

CHAPTER 46

HISTORY OF THE EGYPTIAN LANGUAGE

ANDRÉAS STAUDER

INTRODUCTION: PERIODIZATION OF THE LANGUAGE

ANCIENT Egyptian, including Coptic, has the longest written documentation of any language, extending over more than four millennia.¹ This is traditionally divided into the following stages:

- [Archaic Egyptian: fragmentarily attested, Dynasties 0–3, c.3050–2650 BC]²
- Old Egyptian (Old Kingdom, c.2650–2150 BC)³
- Middle Egyptian (First Intermediate Period through Amarna, c.2150–1350 BC)⁴
- Late Egyptian (Amarna through Third Intermediate Period, c.1350–650 BC)⁵
- Demotic (Late Period, c.650 BC–AD 300)⁶
- Coptic (the indigenous language of Late Antique and medieval Egypt, c.AD 300–1300)⁷

¹ Surveys: Loprieno and Müller 2012, Loprieno 2001, Junge 1985, 1984. Monographic treatments: Allen 2012, Loprieno 1995.

² For the lexicon, Kahl et al. 2002–; for phonology, Kammerzell 2005.

³ Edel 1955–1964 (the reference grammar, now outdated for verbal inflection); for the verb, Allen 1984 (Pyramid Texts), Stauder 2014 (in general), Stauder 2020 and Doret 1986 (both for autobiographies); for specific corpuses: Allen 2017 (pyramid of Unis), Schweitzer 2005 (Fourth Dynasty).

⁴ Malaise and Winand 1999, Borghouts 2010, Schenkel 2012, Allen 2014, Gardiner 1957; for documentary texts, Brose 2014.

⁵ Junge 2008³, Neveu 1996, Erman 1933.²

⁶ Quack in prep., Simpson 1996, Johnson 1976, Spiegelberg 1925. Note the occasional mismatches between Demotic language and script: Demotic language written in the hieroglyphic or hieratic scripts and, conversely, Middle Egyptian or ‘Egyptien de tradition’ (see below) written in the Demotic script; see Quack 2010a; 1995.

⁷ Layton 2011³, Polotsky 1987–1990, Till 1961, 1931, Steindorff 1951; Müller in prep.

The traditional subdivision is largely a product of an awareness of the historicity of the Egyptian language that emerged gradually among scholars from the later nineteenth century onwards.⁸ While entrenched in academic teaching practice, this subdivision is inherently problematic as it projects historical periodization onto linguistic history. It is indirectly relevant insofar as the major political and cultural discontinuities that it mirrors had effects on the types of texts and contents that were committed to writing at a given time; on the constitution of written standards of the language (including their possible geographical bases); on graphemics (the shifting conventions for representing language in writing); and thereby, more broadly, on aspects of how Egyptian-Coptic presents itself as a corpus language. Current research emphasizes the dialectics between linguistic change per se, as a series of continuous processes largely indifferent to such external determinations, and the partly discontinuous ways in which ancient Egyptian manifests itself in a written record. The latter is problematized in its artefactual nature and as reflecting the extra-linguistic determinations of successive episodes of ‘Verschriftlichung’ of which it is the product.

Linguistically, the traditional division is substantiated by a relatively limited set of mainly formal (morphosyntactic) criteria, many to do with verbal morphology. A consideration of a higher number of more diverse criteria, and of the occasionally more elusive dimensions of semantic change, alters the picture.⁹ As description becomes more refined, increasing attention is paid to the considerable diachronies internal to traditionally defined language stages; this leads to distinctions such as between ‘Middle Egyptian I’ (First Intermediate Period–early Twelfth Dynasty) and ‘Middle Egyptian II’ (late Twelfth–Eighteenth Dynasty), between earlier and later Late Egyptian (late Eighteenth–Twentieth Dynasty and late Twentieth Dynasty–Third Intermediate Period, respectively), or between early, middle, and late Demotic.¹⁰ As a result, the boundaries between discrete stages as traditionally defined are also getting blurred.¹¹ In addition, the often considerable variation observed in the written record at any given time is increasingly taken into consideration (see below). Variation is studied both as a defining dimension of written language in use in different cultural settings,¹² and as providing the necessary basis for linguistic change itself; this results in a blurring of the traditional dichotomy between synchrony and diachrony.

From the late New Kingdom to Roman times, the monumental, ritual, and funerary spheres witnessed a continued cultivation or even revival of (elements of) older linguistic varieties (mostly from Middle Egyptian, but also from Old and even Late Egyptian). This phenomenon—described as ‘égyptien de tradition’ (or, roughly, ‘Traditional Egyptian’)—is

⁸ Schenkel 1990: 7–10.

⁹ Lexical change would be highly relevant too in principle, but can hardly serve refined periodization in practice given the severely incomplete diachronic attestation of the lexicon in the record.

¹⁰ For major changes occurring during ‘Old Egyptian’, Stauder 2014 (*passim*); during ‘Middle Egyptian’, Vernus 1990a: 143–93, Stauder 2013c (*passim*); during ‘Late Egyptian’, Winand 1992: 13–17 (and *passim*), 2014b, 2016; during ‘Demotic’, Quack in prep. Coptic is traditionally described in mostly synchronic terms, but internal diachronies are revealed, e.g., when closer attention is paid to differences between ‘dialects’ as reflecting diverse stages in grammaticalization processes (Grossman 2009).

¹¹ Transitions from Old to Middle Egyptian, Stauder 2014 (*passim*), Oréal 2010 (*passim*), Vernus 1996b; from Middle to Late Egyptian, Kruchten 1999, Kroeber 1970; from Late Egyptian to Demotic, Winand 2016: 252–4, 261–2, and 2014b: 260–2, 264–5; Quack forthcoming and 2001: 168–72, Vernus 1990b, and Shisha-Halevy 1989; from Demotic to Coptic, Quack forthcoming and 2006.

¹² Introduction: Polis 2017a; pioneering influential studies are Junge 1985, 1984; further references below.

embedded in textual practice, presents inherent features of hybridity, and is therefore not a historical stage of the language (see further below).¹³ The coexistence of ‘égyptien de tradition’ with contemporary written varieties (later Late Egyptian, Demotic) resulted in a situation of increasing written diglossia from the late New Kingdom and early Third Intermediate Period on.¹⁴

Based on typological criteria, finally, a higher-order grouping contrasts ‘Earlier Egyptian’, comprising Old and Middle Egyptian, with ‘Later Egyptian’, comprising Late Egyptian, Demotic and Coptic (see below).¹⁵

ELEMENTS OF A CULTURAL AND SOCIAL HISTORY

Ancient Egyptian represents an autonomous branch in the Afroasiatic phylum, alongside the Semitic (for example Akkadian, Ge‘ez, Arabic), Berber, Cushitic (for example Somali, Bedja), Chadic (for example Hausa), and perhaps Omotic groups.¹⁶ Afroasiatic is established as a genetic phylum based on a number of notably morphological isoglosses (common features; examples involving Egyptian are given below).¹⁷ Isoglosses between Egyptian and the Semitic group in particular are the most apparent but should not be taken to imply an Egyptian-Semitic subgrouping, or node, within Afroasiatic considering that the perspective is heavily biased by the early attestations of these two groups and the very uneven density of documentation and scholarship in the Afroasiatic phylum. At present, any nodes within Afroasiatic remain highly disputed and the phylum is best represented in terms of a coordinate branching of all five groups.¹⁸ Moreover, tree models must be integrated with models of spread forking with converging, models of language split with convergence areas, and substrate and adstrate influence. Given more hospitable climatic conditions and more mobile lifestyles in prehistoric times, the whole area, including the Eastern Sahara, must have been a zone of protracted contact over millennia. Rather than in principally cladistic

¹³ The label was coined by Vernus (e.g. 1996a, 1979) to capture the cultural status and hybrid character of the phenomenon. Terminologically less fitting are ‘Spätmittelägyptisch’ (Jansen-Winkel 1996), which suggests that ‘égyptien de tradition’ is a continuation of Middle Egyptian, and ‘Neo-mittelägyptisch’ (Junge 1985), which evokes ‘Neo-Latin’ and could be taken to suggest that ‘égyptien de tradition’ is a restoration of Middle Egyptian as a cohesive whole.

¹⁴ Vernus 1996a. This situation of written diglossia is to be distinguished from the fact that the written language differed more or less strongly from the spoken language at all times, and also from the fact that written Egyptian itself displayed internal variation at all times.

¹⁵ Note the labelling: Earlier Egyptian (‘Älteres Ägyptisch’, ‘égyptien de la première phase’) ≠ Old Egyptian (‘Altägyptisch’) ≠ Ancient Egyptian (Egyptian as a whole). Similarly, Later Egyptian (‘Späteres Ägyptisch’, ‘égyptien de la deuxième phase’) ≠ Late Egyptian (‘Neuägyptisch’, ‘néo-égyptien’).

¹⁶ For surveys of the Afroasiatic language families, see Frajzyngier and Shay 2012. The relationship of Omotic to Afroasiatic remains debated, as does the nature of the Omotic grouping itself, as a genetic family or an areal pool: see, recently, Güldemann 2018: 330–40, 347–8.

¹⁷ Gragg 2019; Hayward 2000.

¹⁸ For a review of proposed subgroupings in Afroasiatic, see Peust 2012; for recent discussions of this issue, see the studies in Štubňová and Almansa Villatoro forthcoming. On the even more problematic question of a putative Afroasiatic ‘homeland’, see, for instance, Haggerty and Renfrew 2014: 315–18.

terms, the coalescence of Egyptian, in a region at the crossroads of Northeast Africa and the Levant, should be viewed in relation to contact with languages from other Afroasiatic as well as non-Afroasiatic groups, many of which are now completely submerged.

The development of Egyptian as a written language is a history of its various written standards, in relation to spheres of written performance (see Chapter 47 in this volume) and possibly reflecting diverse geographical and social varieties. The Egyptian language was first committed to writing in relation to state formation during the late fourth and early third millennia BC, ‘...a time when a number of languages was likely spoken over Egyptian territory.’ Underlying geographical variation of Egyptian itself has to be posited at all times, considering the geographical extension of Egypt, the effective porosity of borders to all sides, and the lack of homogenizing forces, such as mass literacy. Such variation, however, remains largely invisible in the written record as a result of the elite nature of the written language, the centralized political and cultural models of written culture and scribal education, and the continuity of the high-cultural written tradition. Only a few elements of possible dialectal variation in pre-Coptic Egyptian have been noted, either synchronically or in relation to apparent discontinuities between successive diachronic varieties.¹⁹ Such discontinuities are plausibly interpreted as pointing to the contributions of different underlying geographical varieties to the standards that defined written Egyptian at various periods. The earliest Egyptian was likely the language of a small group that formed the elite, with southern origins, of the early supra-regional state in the early third millennium BC. The written language of the Old Kingdom was arguably the highly formalized outcome of a mixing of features of southern and northern origins, at a remove of any variety spoken locally. The relatively more widespread literacy in the Middle Kingdom (even though still restricted to the elite) and the increased importance of social groups such as the military in Ramesside times may have played a role in the definition of Middle Egyptian and Late Egyptian as we know it, respectively. In the context of a regionalization of written culture, elements of underlying regional variation become somewhat more visible in Demotic, then more fully so in Coptic. For some Coptic dialects, assigning precise locations in geographically defined speech communities remains difficult, also due to their possible nature as ‘scripto-lects.’²⁰ Sahidic (originating in Middle Egypt) and Bohairic (originating in the North) achieved supra-regional status at various periods, the latter in relation to the influence of the Alexandrine Church.

By definition, written standards imply a distance from spoken language. The latter is elusive throughout Egyptian history. Reported discourse of people of lowly condition are voiced by the elite that had them inscribed; they purport to evoke, rather than transcribe, whatever spoken language may have been like.²¹ Epistolary genres have their own standards, displaying only occasional lapses into what may be actual vernacular forms of the language.²² At a much later time, the generally low number of Greek loanwords in most Roman Demotic is revealing, particularly when contrasted with their significantly higher number in the less

¹⁹ Winand 2016; Gundacker 2017, 2010: 97–103; Allen 2004; and Peust 1999a: 34 (with references to previous observations beginning with Edgerton 1951).

²⁰ Funk 1988; Kasser 1991.

