟ-ⲥ   ⲛ̄-ⲛⲉⲩⲉⲣⲏⲩ

auw   ne-u-čō   mmo-s   n-neu-erēu

and   PRET-3PL-say   ACC-3FSG   to-3PL.POSS-each.other

And they said to each other: (3)

ⲭⲉ-ⲛⲓⲙ   ⲡⲉⲧ-ⲛⲁ-ϥⲓ-ⲡⲱⲛⲉ   ⲉⲃⲟⲗ   ϩⲓ-ⲣⲱ-ϥ   ⲙ̄-ⲡⲉⲙϩⲁⲟⲩ

če-nim   p-et-na-fi-p-ōne   ebol   hi-rō-f   m-pe-mhaou

COMP-who   the.MSG-COMP-will-take-the.MSG-stone   away.from   at-mouth-3FSG   of-the-tomb

Who will take the stone away from the mouth of the tomb? (3)

ⲛ̄ⲧⲉⲣⲟⲩ-ϥⲓⲁⲧ-ⲟⲩ   ⲇⲉ   ⲉϩⲣⲁⲓ̈ ⲁⲩ-ⲛⲁⲩ   ⲉ-ⲡⲱⲛⲉ   ⲉ-ⲁⲩ-ϥⲓⲧ-ϥ̄   ⲙ̄ⲙⲁⲩ

nter-ou-fiat-ou   de   ehrai   a-u-nau   e-p-ōne   e-au-fit-f   mmau

RELTEMP-3PL-look-3PL   but   up   PST-3PL-see   to-the.MSG-stone   RELPRES-3PL-take-3MSG   away

But when they looked up, they saw that the stone had been taken away; (4)

ⲛⲉ-ⲩⲛⲟϭ   ⲅⲁⲣ ⲡⲉ   ⲉⲙⲁⲧⲉ

ne-u-nokʲ   gar   pe   emate

PRET-a-great   for   this.MSG   very

for it was very great. (4)

ⲁⲩⲱ ⲛ̄ⲧⲉⲣⲟⲩ-ⲃⲱⲕ   ⲉϩⲟⲩⲛ   ⲉ-ⲡⲉⲙϩⲁⲟⲩ

auw   nter-ou-bōk   ehoun   e-pe-mhaou

and   RELTEMP-3PL-go   in   to-the.MSG-tomb

And when they went into the tomb, (5)

ⲁⲩ-ⲛⲁⲩ   ⲉ-ⲩϩⲣ̄ϣⲓⲣⲉ   ⲉϥ-ϩⲙⲟⲟⲥ   ⲉϩⲣⲁⲓ̈ ⲛ̄ⲥⲁⲟⲩⲛⲁⲙ ⲙ̄ⲙⲟ-ϥ

a-u-nau   e-u-hršire   e-f-hmoos   ehrai   nsaounam   mmo-f

PST-3PL-see   to-a-young.person   REL.PRES-3MSG-sit   down   at.the.right   in-3MSG

they saw a young man sitting down at the right side of it (the tomb) (5)

ⲉϥ-ϭⲟⲟⲗⲉ   ⲛ̄-ⲟⲩⲥⲧⲟⲗⲏ   ⲛ̄-ⲟⲩⲱⲃϣ̄

e-f-kʲoole   n-ou-stol ē   n-ouōbš

REL.PRES-3MSG-clothe.STAT   with-a-robe   LINK-white

clothed in a white robe. (5)

ⲀⲨⲰ Ⲁ-ⲐⲞⲦⲈ   ϪⲒⲦ-ⲞⲨ ⲚⲦⲞϤ ⲆⲈ Ⲁϥ-ϢⲀϪⲈ ⲚⲘ̄ⲘⲀ-Ⲩ
auw   a-t-hote   či̇t-ou   ntof   de   a-f-šače   nmma-u
and   PST-the.FSG-fear   take-3PL   3MSG   but   PST-3MSG-say   to-3PL
And they were afraid (lit., fear took them). But he said to them: (5-6)

ϪⲈ-Ⲙ̄ⲠⲢ̄-Ⲣ̄-ⲒⲞⲦⲈ   ⲈⲦⲈⲦⲚ̄-ⲔⲰⲦⲈ   Ⲛ̄ⲤⲀ-Ⲓ̄Ⲥ̄
če-mpr-r-hote   e-tetn-kōte   for-is[39]
COMP-NEG-do-fear   REL.PRES-2PL-seek   for-Jesus,
Don't be afraid. You are looking for Jesus (6)

ⲠⲚⲀⲌⲀⲢⲎⲚⲞⲤ   Ⲡ-ⲈⲚⲦ-ⲀⲨ-Ⲥ̄ⲦⲞⲨ[40]   Ⲙ̄ⲘⲞ-ϥ
p-nazarēnos   p-ent-a-u-staurou   mmo-f
the.MSG-Nazarethian   the.MSG-COMP-PST-3PL-crucify   ACC-3MSG
of Nazareth who was crucified. (6)

Ⲁϥ-ⲦⲰⲞⲨⲚ-ϥ̄   Ⲛ-ϥ-Ⲍ̄Ⲙ̄-ⲠⲈⲒ̈-ⲘⲀ   ⲀⲚ
a-f-twoun-f   n-f-hm-pei-ma   an
PST-3MSG-resurrect-3MSG   NEG-3MSG-in-this.MSG-place   NEG
He has been resurrected. He is not in this place. (6)

ⲀⲚⲀⲨ   Ⲉ-ⲠⲘⲀ   Ⲛ̄Ⲧ-ⲀⲨ-ⲔⲀⲀ-ϥ   Ⲛ̄ⲌⲎⲦ-ϥ̄
anau   e-p-ma   nt-a-u-kaa-f   nhēt-f
look.IMP   at-the.MSG-place   COMP-PST-3PL-put-3MSG   in-3MSG
Look at the place that they put him in. (6)

ⲀⲖⲖⲀ ⲂⲰⲔ   Ⲛ̄ⲦⲈⲦⲚ̄ϪⲞⲞ-Ⲥ   Ⲛ̄-ⲚⲈϥⲘⲀⲐⲎⲦⲎⲤ   ⲘⲚ̄-ⲠⲔⲈⲠⲈⲦⲢⲞⲤ
alla   bōk   nte-tn-čoo-s   n-ne-f-mathētēs   mn-pkepetros
but   go.IMPF   CONJ-2PL-tell-3FSG   to-the.PL-3MSG-disciple   with-Peter
But go and tell this to his disciples and Peter (7)

ϪⲈ-ϥ-ⲚⲀ-Ⲣ̄-ϢⲞⲢⲠ̄   ⲈⲢⲰⲦⲚ̄   Ⲉ-ⲦⲄⲀⲖⲒⲖⲀⲒⲀ
če-f-na-r-šorp   erō-tn   e-t-galilaia
that-3MSG-FUT-be-earlier   than-2PL   to-the.FSG-Galilee
that he will be earlier than you to Galilee.' (7)

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[39] This is an abbreviation for ⲒⲎⲤⲞⲨⲤ [iēsous] 'Jesus.'

[40] This is another abbreviation, written out fully in the transliteration.

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