²¹ Vernus 2010a (‘Reden und Rufe’); Winand 2017b (words of thieves in the Tomb Robberies papyri).

²² For the Middle Kingdom, see Brose 2014 and Allen 1994 (noting that Hekanakht makes a slight difference in register when addressing a superior and when dealing with private business matters); for Ramesside times, see Sweeney 2001; and for the different situation in Coptic, see Richter 2006.

standardized language of the contemporary Narmuthis ostraca;²³ similarly, Arabic loanwords were largely kept out from most Coptic texts even at a relatively late date.²⁴

The formality of the pre-Coptic record reflects the high-cultural determinations of written performance specific to ancient Egypt. Egyptian was first committed to writing in very short inscriptions in ceremonial and funerary contexts, then extended to administrative functions. Continuous texts, mirroring the sequence of speech, developed only later from 2700 BC on;²⁵ written genres diversified only gradually. In relation to the sacralizing function of inscriptions, written language in the lapidary sphere tends to show a remarkable stability of formulations from one monument to the next and across time. In the Old Kingdom, constructions of the verb differ partly in the Pyramid Texts and in tomb autobiographies, reflecting the different ritual functions of these types of texts.²⁶ The refined and highly patterned language of Middle Egyptian literature is a product and index of a court-oriented elite society in which face-to-face interaction and verbal rhetoric were vital.²⁷ Furthermore, it draws on constructions, formulations, and modes of patterning otherwise found in lapidary genres with which Middle Egyptian literature is intertextually allied.²⁸ In a changed cultural and social setting, the language of Late Egyptian literature displays no similarly intensively productive linguistic connections with the inscriptional sphere, but significant internal variation in relation to time and genre, with teachings, for example, being typically more conservative linguistically.²⁹ In the early Third Intermediate Period, the apparent linguistic proximity of *The Misfortunes of Wenamun* to the contemporary vernacular is only partial, and part of the fictionalizing framing strategies of the literary composition.³⁰

Late Egyptian, more generally, displayed a complex continuum of written registers, defined in relation to types of texts, contents, supports, and contexts of written performance.³¹ Linguistic selections were thus made in relation to a cultural code, itself changing over time. At the close of the Second Intermediate Period (c.1550 BC) already, the highly composed language of the Kamose inscriptions accommodated a great many innovative expressions with an otherwise highly classical Middle Egyptian, indexing claims of both insertion into a tradition and novelty in terms of content and textual format.³² In Ramesside times (c.1295–1069 BC), texts and genres that ranked higher in decorum and/or were more strongly bound by past textual tradition tended to include higher amounts of Middle Egyptian expressions alongside generally more conservative spellings.³³ In inscriptions and in literature notably, expressions deriving from various periods could be accommodated within a single textual composition, resulting in deliberate linguistic heterogeneity

²³ Ray 1994; on the Narmuthis ostraca, see also Quack 2006. ²⁴ Richter 2017.

²⁵ Stauder-Porchet 2017: 9–33.

²⁶ Stauder 2020, 2014: 114–16, Allen 1982; also, for ‘particles’, Oréal 2010 (*passim*).

²⁷ Stauder 2013c; Collier 1996; Loprieno 1996. ²⁸ Stauder 2013b and 2013c: 242–9.

²⁹ Quack 1994: 29–50 (*Teaching of Ani*); Vernus 2013 (*Teaching of Amenemope*).

³⁰ Winand 2011.

³¹ This has been described in the terms of been described in the terms of a ‘néo-égyptien partiel’, ‘néo-égyptien mixte’, and ‘néo-égyptien complet’ (Winand 1992: 10–30); see also Junge 1984 and 1985, in a broader historical perspective.

³² Stauder 2013c: 43–50.

³³ Goldwasser 1999, 1990. A complex differentiation of registers is already observed in the Eighteenth Dynasty: for Amarna, Silvermann 1991; for early Thutmose times, see Stauder 2013a and 2013c: 9–55, particularly 50–3, and 238–42.

modulated in relation to similar parameters of decorum, phraseological embeddedness, and generic boundedness.³⁴ Linguistic variation is also observed at the level of a scribal community, at Deir el-Medina, where an identifiable individual author (Amunnakht) also differentiated linguistic register according to context of written performance.³⁵

Linguistic heterogeneity in what presents itself as one text could also result through layered textual history, and, more broadly, through the inclusion of formulations and textual materials deriving from various periods.³⁶ The phenomenon becomes particularly manifest in the context of the written diglossia that emerged when the register continuum characteristic of Ramesside written production evolved, in the early first millennium BC, into a starker contrast between the monumental and religious spheres and the more mundane ones. In the former, 'égyptien de tradition' drew on past written tradition in ways that were both reproductive and genuinely productive³⁷—and, thereby, on multiple linguistic models (mostly Middle Egyptian in various forms, but also Old and Late Egyptian)—so as to evoke a 'primeval' or 'pristine' language associated with tradition as a source of authority and with the ritually to be re-enacted 'First Time' (*sp tpy*).³⁸ In 'égyptien de tradition' in its many actualizations, the morphosyntax of older varieties could be simplified; equally characteristic are various degrees of interference, as well as elements of intentional dissimulation, from contemporary varieties.³⁹ In addition to continuously transmitted texts, excerpts from old texts were used on monuments,⁴⁰ and compendia of what may be termed historical lexicography were compiled in sacerdotal contexts,⁴¹ the effects of such textual, hence linguistic, archaeology being visible for example in the lexical wealth of Ptolemaic temple inscriptions. In similar contexts, practices of intralingual translation, from Middle Egyptian into Demotic, are documented, with the implication that the situation of written diglossia was clearly recognized as such culturally.⁴²

With the progress of Greek, the native idiom became gradually confined to the spheres of religion and private business in early Roman Egypt, then further to magical texts, mummy labels, and 'personal piety' in the third century AD. The advent of Coptic, in the fourth century AD, represents a 'Neuerschriftlichung' of the native language in relation to the translation of texts from the new Gnostic, Manichean, and Christian religions.⁴³ More than in pharaonic times, the functional spheres of written performance remained restricted: Coptic was used in written form for religious literature of various sorts, and, discontinuously, for business matters, scientific texts, poetry, and in private graffiti, but not, as a rule,

³⁴ For inscriptions, notably Paksi 2020 and 2016 (Ramesside royal inscriptions); Gillen 2015 (eulogistics vs. narrative parts in the Medinet Habu inscriptions), Vernus 1978 (Samut son of Kyky, with literarizing tendencies); for literature, see, e.g., Quack 2001: 168–72 (Wermaï); Goldwasser 1990 (Satirical Letter).

³⁵ Polis 2017a and 2017b.

³⁶ E.g. for earlier times, in the Coffin Texts, see Vernus 1996b; in later times, in P. Jumilhac, see Quack 2008.

³⁷ Vernus 2015, 2016, 2017.

³⁸ For general introductions to this topic, see Vernus 1996, 2016 and Engsheden 2016. For specific studies, see Vernus 1979, 2015; Engsheden 2003; Depuydt 1999; Jansen-Winkeln 1996; der Manuelian 1994; and Lustman 1999.

³⁹ See, for example, Engsheden 2003 and Vernus 1979.

⁴⁰ Osing and Rosati 1998; Kahl 1999. ⁴¹ Osing 1998.

⁴² Cole 2015, von Lieven 2007: 258–73.

⁴³ Richter 2009; for the writing system, see Quack 2017.

for public administration or political display which remained the domains of Greek and, later, Arabic.

The demise of Coptic was a protracted process, varying according to geographical areas and functional spheres of written and oral performance. An advanced stage of ongoing language shift to Arabic in the thirteenth and fourteenth centuries AD is inferred from the discontinuation of new written production in Coptic and from intense philological activity which included the translation of Coptic written tradition into Arabic, and the redaction of lexico-grammatical sketches of the language in Arabic.⁴⁴ In its Bohairic form, Coptic survives to the present day as the liturgical language of the Coptic Church.

During much of pharaonic civilization, Egyptian carried an unrivalled prestige in Egypt and was strongly associated with Egyptian writing, and, beyond this, with high culture itself. While this did not preclude occasional extensive borrowing from other languages (see below), other languages spoken in Egypt by various foreign communities at various periods were hardly ever committed to writing before the Late Period.⁴⁵ Generally speaking, languages spoken outside Egypt were also not written down, with the notable exceptions of short magical spells embedded in Egyptian texts⁴⁶ and of Akkadian as the language of international diplomacy in the Late Bronze Age.⁴⁷ Conversely, the Egyptian language was generally not used outside Egypt, except for display in short royal inscriptions by the Middle Bronze Age governors/rulers of Byblos and in more elaborate ones by Napatian rulers around the mid-first millennium BC.⁴⁸ In both cases, this was part of a broader adoption of elements of Egyptian decorum indicative of prestige, and in the case of the Napatian rulers, it also arguably carried a claim of cultural continuity with the Twenty-fifth Dynasty that had ruled Egypt itself.

The bulk of the linguistic heritage of Egyptian lies in loanwords in Egyptian Arabic and in native (pre-Arabic) toponymy.⁴⁹ A few loanwords found their way into other languages, particularly those denoting items culturally associated with Egypt; for example ‘oasis’ < *wh3.t* ‘cauldron, oasis’ (via Greek); ‘Susan’ < (ancient Hebrew) *shoshanah* ‘lily’ < *zšn* ‘lotus’; ‘Onofrio’ (an Italian proper name) < *wn(n)-nfr* (an epithet of Osiris); Meroitic *ant* (**/annata/*) ‘priest’ < *hm-ntr*.

LINGUISTIC HISTORY: A SELECTIVE PRESENTATION

The Afroasiatic background

Earlier Egyptian displays a series of lexical and morphological commonalities (‘isoglosses’) with other Afroasiatic languages.⁵⁰ The identification of lexical isoglosses is made difficult by the time depth involved; by the considerable phonological development in Egyptian

⁴⁴ For the latter, see, for example, Khouzam 2002.

⁴⁶ Quack 2010b; see also Steiner 2011 (disputed).

⁴⁸ For the latter, see Peust 1999b.

⁴⁹ For the former, see Vittmann 1991; for the latter, see Peust 2010.

⁵⁰ See the studies in Štubňová and Almansa Villatoro forthcoming, with further references.

⁴⁵ Quack 2010b, 2017: 28–30.

⁴⁷ Müller 2010.

prehistory; and by the late attestation and unequal description of several branches of Afroasiatic. Even in the case of the Semitic domain, which is better documented, more thoroughly studied, and of early attestation, the partly different phonological reconstructions lead to a partly diverging set of cognates.⁵¹

Morphological isoglosses are more easily identified.⁵² Egyptian shares a general morphological type with Afroasiatic, by which a well-formed word results from the intersection, or ‘interfixation’, of two discontinuous morphemes, a lexical and a grammatical one, with or without additional affixes (‘root-and-pattern morphology’). Specific isoglosses in nominal morphology include:

- the various series of personal pronouns,
- the feminine ending *-t* and elements of plural formation,
- elements of derivational morphology (the prefix *m-*; the *nisba* formation).

For example

lexical root morpheme:	{ <i>s-d-m</i> }	‘hear’	
inflectional morpheme:	{CaCCá-f}	→ */saj'maf/	‘may he hear’ (<i>sḏm=f</i>)
	{Cá:CaC}	→ */'sa:jam/	‘hear’ (<i>sḏm</i>)
	{CaCiC-nv-f}	→ */sa'jimnvf/	‘he heard’ (<i>sḏm.n=f</i>)
		(etc.)	

Specific isoglosses in verbal morphology include:

- the pseudoparticiple (cognate to, for example, the Akkadian or Berber stative, and the West-Semitic perfect),
- the passive morpheme *.t(w)* (cognate to the Afroasiatic transitivity-reducing affix {t}),
- and the derivational prefixes *s-* (causative) and *n-* (intransitive, detransitive, and with certain morphological functions).

Major differences in the morphological inventory are:

- the *sḏm=f* suffix conjugation, present only in Egyptian,
- and, conversely, the lack of the Afroasiatic prefix conjugation (for example ^{Semitic} *ya-qtul*).

On the last account, Egyptian could reflect an earlier, or, conversely, a more innovative, stage within Afroasiatic. Alternatively, Egyptian could also represent a separate development, in which case neither the Egyptian suffix conjugation nor the Afroasiatic prefix conjugation would project back to the proto-language, assuming there even ever was one.

While the verbal isoglosses mentioned above make for a shared morphological inventory, the forms in individual branches of Afroasiatic can have a partly different functional profile or morphological status. For example, both the Egyptian ‘pseudoparticiple’ and the

⁵¹ See the partly diverging analyses in, for example, Allen 2012: 31–6; Schneider 1997; Loprieno 1995: 31–7; Schenkel 1993, 1990: 48–57; and further Gensler 2015. For an etymological dictionary of Egyptian in Afroasiatic, see Takács 1999– (the work has received a mixed reception).

⁵² Stauder forthcoming a.

morphologically cognate Akkadian ‘stative’ can be described as resultatives (denoting a state that results from some previous action). But the Egyptian form has also developed regular uses as a perfect with various low-transitivity events (for example (*iw=i*) *ii.kw* meaning not only ‘I am here (having come)’, but also ‘I have come’ or even ‘I came’ in a narrative chain).⁵³ Similarly, the morphemes {n}, {s} and {t} tend to be part of a productive derivational system at the crossroads of grammatical functions and lexical semantics in various Afroasiatic languages (developing into so-called stems in Semitic language). By contrast, the cognate morphemes in Egyptian are either fully inflectional (*.t(w)*, coding the sole grammatical function of passive voice) or more fully derivational (*n-* and *s-*) with a diachronic tendency to reduced productivity and eventually lexicalization.⁵⁴

Phonology

During the course of its written history, Egyptian underwent major phonological changes that can only be hinted at here.⁵⁵ Under the influence of a strong expiratory stress, unstressed vowels were reduced to *sh^ewa* (/ə/).⁵⁶ This resulted in a thorough renewal of the inventory of licensed syllable structures with the rise of complex syllables with initial or final consonant clusters in different positions in the word,⁵⁷ for example, under loss of the pre-tonic vowel, #Cv\$CVC\$ > #CCVC\$, */wi¹dah/(wdḥ) ‘fruit’ > /wdah/(ⲟϣⲓⲣⲁⲗ).⁵⁸

Long and short stressed vowels underwent a global shift beginning in the later second millennium BC:

In the later second millennium BC

- /u:/ > /ε:/ for example */'k^hu:mat/(km.t) ‘Egypt’ > */k^hε:mə/(cf. Coptic κημε)
- /u/,/i/ > /ε/ for example */rin/(rn) ‘name’ > */rεn/(cf. ^{ALMF} ρεη)

In the earlier first millennium BC

- /a:/ > /o:/ for example */'ra:mac/(rmt) ‘man’ > */ro:mə/(cf. ρⲟⲙε)

In Sahidic and Boharic, further, the outcomes of:

- /ε/ > /a/ for example */rεn/(cf. ^{ALMF} ρεη) > */ran/(^{SB} ραν)
- /a/ > /o/ for example */san/(sn) ‘brother’ (cf. ^{ALMF} ραν) > */son/(^{SB} ρον)

In the consonantal domain, the realization of various phonemes in earlier times remains disputed; so does the mode of articulation in various series, as a contrast of voice, of aspiration, or otherwise. Among major changes, the phoneme conventionally transcribed as ʒ evolved early from a liquid, possibly realized as a uvular trill (/ʀ/), to a glottal stop (/ʔ/). A general tendency from the second millennium BC onwards was for the place of articulation to move forward, velars and uvulars undergoing palatalization, palatals evolving into dentals. For example, illustrating the palatalization of the initial velar, as well as the change of ʒ

⁵³ Stauder forthcoming a: §3.4; 2014: 109–19, 279–88.

⁵⁴ Stauder forthcoming a: §3.2, §4; 2014: 212–22; see Vernus 2009 for *n-*.

⁵⁵ For introductions to Egyptian historical phonology, see Peust 1999a; Loprieno 1995: 28–50; Kammerzell 1995, 2005; Schenkel 1990: 24–93; Allen 2020.

⁵⁶ Fecht 1960.

⁵⁷ Loprieno 1995: 39–40 and 48–50. ‘s’ for syllable boundary, ‘#’ for word boundary.

⁵⁸ Unless otherwise mentioned, Coptic examples are from the Sahidic variety.

from /R/to/?/and possibly zero, */k^harmaw/k3nw, k3m ('garden', cf. Semitic *krm*) > ^{LEg}*/k^ha?m/>/k^o:m/(GOM). Various neutralizations occurred, for instance between pharyngeal/h/(h) and glottal/h/(h), both >/h/(first millennium BC), and modes of articulation in different series underwent complex restructuring. In syllable-final and word-final positions, various phonemes were reduced to a glottal stop and ultimately to zero, for example *mš'i* 'walk' */maʃʃaj/ > */moʃʃə/(with metathesis, MODO), *rmṯ* 'man' */ra:mac/> */ro:mə/(POME).

Nominal morphology and syntax

The above phonetic changes resulted in an evolution, and partial restructuring, of the inherited patterns of synthetic nominal formation over time.⁵⁹ In addition to these, new patterns of nominal derivation developed, involving prefixes that arose from erstwhile analytical constructions, for example *ḫiOYε* 'steal' → *peq-ḫiOYε* 'thief' (with *peq-* < *rmṯ iw=f* (*hr* INFINITIVE) 'a man who (. . .)').⁶⁰

The expression of gender and number was transferred from endings to articles from Late Egyptian onwards, for example */sa:nat/sn.t 'sister' (with */-at/the feminine ending) → /tco:nə/rco:nε (with *r-* the fem. definite article); the plural ending *-w* retained some productivity down to Coptic. Note that the effects of the feminine ending */-˘t/> */-ə/on the syllable structure of the word are often still felt in Coptic in the form of typically feminine nominal patterns, for example /ʃpe:rə/'wonder' (OHPPE) < */ḫapu:rat/or the like (*hpr.t*). While the article provided a new formal expression of gender and number, it did not develop, therefore, because there was any strong need for such formal renewal. Rather, the rise of the definite article *n-/r-/n-* out of the demonstrative *p3/t3/n3* (during the early and mid-second millennium BC) represents a cross-linguistically well paralleled development by which a deictic expression undergoes semantic weakening into an anaphoric one, beginning in Egyptian in the later Twelfth Dynasty.⁶¹ The later rise of an indefinite article (SG. *OY-* < *w* 'one' and PL. *2N-* < *nhy n* 'some'), as well as the fact that the definite article should be innovated first, similarly find abundant cross-linguistic parallels. Related to this development is also the rise of a possessive article, superseding the earlier suffixed expressions of possession, for example ^{MEg}*pr=f* 'his house' → ^{LEg}*p3y=f pr*. In Late Egyptian, Demotic, and Coptic, the earlier suffixed construction became increasingly restricted to the expression of inalienable possession (such as body parts), in another development that finds good cross-linguistic parallels.⁶²

In the expression of gender and number, of pronominal possession, and in nominal derivational patterns, nominal morphology thus displayed a general diachronic tendency for grammatical material to be increasingly agglutinated to the left of the lexical word. This does not represent an overarching drift,⁶³ but resulted from a variety of developments, all following

⁵⁹ For these earlier synthetic patterns, Schenkel 1983, Osing 1976, Fecht 1960.

⁶⁰ In the above example, reanalysis is manifest in that *peq-ḫiOYε* can be preceded by the definite article (*n-peq-ḫiOYε* 'the thief'), while the source construction included a circumstantial clause (*iw=f hr it3*), possible only with an indefinite antecedent (**p3 rmṯ iw=f hr it3* would have been ungrammatical in Late Egyptian or Demotic).

⁶¹ Kröber 1970: 1–30; Zöllner-Engelhardt 2016: 74–129.

⁶² Haspelmath 2015.

⁶³ See already Schenkel 1966 for a critique of the notion of 'conversion' advocated by Hintze 1947, 1950.

regular principles of linguistic change. For example, the rise of derivational prefixes (rather than new suffixes) is a consequence of renewal through grammaticalization and reanalysis in a language with head-dependent order, e.g. $[rmt]_{\text{HEAD}} [iw=f hr it_3]_{\text{DEPENDENT}} > \text{PE}^{\text{q}}_{\text{PREFIX}} -\text{xioy}^{\text{e}}$

Verbal morphology

Through a series of developments that stretched over three millennia, the suffix conjugation was gradually—and ultimately wholly—superseded by other means of inflection. The process involved two main modes of renewal: the grammaticalization of new verbal patterns from situational predicate constructions (‘adverbial predicate constructions’), begun in the Old Kingdom, and the development of new patterns based on periphrasis by the auxiliary *iri* ‘do’, from the New Kingdom onwards; the latter process was complete only in Coptic.

In Old Egyptian already, new verbal patterns—NP *hr sdm* and NP *r sdm*—had grammaticalized from situational predicate constructions. They did so initially to convey specific semantics, as marked expressions of progressive aspect (corresponding roughly to, English continuous tenses) and of objective necessity, respectively.⁶⁴ These constructions subsequently weakened semantically into an unmarked unaccomplished (roughly, English simple present tense) and a future tense, respectively. As a result, they gradually superseded the former synthetic expressions of similar semantics during the (later) Middle Kingdom and early New Kingdom:⁶⁵

^{OEg-MEg.I-(MEg.II)} NP *hr sdm* ‘he is hearing’ (progressive)
 > ^{(MEg.II)-LEg} ‘he hears’ (unaccomplished),
 superseding ^{OEg-MEg.I-(MEg.II)} N(P) *sdm=f*

^{OEg-Meg.I} NP *r sdm* ‘he is bound to hear’ (objective necessity)
 > ^{MEg.II} ‘he will hear’ (future),
 superseding ^{OEg-MEg.I} ‘prospective’ *sdm=f (irw=f)*

After developing initially in the positive and active domains, these analytic patterns were subsequently, often much later, generalized to the passive domain,⁶⁶ to negative polarity, and to relativization.⁶⁷ For example

^{OEg-MEg.II} <i>sdm.tw=f</i> ‘he is heard’	→	^{(MEg.II)-LEg} <i>iw.tw hr sdm=f</i>
^{OEg-MEg.II} <i>nn sdm=f</i> ‘he will not heard’	→	^{LEg} <i>nn iw=f r sdm</i>
^{OEg-MEg.II} <i>sdm</i> ‘who hears’	→	^{(MEg.II)-LEg} <i>nty hr sdm</i>

⁶⁴ For the former, see Collier 1994 and Vernus 1997; and for the latter, see Vernus 1990a: 5–7; Stauder 2014: 119–22; ‘NP’ stands for ‘noun phrase’, be this a full noun or a pronominal subject.

⁶⁵ For the former, see Vernus 1990a: 143–93; Winand 2006: 263–323; Stauder 2013c: 137–57; 2014: 227–30; and for the latter, see Stauder 2014: 231–3.

⁶⁶ For NP *hr sdm*, see Stauder 2014: 360–5, 2013c: 382–405; for NP *r sdm*, see Stauder 2014: 356–60, 2013c, 364–82.

⁶⁷ As elsewhere, the spread of the new constructions was gradual, along the following dimensions: (a) time reference: in the future before (henceforth: ‘>’) present > past; (b) voice: in the passive > active; (c) polarity: negative > positive; (d) syntax of co-reference: oblique constructions > direct ones.

Periphrasis by means of *iri* ‘do’ is found occasionally already in early times, notably with imperatives. It spread as a regular feature of inflection in the Eighteenth Dynasty, first in the negative imperative,⁶⁸ then in the morphological successors of Earlier Egyptian forms based on the long stem (*irr-*),⁶⁹ and further, through analogy, in Ramesseid times.⁷⁰ Further *iri*-periphrased constructions emerged in Roman times. For example:

^{OEg-MEg} *irr=f* (a specialized imperfective)
 > late D.18 *i.ir=f sdm* (the Later Egyptian focusing tense)

^{OEg-MEg} *n sdm.n=f* ‘he does not hear’ (>late D.18 *bw sdm=f*)
 > D.19 *bw ir=f sdm*

^{LEg-Rom.Dem} *hr d=f* (an habitual present) > ^{Rom.Dem} *hr ir=f sdm*

These analytic and periphrastic patterns in turn underwent phonological reduction and re-synthesis. For example:

^{LEg} *bn iw=f(r) sdm* > $\text{nn}=\text{q}-\text{C}\text{O}\text{T}\text{M}$ ‘he will not hear’

^{LEg} *bw-ir=f sdm* > $\text{ME}=\text{q}-\text{C}\text{O}\text{T}\text{M}$ ‘he (habitually) hears’

^{Rom.Dem} *ir=f sdm* > $\text{A}=\text{q}-\text{C}\text{O}\text{T}\text{M}$ ‘he heard’

These combined developments led to two major typological changes: (1) in morphology, a shift from a more fusional to a more agglutinative type, and (2) in word order, a shift from a Verb-Subject order to a Subject-Verb order. Regarding the first of these changes, Earlier Egyptian verbal morphology was broadly of a fusional type: it made use of a rich variety of stem alternations combined with affixation to express verbal categories. In Later Egyptian, by contrast, synthetic inflection was increasingly limited to the infinitive, the pseudoparticiple (or stative, itself developing into a non-finite form), and to participial forms of the verbs (with an increasingly reduced functional yield). Grammatical meaning, carried by various conjugational auxiliaries and prefixes, was thus increasingly isolated from the lexical meaning, carried by the infinitive and stative:⁷¹

	Earlier Egyptian	Coptic
‘he did’	*/jarn [~] f/^(?) (<i>ir.n=f</i>)	$\text{A}=\text{q}-\text{EIP}\text{E}_{\text{INF}}$ (< <i>ir=f sdm</i> _{INF})
‘he does’	*/. . /^(?) (<i>ir=f</i>)	$\text{q}-\text{EIP}\text{E}_{\text{INF}}$ (< <i>iw=f hr sdm</i> _{INF})
‘he will do’	*/j [~] ra:w [~] f/^(?), */j [~] ra:j [~] f/^(?) (<i>ir=f, irw=f, iry=f</i>)	$\text{E}=\text{q}-\text{E}-\text{EIP}\text{E}_{\text{INF}}$ (< <i>iw=f r sdm</i> _{INF})
‘may he do’	*/j [~] r [~] ja:f/^(?) (<i>ir=f, iry=f</i>)	$\text{MAPE}=\text{q}-\text{EIP}\text{E}_{\text{INF}}$ (< <i>mi ir=f sdm</i> _{INF})
‘he does...’	*/j [~] ra:r [~] f/^(?) (<i>irr=f</i>)	$\text{E}-\text{q}-\text{EIP}\text{E}_{\text{INF}}$ (< <i>i.ir=f sdm</i> _{INF})

This led to a more agglutinative morphological type in Later Egyptian, in which grammatical functions tended to be distributed over discrete morphemes. For example

⁶⁸ Vernus 2010a.

⁶⁹ Stauder forthcoming b: §2.1; Kruchten 1999: 1–51.

⁷⁰ Kruchten 2000; Winand 1992.

⁷¹ The phenomenon has been termed ‘Flexionsisolierung’: Polotsky 1987–90: 171.

$\epsilon_{\text{CIRC}} - \lambda_{\text{PAST}} = \text{q-COD}^{\text{TM}}_{\text{HEAR}} (< \text{LEg-Dem } iw_{\text{CIRC}} \text{ } \underline{s\dot{d}m}_{\text{HEAR.PAST}} = f)$,

giving discrete expressions to the circumstantial function ($\epsilon - < iw$) and to past tense ($\lambda =$),

in contrast to $\text{O}^{\text{Eg-MFeg}} \underline{s\dot{d}m}.n=f$, an anterior tense that could be use in a circumstantial or main clause alike without morphological differentiation;

An apparently reverse outcome is observed with negative constructions, with the rise of conjugational prefixes that combined the expression of negative polarity and tense-aspect in ways that are not segmentable anymore. Contrast:

	Earlier Egyptian	Coptic
'he did not hear'	$n_{\text{NEG}} \underline{s\dot{d}m}=f$	$\text{M}\Pi_{\text{NEG.PAST}} = \text{q-COD}^{\text{TM}}$
'he does not hear (habitually)'	$n_{\text{NEG}} \underline{s\dot{d}m}.n=f$	$\text{M}\epsilon_{\text{NEG.HABITUAL}} = \text{q-COD}^{\text{TM}}$
'he will not hear'	$n_{\text{NEG}} \underline{s\dot{d}m}=f (n \text{ } irw=f)$	$\text{N}\Pi\epsilon_{\text{NEG.FUTURE}} = \text{q-COD}^{\text{TM}}$

As a result of the above processes of formal renewal, the preferred unmarked word order in verbal clauses yielded gradually from a Verb-Subject one (henceforth: VS) to Subject-Verb (SV) one. The NP *hr/r sdm* patterns inherited their SV order from the subject-predicate order of the situational predicate constructions they grammaticalized from:

$iw=f_{\text{SUBJECT}} \text{ } im_{\text{PREDICATE}}$ 'he is there'
(subject-first order in situational predicate constructions)

thus, $\text{NP}_{\text{SUBJECT}} [hr \underline{s\dot{d}m}]_{\text{PREDICATE}} \rightarrow (\dots) \text{q}_{\text{SUBJECT}} -\text{COD}^{\text{TM}}_{\text{VERB}}$
 $\text{NP}_{\text{SUBJECT}} [r \underline{s\dot{d}m}]_{\text{PREDICATE}} \rightarrow (\dots) \epsilon=\text{q}_{\text{SUBJECT}} -\epsilon-\text{COD}^{\text{TM}}_{\text{VERB}}$

With the patterns that originated through *iri*-periphrasis, SV order and prefixing morphology derived from the fact that *iri*, hosting the subject, preceded the lexical verb in the infinitive, and thereby, ultimately, from the more general head-dependent order in Egyptian:

$hm_{\text{HEAD}} - ntr_{\text{DEPENDENT}}$ 'servant of the god, priest'
(general head-dependent order of Egyptian)

thus, also, $iri_{\text{HEAD}} \underline{s\dot{d}m}_{\text{INFINITIVE-DEPENDENT}}$ 'do hearing', yielding, for example,
 $\text{LEg } bw_{\text{NEG}} - ir_{\text{AUX}} = f \underline{s\dot{d}m}_{\text{INF}}$
 $\rightarrow (\dots)$ reanalysed as $\text{M}\epsilon_{\text{PREF}} = \text{q}_{\text{SUBJECT}} - \text{COD}^{\text{TM}}_{\text{VERB}}$

similarly, $p3u_{\text{HEAD}} \underline{s\dot{d}m}_{\text{INFINITIVE-DEPENDENT}}$ 'do hearing in the (remote) past', yielding:
 $\text{MEg } n_{\text{NEG}} p3_{\text{AUX}} = f \underline{s\dot{d}m}_{\text{INF}}$ 'he has not heard (in the remote past)'
 $> \text{LEg } bwpw = f \underline{s\dot{d}m}$ 'he did not hear'
 $\rightarrow (\dots)$ reanalysed as $\text{Dem } bp_{\text{PREF}} = f_{\text{SUBJECT}} \underline{s\dot{d}m}_{\text{VERB}}$ ($> \text{M}\Pi = \text{q-COD}^{\text{TM}}$)

Order in individual clausal patterns and constructions thereby remained generally stable throughout Egyptian history. For example, the unaccomplished $\underline{s\dot{d}m}=f$ (VS) did not itself

evolve into, but was replaced, gradually, by NP *hr sdm* during the first half of the second millennium BC (see above), the latter pattern yielding $\alpha\text{-COTM}$ (SV). Similarly, past tense *sdm.n=f* (> ^{LEg-Dem} *sdm=f*: VS) was superseded by *ir=f sdm* during Roman times, the latter pattern, after reanalysis, yielding $\lambda\text{-}\alpha\text{-EIP}\epsilon$ (prefix-SV). The shift from a VS to a SV order was therefore the by-product of successive processes of grammaticalization over three millennia, in a language that happened to have subject-first situational predicate constructions and a general head-dependent order.

Functional domains

The domain of tense and aspect⁷² witnessed complex changes both in terms of which semantic categories were expressed at any given time, and of the (often combined) levels of grammatical form through which these categories were expressed (conjugational tenses, adverbial expressions, auxiliaries), when they were. As far as conjugational tenses are concerned, a tendency towards a less prominent role of aspect is noticeable. During the course of Old and Middle Egyptian already, the inherently perfective *sdm(w)*-passive increasingly gave way to passives marked by *.t(w)*, an aspectually neutral marker.⁷³ Beginning in the later Middle Kingdom, NP *hr sdm*, initially restricted to progressive semantics, was gradually generalized to the whole domain of the relative present (see above). In Old and Middle Egyptian, the *irr=f* presented a complex functional profile associating imperfective aspect with a lower assertive modality.⁷⁴ In Late Egyptian, the form, now as *i.ir=f sdm*, has specialized in the expression of adverbial focus and become unmarked for tense and aspect.⁷⁵ With participles, the Old and Middle Egyptian aspect-based contrast between unmarked ('perfective') *ir(t)* and marked ('distributive' or 'imperfective') *irr(t)* gave way to an increasingly tense-based contrast between anterior and simultaneous relativizing constructions in Late Egyptian. The pseudoparticiple, which in earlier times could express a stative and also a perfect with some types of events, was restricted to the former value after the New Kingdom. In various constructions, absolute time (present, past, future), rather than relative time (simultaneity, anteriority, posteriority) was becoming an increasing point of reference in later Late Egyptian (from the later Twentieth Dynasty, c.1100 BC onwards).⁷⁶

Major developments affected the domains of passive voice and transitivity.⁷⁷ Old Egyptian had multiple types of inflectional passives (the *sdm(w)*-passives, forms marked by the affix *.t(w)*, and reduplicating forms) used in a variety of passive constructions with transitive and intransitive verbs, with and without expression of the agent. Beginning in the Old Kingdom already, the *sdm(w)*-passive was gradually replaced by *.t(w)*-marked constructions in various environments. Beginning in the Twelfth Dynasty (c.1985–1773 BC), *.t(w)* was extended to subject-first constructions of the type NP *hr sdm* and NP *r sdm*, where, being inserted in the subject slot, it functioned as an impersonal subject pronoun. By the end of the New Kingdom and early Third Intermediate Period (roughly at the end of the second millennium BC), all inflectional passives were replaced by a construction in which a 3PL subject pronoun expressed non-specified reference. With regard to transitivity, Demotic and Coptic

⁷² Winand 2006. ⁷³ Stauder 2014: particularly 26–31, 250–63, 297–318.

⁷⁴ Uljas 2007: 349–59, and Borghouts 1988. ⁷⁵ Stauder forthcoming b.

⁷⁶ Winand 2014b. ⁷⁷ Stauder 2014.

saw the emergence of a large class of verbs that could be used regularly as transitives and intransitives alike, for example $\text{M}\text{OY}\text{Z}_{\text{TR}}$ ‘fill’, $\text{M}\text{OY}\text{Z}_{\text{INTR}}$ ‘become full’. In Earlier Egyptian, the mediate object construction ($v\ m\ o$) signalled incomplete affectation of, and/or focus on, the object;⁷⁸ after a complex development, it became an obligatory object marker in Coptic ‘durative tenses’ (historically, broadly the NP *hr sdm* and related patterns) and a differential object marker with the ‘non-durative tenses’ (historically, broadly the *iri*-periphrased tenses).⁷⁹ Demotic and Coptic further witnessed the emergence of a whole set of phrasal verbs and of a series of lexical auxiliaries: for the former, for example $\text{K}\text{O}\ \text{N}\text{A}=\ \text{E}\text{B}\text{O}\text{A}$ ‘forgive’, $\text{K}\text{A}\ \text{T}\text{O}\text{O}\text{T}=\text{REFLEXIVE PRONOUN}$ ‘forgive, abandon’ (with $\text{K}\text{O} < h_3^c$ ‘lay down’); for the latter, for example $\text{J}\text{-}\text{Z}\text{A}\text{P}$ ‘judge’ (literally, ‘give judgement’).

In the domains of clause combining, significant changes led to functional contrasts being increasingly conveyed by morphologically more overt strategies. In Earlier Egyptian, clause combining was largely asyndetic (morphologically unmarked), with referential cohesion, discourse particles,⁸⁰ and intonational contour playing a major role in macro-syntactic organization; *iw* served to ground the clause it introduced, either with respect to the speech situation (‘contextual *iw*’) or with respect to a preceding segment of discourse (‘cotextual *iw*’).⁸¹ Given the latter function, well attested in the Old Kingdom already, *iw* would develop into (and specialize as) an overt marker of adverbial subordination by the early New Kingdom. Earlier Egyptian prepositions could introduce a variety of tenses, depending on semantics to be expressed (for example with the preposition *r*, *r mr=f*, *r mr.w=f*, *r mrr=f*, *r mr.n=f*, *r mr.t=f*). Later Egyptian lost this type of construction with most prepositions, or kept it only with one specific tense for a given erstwhile preposition, the combination grammaticalizing into a bound form (for example $\text{M}^{\text{Eg-L}^{\text{Eg}}}\ r\ \text{sdm.t=f} > \text{L}^{\text{Eg}}\ \text{š}_3^c\text{-}(i.)\text{ir.t=f}\ \text{sdm} > \text{O}\text{A}\text{N}\text{T}=\text{Q-C}\text{O}\text{T}\text{M}$ ‘until he has heard’). An important overall result of the combined above developments was the emergence of a sharper contrast between main and subordinate clauses in Later Egyptian.

In the domain of adverbial-phrase focusing, major changes are observed in the transition from Middle to Late Egyptian.⁸² In Earlier Egyptian, a reduced assertive modality of the verbal predicate was signalled by the absence of *iw* or the presence of *is* in certain constructions, and was, furthermore, an effect of the aspectual profile of certain forms of the verb: the *irr=f* as a specialized imperfective, and various forms used as default non-resultatives in the accomplished.⁸³ In Late Egyptian, the morphological successor of the *irr=f*, the *i.ir=f sdm* marks adverbial focusing, regardless of tense and aspect. Later Egyptian thus contrasts with earlier stages of the language in displaying dedicated adverbial focusing morphology on the verb.

Some further changes

The above presentation has followed the traditional emphasis of Egyptological research on the verb. It should be stressed, however, that changes affected a great many other domains of the language as well, of which only a few illustrations can be given here. Among parts of

⁷⁸ Winand 2015, Stauder 2014: 324–9. ⁷⁹ Shisha-Halevy 1986: 105–28; Engsheden 2006.

⁸⁰ Oréal 2010. ⁸¹ Vernus 1998: 194–7; Loprieno 2006.

⁸² Stauder forthcoming b. ⁸³ Stauder 2015b, 2014: 235–43.

speech, adjectives gradually reduced their autonomy in Demotic and Coptic. Although a few core adjectives survived as bound forms, the qualifying function was generally transferred to the A n B construction.⁸⁴ In non-verbal patterns,⁸⁵ the predication of quality (*nfr sw*) entered obsolescence during Late Egyptian, and similar semantics were conveyed by other strategies in Demotic and Coptic, including the *n3-nfr=f* form and the stative.

In situational predicate constructions as well as the verbal NP *hr sdm* that had developed from these, *wn* grammaticalized as a mandatory introduction of indefinite subjects in later Late Egyptian.⁸⁶ With noun-phrase focusing constructions, the *in/m*-marked cleft constructions were lost after Late Egyptian; so-called ‘pseudo-cleft’ patterns were extended to wider functions, and eventually reanalysed structurally in Demotic and Coptic.⁸⁷ While Earlier Egyptian had a rich variety of zero-subject constructions used with referents of low individuation,⁸⁸ Later Egyptian lost these (compare, for example, earlier *hpr.n ø* ‘it happened’ with $\lambda=c-\omega\omega\omega\epsilon$, with an overt 3FSG subject). The verb-object (VO) order remained stable throughout history, as did, more generally, the head-dependent order (for example nouns before qualifying expressions). Overall, Coptic tended to display more flexible word order than earlier written forms of the language; one noticeable development was the increased use of right-dislocation.

Change in the lexicon can only be hinted at here. Beyond innovation and obsolescence of individual lexemes, this included semantic change (for example ^{OEg-MEg} *m* ‘swallow’ > ^{LEg...} *m* ‘learn, know’, by a change by which perception is construed as mental ingestion), as well as changes in the argument structure of verbs. Renewal involved various types of lexicalization (for example *hwn-r-hr*, lit. ‘strike to the face’, ‘fight’ > ^{LEg} *hnh* ‘fear’)⁸⁹ and extended to core vocabulary.⁹⁰ Lexical borrowing is discussed below.

Earlier and Later Egyptian

Based on broad typological criteria, Earlier Egyptian (Old and Middle Egyptian combined) is classically contrasted with Later Egyptian (Late Egyptian, Demotic, and Coptic).⁹¹ The former is characterized by a preference for fusional morphology, verb-subject order, and asyndetic embedding of dependent clauses. The latter, by contrast, is characterized by a preference for more agglutinative morphology, subject-verb order, and morphologically overt subordination. Evidently, neither Earlier nor Later Egyptian are pure types. For example, the SV patterns NP *hr/r sdm* are already present in Old Egyptian (outside the Pyramid Texts), if with a limited functional yield, while elements of the VS conjugation are still found in Roman Demotic (for example past tense *sdm=f* alongside the new *ir=f sdm*). In verbal morphology, Late Egyptian represents an analytic peak between the more fusional type of Old Egyptian and the more agglutinative type of Coptic, both being synthetic, if in different ways.

⁸⁴ Shisha-Halevy 1986: 129–39.

⁸⁵ For a detailed diachronic study of non-verbal patterns, Loprieno, Müller, and Uljas 2017.

⁸⁶ Winand 1989. ⁸⁷ Loprieno 1995: 133–7, with references to previous studies.

⁸⁸ Vernus 2014 and Stauder 2014: 140–8, 192–200. ⁸⁹ Vernus 2003.

⁹⁰ Giving an impression (however partial) of lexical stability and change, see the list of words from *Sinuhe* that are still attested in Coptic (Peust 1999a: 301–6).

⁹¹ See, for example, Loprieno 2001, 1995; Kammerzell 1998: 81–98, Vernus 1988, Hintze 1947.

Major changes, to be sure, occurred between Middle and Late Egyptian (for example the development of *iri*-periphrased forms; new strategies for clause combining and adverbial-phrase focusing; and the redefinition of the functions of *iw*). But several elements that would be typical of Late Egyptian were developing already in Middle Egyptian (for example the semantic generalization of NP *hr/r sdm*; the extension of *.t(w)* to constructions in which it functioned as an impersonal subject pronoun). Moreover, changes that are significant in the overall history of Egyptian unfolded already during Old Egyptian and earlier Middle Egyptian (for example the spread of *.t(w)*-marked passives over *sdm(w)*-passives; the reduction of the suffix conjugation with the obsolescence of the Old Egyptian past tense *sdm=f* and prospective *ir(w)=f*). Further major changes occurred only during later Late Egyptian (for example the semantic retraction of the pseudoparticiple to the stative function and its evolution into a non-finite form; an increasing tendency to express absolute, rather than relative, tense; the generalization of past tense *sdm=f* to all types of events and its use in narrative chains). Other major changes became prominent only in Demotic and later (for example the generalization of the second-tense prefix through reanalysis of earlier focusing tenses; the transitivity alternations described above). When individual constructions are considered, a more continuous tableau of ongoing change thus emerges, complementary to the broad typological contrast between Earlier and Later Egyptian described above.

MECHANISMS AND FACTORS OF CHANGE

Linguistic change happens in, and is a product of, the conditions of linguistic interaction.⁹² New expressions and variants of existing ones are constantly innovated by speakers, coexist with older ones, and are ultimately selected, or not, by the broader speech community. Synchronic variation is thereby a necessary component of ongoing change, and any statement that an expression A becomes B ('A > B', such as made above) must be read as schematizing. Given the generally high degree of formality of written standards in pre-Coptic times, the record remains opaque to most underlying synchronic variation that existed, and non-standard constructions and constructions that did not catch on are only occasionally noticed.⁹³ In favourable cases only, the gradual spread of new expressions across different written registers can be described.⁹⁴

Linguistic performance is determined by the often conflicting demands of communication, such as expressivity as opposed to automatization in production and processing. This dynamic results in recurring mechanisms of change, which often involve the interplay of

⁹² See, for example, Keller 1994 and Croft 2000.

⁹³ For example, the future construction *twi r sdm* in the late Second Intermediate Period and early New Kingdom (Stauder 2017: 152, n. 33, and Kroeber 1970: 93–8); ^{LEg} (*r*)-š3^c-*m-dr-sdm=f* > ^{Dem} š^c-*tw sdm=f* 'since/after he has heard', documented only two dozen times over a millennium from Late Egyptian through Demotic (Collombert 2004).

⁹⁴ For example, for the negative imperative, innovative *m ir sdm* alongside older *m sdm*, distributed according to written registers during the Eighteenth Dynasty (Vernus 2010a); the third person plural suffix pronoun =*w* gradually superseding =*sn* during the New Kingdom (in the Eighteenth Dynasty, Edel 1959; in the Ramesside period, Winand 1995); *irm* 'with' gradually superseding *hn^c* during the New Kingdom (Winand 2014a).

Such recurring mechanisms define constraints on possible, or even preferred, types of changes. They do not, however, predict when, and how fast, a particular change will take place, nor whether it will at all. Changes in one construction or functional domain can also be dependent on the broader intra-linguistic context in which they occur. For example, the development by the passive morpheme. *t(w)* of functions as an impersonal subject pronoun was made possible by the conjunction, at a certain moment in time, of a whole series of unrelated dimensions of favourable context.¹⁰⁰ The renewal of verbal morphology through *iri* may have been in part in response to the reduced distinctiveness of patterns of synthetic inflection, itself the result of a strong expiratory stress of Egyptian, yet the loss of endings could also happen for various reasons other than phonological ones. Thus, the gradual reduction of personal endings of the pseudoparticiple, during Late Egyptian, was a consequence of the reduced syntactic distribution of the form resulting in an increasing redundancy of the personal endings.¹⁰¹

Among factors of change, sociolinguistic dimensions remain generally elusive due to the nature of the written record. The effects of language contact are documented through extensive lexical borrowing at all times, varying as a function of intensity of contact and of the prestige of the donor language relative to Egyptian-Coptic at the time of borrowing.¹⁰² Technical or culturally specific vocabulary displayed a strong tendency to be borrowed in larger quantities, as well as earlier in case of prolonged contact, than core vocabulary. The word *ssmt* ‘horse’ was thus borrowed in the early New Kingdom along with the adoption of technical innovations in warfare;¹⁰³ similarly, ⲛⲓⲛⲓⲛⲓ ‘soul’ (from Greek) displaced native ⲛⲁⲓ (< *b3*) in the new Greek-mediated cultural context of Christianity. While some loanwords were thoroughly integrated both semantically and morphologically into Egyptian, respectively Coptic, and thereby nativized, other ones, particularly those found in the Ramesside record, did not leave much trace in subsequent language history and are arguably better interpreted as instances of (learned) code-switching.¹⁰⁴ A good illustration of lexical renewal through borrowing is ‘sea’^{OEg} *w3d-wr*,^{LEg} *ym* (from West-Semitic *yam*), ⲧⲓⲗⲁⲗⲁⲥⲁ (from Greek *thalassa*). As far as current evidence goes, however, language contact seems to have exercised little, if any, direct influence on grammar itself. In the realm of phonology, it has been argued that the sound shift /a:/>/o:/ in the early first millennium BC was part of a broader areal phenomenon which included the ‘Canaanite Vowel Shift’.¹⁰⁵

¹⁰⁰ Stauder 2014: 384–403, and 2015: 473–99, 517–21.

¹⁰¹ Winand 1992: 103–49.

¹⁰² For loans from West Semitic languages, see Hoch 1994 (with critical review in Meeks 1997), Winand 2017a, and Quack 2005 (for the less studied post-Ramesside times); from various Libyan, African, and Indo-European languages, Schneider et al. 2004; from African languages specifically, el-Sayed 2011; from Greek, Clarysse 1987 (into Demotic), and Grossman et al. 2017 and Förster 2002 (into Coptic); from Arabic into Coptic, Richter 2017.

¹⁰³ Vernus 2010b; in the same context, the word *hps̄*, of native stock, was extended in its meaning, from ‘strong arm’ to ‘sickle-shaped sword’, the weapon itself having been introduced to Egypt during the Second Intermediate Period (Stauder 2013c: 399–401). That a native word was retained in this case was because it already carried significations in royal ideology, now extended to the new weapon.

¹⁰⁴ For Late Egyptian, Winand 2017; Kammerzell 1998: 99–121; for degrees and strategies of integration into Coptic, Grossman et al. 2017.

¹⁰⁵ Kammerzell 1998: 153–71.

SUGGESTED READING

For overviews of Egyptian linguistic history, see Allen 2012 and Loprieno 1995. For examples of case-studies in describing and analysing linguistic change, see Stauder 2014: 349–409, 2015a: and Grossman et al. 2014; and for an introduction to linguistic variation and register in Egyptian at various periods, see Polis 2017. For ‘égyptien de tradition’, see Vernus 2016, 2017; and for Coptic, see Richter 2009.

BIBLIOGRAPHY

- Allen, J. 1982. Synthetic and Analytic Tenses in Old Egyptian. In *Légyptologie en 1979. Axes prioritaires de recherches*. Colloques internationaux du Centre National de la Recherche Scientifique, n° 595. Paris: Éditions du CNRS, I, 19–27.
- Allen, J. 1984. *The Inflection of the Verb in the Pyramid Texts*. Bibliotheca Aegyptia 2. Malibu: Undena Publications.
- Allen, J. 1994. Colloquial Middle Egyptian: Some Observations on the Language of Heka-Nakht, *Lingua Aegyptia* 4: 1–12.
- Allen, J. 2004. Traits dialectaux dans les textes des pyramides du Moyen Empire. In S. Bickel and B. Mathieu (eds), *D'un monde à l'autre. Textes des pyramides, Textes des sarcophages*. BdÉ 139. Cairo: IFAO, 1–14.
- Allen, J. 2012. *An Historical Study of Ancient Egyptian*. Cambridge: Cambridge University Press.
- Allen, J. 2014. *Middle Egyptian: An Introduction to the Language and Culture of Hieroglyphs*. Cambridge: Cambridge University Press.
- Allen, J. 2017. *A Grammar of the Ancient Egyptian Pyramid Texts. Volume 1: Unis*. Languages of the Ancient Near East 7. Winona Lake: Eisenbrauns.
- Allen, J. 2020. *Ancient Egyptian Phonology*. Cambridge: Cambridge University Press.
- Borghouts, J. 1988. Aspectual values of the second tenses in Middle Egyptian. In S. Schoske, H. Altenmüller and D. Wildung (eds), *Linguistik, Philologie, Religion. Akten des vierten Internationalen Ägyptologen-Kongresses, München 1985*. Studien zur Altägyptischen Kultur, Beihefte 3. Hamburg, 29–42.
- Borghouts, J. 2010. *Egyptian. An Introduction to the Writing and Language of the Middle Kingdom*. Egyptologische Uitgaven 24. Leuven: Peeters.
- Brose, M. 2014. *Grammatik der dokumentarischen Texte des Mittleren Reiches*. LingAeg SM 13. Hamburg: Widmaier.
- Bybee, J, R. Perkins, and W. Pagliuc 1994. *The Evolution of Grammar: Tense, Aspect and Modality in the Languages of the World*. Chicago: Chicago University Press.
- Clarysse, W. 1987. Greek Loan-Words in Demotic. In S. Vleeming (ed.), *Aspects of Demotic Lexicography. Acts of the Second International Conference for Demotic Studies, Leiden, 19–21 September 1984*. Leuven: Peeters, 9–33.
- Cole, E. 2015. Interpretation and Authority: The Social Functions of Translation in Ancient Egypt. PhD thesis. University of California Los Angeles.
- Collier, M. 1994. Grounding, Cognition and Metaphor in the Grammar of Middle Egyptian, *Lingua Aegyptia* 4: 57–87.
- Collier, M. 1996. The Language of Literature: On Grammar and Texture. In A. Loprieno (ed.), *Ancient Egyptian Literature: History and forms*. PdÄ 10. Leiden: Brill, 531–53.
- Collombert, P. 2004. La forme démotique $\text{š}^c\text{-tw } \text{s}\overline{\text{d}}\text{m}=\text{f}$ (néo-égyptien (r)- $\text{š}\overline{\text{z}}^c\text{-m-dr-s}\overline{\text{d}}\text{m}=\text{f}$), *Lingua Aegyptia* 12: 21–43.
- Croft, W. 2000. *Explaining Language Change. An Evolutionary Approach*. Harlow/New York: Longman.

- Depuydt, L. 1999. Analyzing the Use of Idioms Past (with Special Focus on Sovereign Nubia), *Studien zur Altägyptischen Kultur* 27: 34–63.
- Der Manuelian, P. 1994. *Living in the Past. Studies in Archaism of the Egyptian Twenty-Sixth Dynasty*. Studies in Egyptology. London: Kegan Paul International.
- Doret, É. 1986. *The Narrative Verbal System of Old and Middle Egyptian*. Genève: Patrick Cramer.
- Edel, E. 1955–64. *Altägyptische Grammatik*. Analecta Orientalia 34/39. Rome: Pontificium Institutum Biblicum.
- Edel, E. 1959. Die Herkunft des neuägyptisch-koptischen Personalsuffixes der 3. Person Plural -w, *Zeitschrift für Ägyptische Sprache und Altertumskunde* 84: 17–38.
- Edgerton, W. 1951. Early Egyptian Dialect Interrelationships, *Bulletin of the American Schools of Oriental Research* 122: 9–12.
- Engsheden, Å. 2003. *La reconstitution du verbe en égyptien de tradition 400–30 avant J.-C.* Uppsala Studies in Egyptology 3. Uppsala: Uppsala University.
- Engsheden, Å. 2006. Über die Markierung des direkten Objekts im Koptischen, *Lingua Aegyptia* 14: 199–222.
- Engsheden, Å. 2016. Traditional Egyptian II (Ptolemaic, Roman). In J. Stauder-Porchet, A. Stauder, and W. Wendrich (eds), *UCLA Encyclopedia of Egyptology*. Los Angeles. <https://escholarship.org/uc/item/8g73w3gp>
- Erman, A. 1933. *Neuägyptische Grammatik*. Leipzig: Engelmann.
- Fecht, G. 1960. *Wortakzent und Silbenstruktur. Untersuchungen zur Geschichte der ägyptischen Sprache*. ÄgFo 21. Glückstadt: Augustin.
- Förster, H. 2002. *Wörterbuch der griechischen Wörter in den koptischen dokumentarischen Texten. Texte und Untersuchungen zur Geschichte der Altchristlichen Literatur* 148. Berlin: de Gruyter.
- Frajzyngier, Z. and E. Shay (eds) 2012. *The Afroasiatic Languages*. Cambridge Language Surveys. Cambridge: Cambridge University Press.
- Funk, W.-P. 1988. Dialects Wanting Home: A Numerical Approach to the Early Varieties of Coptic. In J. Fisiak (ed.), *Historical Dialectology. Regional and Social*. Trends in Linguistics. Studies and Monographs 37. Berlin: de Gruyter, 149–92.
- Gardiner, A. 1957. *Egyptian Grammar. An Introduction to the Study of Hieroglyphs*. Oxford: Griffith Institute.
- Gensler, O. 2015. A Typological Look at Egyptian *d > ʕ. In E. Grossman, M. Haspelmath, and T.S. Richter (eds), *Egyptian-Coptic Linguistics in Typological Perspective*. Trends in Linguistics 55. Berlin/New York: de Gruyter, 187–202.
- Gillen, T. 2015. Ramesside Registers of Égyptien de Tradition: The Medinet Habu inscriptions. In E. Grossman, S. Polis, A. Stauder, and J. Winand (eds), *On Forms and Functions: Studies in Ancient Egyptian Grammar*. LingAeg SM 15. Hamburg: Widmaier, 41–86.
- Goldwasser, O. 1990. On the Choice of Registers—Studies in the Grammar of Papyrus Anastasi I. In S. Israelit-Groll (ed.), *Studies in Egyptology. Presented to Miriam Lichtheim*. Jerusalem: Magnes Press, Hebrew University, I, 120–49.
- Goldwasser, O. 1999. ‘Low’ and ‘High’ Dialects in Ramesside Egyptian. In S. Grunert and I. Hafemann (eds), *Textcorpus und Wörterbuch. Aspekte zur ägyptischen lexicographie*. PdÄ 14. Leiden: Brill, 311–28.
- Gragg, G. 2019. Semitic and Afro-Asiatic. In J. Huehnergard and N. Pat-El (eds), *The Semitic Languages, Second Edition*. Routledge Language Family Series. London/New York: Routledge, 22–48.
- Grossman, E. 2009. Periphrastic Perfects in the Coptic Dialects. A Case Study in Grammaticalization, *Lingua Aegyptia* 17: 81–118.
- Grossman, E., Lescuyer, G., and Polis, S. 2014. Contexts and Inferences: The Grammaticalization of the Later Egyptian Allative Future. In E. Grossman, S. Polis, A. Stauder, and J. Winand (eds), *On Forms and Functions: Studies in Ancient Egyptian Grammar*. LingAeg SM 15. Hamburg: Widmaier, 87–136.
- Grossman, E., Dils, P., Richter, T.S., and Schenkel, W. (eds) 2017. *Greek Influences on Egyptian-Coptic: Contact-Induced Change in an Ancient African Language (DDGLC Working Papers 1)*. LingAeg SM 17. Hamburg: Widmaier.

- Guldemann, T. 2018. *The Languages and Linguistics of Africa*. The World of Linguistics 11. Berlin/ New York: de Gruyter Mouton.
- Gundacker, R. 2010. Eine besondere Form des Substantivalsatzes. Mit besonderer Rücksicht auf ihre dialektale und diachrone Bedeutung, *Lingua Aegyptia* 18: 41–117.
- Gundacker, R. 2017. Where to Place 'Ältere Komposita.' Traces of Dialectal Diversity Among Early Toponyms and Theonyms. In D. Werning (ed.), *Proceedings of the Fifth International Conference on Egyptian-Coptic-Linguistics (Crossroads V)*. Berlin, February 17–20, 2016. *Lingua Aegyptia* 25. Hamburg: Widmaier, 101–76.
- Haggerty, P. and Renfrew, C. 2014. Africa: Languages. In C. Renfrew (ed.), *The Cambridge World Pre-history*. Cambridge: Cambridge University Press, vol. I, 307–20.
- Haspelmath, M. 2004. On Directionality in Language Change with Particular Reference to Grammaticalization. In O. Fischer, M. Norde, and H. Perridon (eds), *Up and Down the Cline: The Nature of Grammaticalization*. Typological Studies in Language 59. Amsterdam: Benjamins, 17–44.
- Haspelmath, M. 2015. The Three Adnominal Possessive Constructions in Egyptian-Coptic: Three Degrees of Grammaticalization. In E. Grossman, M. Haspelmath, and T.S. Richter (eds), *Egyptian-Coptic Linguistics in Typological Perspective*. Trends in Linguistics 55. Berlin/New York: de Gruyter, 261–87.
- Hayward, R. 2000. Afroasiatic. In B. Heine and D. Nurse (eds), *African Languages. An Introduction*. Cambridge: Cambridge University Press, 74–98.
- Hopper, P. and E. Traugott 2003². *Grammaticalization*. Cambridge: Cambridge University Press.
- Hintze F. 1947. Die Haupttendenzen der ägyptischen Sprachentwicklung, *Zeitschrift für Phonetik und Allgemeine Sprachwissenschaft* 1: 85–108.
- Hintze F. 1950. 'Konversion' und 'analytische Tendenz' in der ägyptischen Sprachgeschichte, *Zeitschrift für Phonetik und Allgemeine Sprachwissenschaft* 4: 51–6.
- Hoch, J. 1994. *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period*. Princeton: Princeton University Press.
- Jansen-Winkel, K. 1996. *Spätmittelägyptische Grammatik der Texte der 3. Zwischenzeit*. ÄAT 34. Wiesbaden: Harrassowitz.
- Johnson, J. 1976. *The Demotic Verbal System*. SAOC 38. Chicago: Oriental Institute.
- Junge, F. 1984. Sprache. In W. Helck and W. Westendorf (eds), *Lexikon der Ägyptologie V*. Wiesbaden: Harrassowitz, 1176–214.
- Junge, F. 1985. Sprachstufen und Sprachgeschichte, *Wiener Zeitschrift für die Kunde des Morgenlandes Supplement VI*: 17–34.
- Junge, F. 2008³. *Einführung in die Grammatik des Neuägyptischen*. Wiesbaden: Harrassowitz.
- Kahl, J., 1999. *Siut-Theben. Zur Wertschätzung von Traditionen im alten Ägypten*. PdÄ 13. Leiden: Brill.
- Kahl, J., Kloth, N., and Zimmermann, U. 2002. *Frühägyptisches Wörterbuch*. Wiesbaden: Harrassowitz.
- Kammerzell, F. 1995. Zur Umschreibung und Lautung. In R. Hannig (ed.), *Grosses Handwörterbuch Ägyptisch-Deutsch (2800–950 v.Chr.)*. Mainz: Philipp von Zabern, xxiii–lix.
- Kammerzell, F. 1998. *Sprachkontakte und Sprachwandel im Alten Ägypten*. Unpublished Habilitationsschrift, Göttingen.
- Kammerzell, F. 2005. Old Egyptian and Pre-Old Egyptian. Tracing Linguistic Diversity in Archaic Egypt and the Creation of the Egyptian Language. In S. Seidlmayer (ed.), *Texte und Denkmäler des ägyptischen Alten Reiches*. TLA 3. Berlin: Achet Verlag, 165–247.
- Kasser, R. 1991. Geography, Dialectal. In A. Atiya (ed.), *The Coptic Encyclopedia VIII*. New York: Macmillan, 133–41.
- Keller, R. 1994. *On Language Change. The Invisible Hand in Language*. London: Routledge.
- Khouzam, A.F. 2002. *La langue égyptienne au Moyen Age: le manuscrit copte 44 de Paris de la Bibliothèque nationale de France*. Paris: Harmattan.
- Kroeber, B. 1970. *Die Neuägyptizismen vor der Amarnazeit. Studien zur Entwicklung der ägyptischen Sprache vom Mittleren zum Neuen Reich*. Tübingen: Philosophische Fakultät der Eberhard-Karls-Universität Tübingen.
- Kruchten, J.-M. 1999. From Middle to Late Egyptian, *Lingua Aegyptia* 6: 1–97.

- Kruchten, J.-M. 2000. Assimilation and Dissimilation at Work in the Late Egyptian Verbal System. The Verb Forms Built by Means of the Auxiliary *iri* from the Second Part of the Nineteenth Dynasty until Early Demotic, *Journal of Egyptian Archaeology* 86: 57–65.
- Layton, B. 2011³. *A Coptic Grammar*. Porta Linguarum Orientalium 20. Wiesbaden: Harrassowitz.
- Lehmann, C. 2004. Theory and Method in Grammaticalization, *Zeitschrift für Germanistische Linguistik* 32/2: 152–87.
- Loprieno, A. 1995. *Ancient Egyptian. A Linguistic Introduction*. Cambridge: Cambridge University Press.
- Loprieno, A. 1996. Linguistic Variety and Egyptian literature. In A. Loprieno (ed.), *Ancient Egyptian Literature: History and Forms*. PdÄ 10. Leiden: Brill, 515–30.
- Loprieno, A. 2001. From Ancient Egyptian to Coptic. In M. Haspelmath, E. König, W. Oesterreicher, and W. Raible (eds), *Language Typology and Language Universals. An International Handbook*. Handbücher zur Sprach- und Kommunikationswissenschaft 17. Berlin: de Gruyter, 1742–61.
- Loprieno, A. 2006. On Fuzzy Boundaries in Egyptian Syntax. In G. Moers, H. Behlmer, K. Demuss, and K. Widmaier (eds), *jn.t Dr.w—Festschrift für Friedrich Junge*. Göttingen: Seminar für Ägyptologie und Koptologie, 429–41.
- Loprieno, A. and Müller, M. 2012. Ancient Egyptian and Coptic. In Z. Frajzyngier and E. Shay (eds), *The Afroasiatic Languages*. Cambridge Language Surveys. Cambridge: Cambridge University Press, 102–44.
- Loprieno, A., Müller, M., and Uljas, S. 2017. *Non-Verbal Predication in Ancient Egyptian*. The Mouton Companions to Ancient Egyptian 2. Berlin: De Gruyter.
- Lustman, J. 1999. *Étude grammaticale du papyrus Bremner-Rhind*. Paris: J. Lustman.
- Malaise, M. and J. Winand. 1999. *Grammaire raisonnée de l'égyptien classique*. Aegyptiaca Leodensia 6. Liège: Centre Informatique de Philosophie et Lettres.
- Meeks, D. 1997. Les emprunts égyptiens aux langues sémitiques durant le Nouvel Empire et la Troisième Période Intermédiaire. Les aléas du comparatisme, *Bibliotheca Orientalis* 54: 32–61.
- Müller, M. 2010. *Akkadisch in Keilschrifttexten aus Ägypten. Deskriptive Grammatik einer Interlanguage des späten zweiten vorchristlichen Jahrtausends anhand der Ramses-Briefe*. AOAT 373. Münster: Ugarit Verlag.
- Müller, M. 2016. Vom Lexikon in die Grammatik. Grammatikalisierungsphänomene im Ägyptisch-Koptischen. In P. Dils and L. Popko (eds), *Zwischen Philologie & Lexikographie des Ägyptisch-Koptischen. Akten der Leipziger Abschlussstagung des Akademienprojekts 'Altägyptisches Wörterbuch'*. Abhandlungen der Sächsischen Akademie der Wissenschaften zu Leipzig—Philologisch-historische Klasse 84/3. Stuttgart/Leipzig: Sächsische Akademie der Wissenschaften zu Leipzig, in Kommission bei S. Hirzel, 56–81.
- Müller, M. In prep. *Einführung in die Grammatik des Bohairischen*.
- Neveu, F. 1996. *Grammaire du néo-égyptien: la langue des Ramsès*. Paris: Khéops.
- Oréal, E. 2010. *Les particules en égyptien ancien. De l'ancien égyptien à l'égyptien classique*. BdÉ 152. Cairo: IFAO.
- Osing, J. 1976. *Die Nominalbildung des Ägyptischen*. Mainz: Philipp von Zabern.
- Osing, J. 1998. *The Carlsberg Papyri 2. Hieratische Papyri aus Tebtunis I*. Copenhagen: Museum Tusulanum Press.
- Osing, J. and Rosati, G. 1998. *Papiri geroglifici e ieratici da Tebtynis*. Florence: Istituto Papirologico 'G. Vitelli'.
- Paksi, J. 2016. Linguistic Inclusiveness in the Seti's Kanais Inscription, *Lingua Aegyptia* 13: 175–96.
- Paksi, J. 2020. *Linguistic Heterogeneity in the Ramesside Royal Inscriptions*. Unpublished PhD thesis Universität Basel / École Pratique des Hautes Études, PSL.
- Peust, C. 1999a. *Egyptian Phonology: An introduction to the phonology of a dead language*. Monographien zur ägyptischen Sprache 2. Göttingen: Peust and Gutschmidt.
- Peust, C. 1999b. *Das Napatianische: ein ägyptischer Dialekt aus dem Nubien des späten ersten vorchristlichen Jahrtausends: Texte, Glossar, Grammatik*. Monographien zur ägyptischen Sprache 3. Göttingen: Peust and Gutschmidt.
- Peust, C. 2010. *Die Toponyme vorarabischen Ursprungs im modernen Ägypten*. Göttinger Miszellen Beihefte 8. Göttingen: Seminar für Ägyptologie und Koptologie der Universität Göttingen.

- Peust, C. 2012. On the Subgrouping of Afroasiatic, or: How to Use an Unrooted Phylogenetic Tree in Historical Linguistics, *Lingua Aegyptia* 20: 221–51.
- Polis, S. 2017a. Linguistic Variation in Ancient Egyptian: An Introduction to the State of the Art (with Special Attention to the Community of Deir el-Medina). In J. Cromwell and E. Grossman (eds), *Scribal Repertoires in Egypt from the New Kingdom to the Early Islamic Period*. Oxford Studies in Ancient Documents. Oxford: Oxford University Press, 61–88.
- Polis, S. 2017b. The Scribal Repertoire of Amennakhte Son of Ipy: Describing Variation across Late Egyptian Registers. In J. Cromwell and E. Grossman (eds), *Scribal Repertoires in Egypt from the New Kingdom to the Early Islamic Period*. Oxford Studies in Ancient Documents. Oxford: Oxford University Press, 89–126.
- Polotsky, H. 1987–90. *Grundlagen des koptischen Satzbaus*. American Studies in Papyrology 27/29. Atlanta: Scholars Press.
- Quack, J. 1994. *Die Lehren des Ani: ein neuägyptischer Weisheitstext in seinem kulturellen Umfeld*. OBO 141. Fribourg: Universitätsverlag/Göttingen: Vandenhoeck & Ruprecht.
- Quack, J. 1995. Monumentaldemotisch. In L. Gestermann and H. Sternberg el-Hotabi (eds), *Per aspera ad astra. Wolfgang Schenkel zum neunundfünfzigsten Geburtstag*. Kassel, 107–21.
- Quack, J. 2001. Ein neuer Versuch zum Moskauer literarischen Brief, *Zeitschrift für Ägyptische Sprache und Altertumskunde* 128: 168–81.
- Quack, J. 2005. Zu den vorarabischen semitischen Lehnwörtern im Koptischen. In B. Burtea, J. Tropper, and H. Younansardaroud (eds), *Studia Semitica et Semitohamitica, Festschrift für Rainer Voigt anlässlich seines 60. Geburtstages am 17. Januar 2004*. AOAT 317. Münster: Ugarit-Verlag, 307–38.
- Quack, J. 2006. En route vers le copte. Notes sur l'évolution du démotique tardif, *Faites de langues 27 (Les langues chamito-sémitiques (afro-asiatiques))* volume 2: 191–216.
- Quack, J. 2008. Corpus oder Membra disjecta? Zur Sprach- und Redaktionskritik des Papyrus Jumilhac. In W. Waitkus (ed.), *Diener des Horus—Festschrift für Dieter Kurth zum 65. Geburtstag (Aegyptiaca Hamburgensia 1)*. Gladbeck: PeWe Verlag, 203–28.
- Quack, J. 2010a. Inhomogenität von ägyptischer Sprache und Schrift in Texten aus dem Späten Ägypten. In K. Lembke, M. Minas-Nerpel, and S. Pfeiffer (eds), *Tradition and Transformation: Egypt under Roman Rule. Proceedings of the International Conference, Hildesheim, Roemer- and Pelizeaus-Museum, 3–6 July 2008*. CHANE 41. Leiden/Boston: Brill, 313–41.
- Quack, J. 2010b. Egyptian Writing for Non-Egyptian Languages, and Vice Versa: A Short Overview. In A. de Voogt and I. Finkel (eds), *The Idea of Writing. Play and Complexity*. Leiden/Boston: Brill, 315–26.
- Quack, J. 2017. How the Coptic Scripta Came About. In E. Grossman, P. Dils, T.S. Richter, and W. Schenkel (eds), *Greek Influence on Egyptian-Coptic: Contact-Induced Change in an Ancient African Language (DDGLC Working Papers 1)*. LingAeg SM 17. Hamburg: Widmaier, 27–96.
- Quack, J. forthcoming. Demotic. In J. Stauder-Porchet, A. Stauder, and W. Wendrich (eds), *UCLA Encyclopedia of Egyptology*. Los Angeles.
- Quack, J. In preparation. *Demotische Grammatik*.
- Ray, J. 1994. How Demotic is Demotic? In E. Bresciani (ed.), *Acta Demotica: Acts of the Fifth International Conference for Demoticists, Pisa, 4th–8th September 1984*. EVO 17. Pisa: Università di Pisa, 251–64.
- Richter, T.S. 2006. Spoken Sahidic: Gleanings from Non-Literary Texts, *Lingua Aegyptia* 14: 311–23.
- Richter, T.S. 2009. Greek, Coptic, and the 'Language of the Hijra'. Rise and Decline of the Coptic Language in Late Antique and Medieval Egypt. In H. Cotton, R. Hoyland, J. Price, and D. Wasserstein (eds), *From Hellenism to Islam: Cultural and linguistic change in the Roman Near East*. Cambridge: Cambridge University Press, 402–46.
- Richter, T.S. 2017. Borrowing into Coptic, the Other Story: Arabic Words in Coptic Texts. In E. Grossman, P. Dils, T. Richter, and W. Schenkel (eds), *Greek Influences on Egyptian-Coptic: Contact-Induced Change in an Ancient African Language (DDGLC Working Papers 1)*. LingAeg SM 17. Hamburg: Widmaier Verlag, 513–33.
- Rössler, O. 1971. Das Ägyptische als semitische Sprache. In F. Altheim and R. Stiel (eds), *Christentum am Roten Meer I*. Berlin: De Gruyter, 263–326.

- el-Sayed, R. 2011. *Afrikanischstämmiger Lehnwortschatz im älteren Ägyptisch. Untersuchungen zur ägyptisch-afrikanischen lexikalischen Interferenz im dritten und zweiten Jahrtausend v.Chr.* OLA 211. Leuven: Peeters.
- Schenkel, W. 1966. Die Konversion, ein Epiphänomen der kemischen (ägyptischen-koptischen) Sprachgeschichte, *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 21: 123–32.
- Schenkel, W. 1983. *Zur Rekonstruktion der deverbalen Nominalbildung des Ägyptischen.* Göttinger Orientforschungen IV/13. Wiesbaden: Harrassowitz.
- Schenkel, W. 1990. *Einführung in die altägyptische Sprachwissenschaft.* Darmstadt: Wissenschaftliche Buchgesellschaft.
- Schenkel, W. 1993. Zu den Verschluss- und Reibelauten im Ägyptischen und (Hamito)Semitischen. Ein Versuch zur Synthese der Lehrmeinungen, *Lingua Aegyptia* 3: 137–49.
- Schenkel, W. 2012⁷. *Tübinger Einführung in die klassisch-ägyptische Sprache und Schrift.* Tübingen: Schenkel.
- Schneider, T. 1997. Beiträge zur sogenannten ‘Neueren Komparatistik’, *Lingua Aegyptia* 5: 189–209.
- Schneider, T., Breyer, F., Kaelin, O., and Knigge, C. (eds) 2004. *Das Ägyptische und die Sprachen Vorderasiens, Nordafrikas und der Ägäis: Akten des Basler kolloquiums zum ägyptisch-nichtsemitischen Sprachkontakt, Basel 9.–11. Juli 2003.* AOAT 310. Münster: Ugarit-Verlag.
- Schweitzer, S. 2005. *Schrift und Sprache der Vierten Dynastie.* Menes 3. Wiesbaden: Harrassowitz.
- Shisha-Halevy, A. 1986. *Coptic Grammatical Categories: Structural Studies in Shenoutean Sahidic.* *Analecta Orientalia* 53. Roma: Pontificium Institutum Biblicum.
- Shisha-Halevy, A. 1989. Papyrus Vandier Recto: An Early Demotic Literary Text? *Journal of the American Oriental Society* 109: 421–35.
- Silverman, D. 1991. Texts from the Amarna Period and their Position in the Development of Ancient Egyptian, *Lingua Aegyptia* 1: 301–14.
- Simpson, R. 1996. *Demotic Grammar in the Ptolemaic Sacerdotal Decrees.* Oxford: Griffith Institute.
- Spiegelberg, W. 1925. *Demotische Grammatik.* Leipzig: Winters.
- Stauder, A. 2013a. L’émulation du passé à l’époque thoutmoside: la dimension linguistique. In S. Bickel (ed.), *Vergangenheit und Zukunft. Die Konstruktion historischer Zeit in der 18. Dynastie.* AegHelv 22. Basel: Schwabe, 77–125.
- Stauder, A. 2013b. Disintegrating and Reintegrating Sinuhe: The Art of Linguistic Artificiality. In H. Hays, F. Feder and L. Morenz (eds.), *The Alpha and Omega of Sinuhe. Reinterpreting a classical Middle Egyptian text. Proceedings of the workshop 27–29 November 2009 at Leiden University.* Egyptologische Uitgaven. Leuven: Peeters.
- Stauder, A. 2013c. *Linguistic Dating of Middle Egyptian Literary Texts.* LingAeg SM 12. Hamburg: Widmaier.
- Stauder, A. 2014. *Voice and Perspective in Earlier Egyptian.* LingAeg SM 14. Hamburg: Widmaier.
- Stauder, A. 2015a. From Inflectional Passive Marker to Non-Specified Human Subject Pronoun: A Highly Unusual Development in Earlier Egyptian. In E. Grossman, M. Haspelmath, and T.S. Richter (eds), *Egyptian-Coptic Linguistics in Typological Perspective.* Trends in Linguistics 55. Berlin/New York: de Gruyter, 455–532.
- Stauder, A. 2015b. The Earlier Egyptian ‘Emphatic’ Construction: an Alternative Analysis. In J. Allen, M. Collier, and A. Stauder (eds), *Coping with Obscurity: The Brown Workshop on Earlier Egyptian Grammar.* Wilbour Studies in Egyptology and Assyriology 4. Atlanta: Lockwood, 169–200.
- Stauder, A. 2017. L’origine du pronom sujet néo-égyptien (*twi, twk, sw*, etc.), *Revue d’Égyptologie* 67 141–55.
- Stauder, A. 2020. Expressions of Royal Agency: Forms of the verb in the Old Kingdom event autobiography. In J. Stauder-Porchet, E. Froid and A. Stauder (eds), *Ancient Egyptian Biographies. Contexts, Forms, Functions.* Wilbour Studies in Egyptology and Assyriology 6. Atlanta: Lockwood, 219–41.
- Stauder, A. Forthcoming a. Egyptian Morphology in Afroasiatic Perspective. In S. Štubňová and V. Almansa Villatoro (eds), *Rethinking the Origins. The Departure of Ancient Egyptian as a Branch from the Afroasiatic Family?* Wilbour Studies in Egyptology and Assyriology. Atlanta: Lockwood.

- Stauder, A. Forthcoming b. The Emergence of Focusing Verbal Morphology in Egyptian. In C. Woods and A. Stauder (eds), *Linguistic Methods and Theory in the Languages of the Ancient Near East*. Oriental Institute Seminars. Chicago: The Oriental Institute.
- Stauder-Porchet, J. 2017. *Les autobiographies de l'Ancien Empire égyptien. Étude sur la naissance d'un genre*. OLA 255. Leuven/Paris/Walpole: Peeters.
- Steindorff, G. 1951. *Lehrbuch der Koptischen Grammatik*. Chicago: University of Chicago Press.
- Steiner, R. 2011. *Early Northwest Semitic Serpent Spells in the Pyramid Texts*. Harvard Semitic Studies 61. Winona Lake: Eisenbrauns.
- Štubňová, S., and V. Almansa Villatoro (eds). Forthcoming. *Rethinking the Origins. The Departure of Ancient Egyptian as a Branch from the Afroasiatic Family?* Wilbour Studies in Egyptology and Assyriology. Atlanta: Lockwood.
- Sweeney, D. 2001. *Correspondence and Dialogue. Pragmatic Factors in Late Ramesside Letter-Writing*. ÄAT 49. Wiesbaden: Harrassowitz.
- Takács, G. 1999. *Etymological Dictionary of Egyptian*. Handbuch der Orientalistik. Erste Abteilung, 48. Leiden: Brill.
- Till, W. 1931. *Koptische Dialektgrammatik*. München: Beck.
- Till, W. 1961. *Koptische Grammatik (Saidischer Dialekt)*. Lehrbücher für das Studium der orientalischen und afrikanischen Sprachen 1. Leipzig: Verlag Enzyklopädie.
- Uljas, Sami. 2007. *The Modal System, of Earlier Egyptian Complement Clauses. A Study in Pragmatics in a Dead Language*. PdÄ 26. Leiden: Brill.
- Vernus, P. 1978. Littérature et autobiographie: les inscriptions de *s³-mwt* surnommé *Kyky*, *Revue d'Égyptologie* 30: 115–46.
- Vernus, P. 1982. Deux particularités de l'égyptien de tradition: *nty iw* + Présent I ; *wnn=f hr sdm* narratif. In *L'Égyptologie en 1979. Axes prioritaires de la recherche I*. Paris: CNRS, 81–9.
- Vernus, P. 1988. L'égyptien-copte. In J. Perrot (ed.), *Les langues dans le monde ancien et moderne. Troisième Partie: les langues chamito-sémitiques, textes réunis par David Cohen*. Paris: Éditions du CNRS, 161–206.
- Vernus, P. 1990a. *Future at Issue. Tense, Mood and Aspect in Middle Egyptian: Studies in Syntax and Semantics*. Yale Egyptological Studies 4. New Haven: Yale Egyptological Seminar.
- Vernus, P. 1990b. Entre néo-égyptien et démotique: la langue utilisée dans la traduction du Rituel de repousser l'Agressif (Études sur la diglossie I), *Revue d'Égyptologie* 41: 153–208.
- Vernus, P. 1996a. Langue littéraire et diglossie. In A. Loprieno (ed.), *Ancient Egyptian Literature: History and forms*. PdÄ 10. Leiden: Brill, 555–64.
- Vernus, P. 1996b. La position linguistique des Textes des Sarcophages. In H. Willems (ed.), *The World of the Coffin Texts*. Egyptologische Uitgaven 9. Leuven: Peeters, 143–96.
- Vernus, P. 1997. La grammaticalisation en égyptien ancien: phrase nominale et morphogénèse de l'inaccompli et du future, *Mémoires de la société de linguistique de Paris*, Nouvelle Série 5: 63–83.
- Vernus, P. 1998. Processus de grammaticalisation dans la langue égyptienne, *Académie des Inscriptions et Belles-Lettres, Compte-rendus des séances de l'année 1998, janvier-mars*, 192–210.
- Vernus, P. 2003. Lexique et grammaire en égyptien: lexicalisations en substantifs préassignés. In I. Hafemann (ed.), *Wege zu einem Digitalen Corpus Ägyptischer Texte: Akten der Tagung 'Datenbanken im Verbund' (Berlin, 30 September–2. Oktober 1999)*. Thesaurus Lingua Aegyptia 2. Berlin: Achet Verlag, 237–76.
- Vernus, P. 2009. Le préformant n et la détransitivité: formation $n-C_1C_2C_1C_2$ versus $C_1C_2C_1C_2$. À propos de la racine gm 'notion de trituration', *Lingua Aegyptia* 17: 291–317.
- Vernus, P. 2010a. Du moyen égyptien au néo-égyptien, de *m* à *m-jr*: l'auxiliation de l'impératif négatif à la XVIIIe dynastie. In Z. Hawass and J. Wegner (eds), *Millions of Jubilees. Studies in Honor of David P. Silverman II*. ASAE Suppléments 39. Cairo: SAE, 315–35.
- Vernus, P. 2010b. Réception linguistique et idéologie d'une nouvelle technologie: le cheval dans la civilisation pharaonique. In M. Wissa (ed.), *The Knowledge Economy and Technological Capabilities. Egypt, the Near East and the Mediterranean. 2nd millennium B.C.–1st millennium A.D. Proceedings*

- of a conference held at the Maison de la Chimie, Paris, France 9–10 December 2005. *Aula Orientalis Supplementa*. Sabadell, Barcelona: Editorial Ausa, 1–46.
- Vernus, P. 2013. La datation de L'Enseignement d'Aménemopé. Le littéraire et le linguistique. In G. Moers et al. (eds), *Dating Egyptian Literary Texts*. LingAeg SM 11. Hamburg: Widmaier, 191–236.
- Vernus, P. 2014. La non représentation segmentale du (premier) participant direct ('sujet') et la notion de \emptyset . In E. Grossman, S. Polis, A. Stauder, and J. Winand (eds), *On Forms and Functions: Studies in Ancient Egyptian Grammar*. LingAeg SM 15. Hamburg: Widmaier, 257–308.
- Vernus, P. 2015. Restricted Circulation in Old Egyptian as Mirrored in Later 'Repristination von Tradition' and Revivals: the Dependent Pronoun *kw*; the *nfr-n* Negation; the *n wnt sdm=f* Negative Construction. In J. Allen, M. Collier, and A. Stauder (eds), *Coping with Obscurity: The Brown Workshop on Earlier Egyptian Grammar*. Wilbour Studies in Egyptology and Assyriology 4. Atlanta: Lockwood, 201–24.
- Vernus, P. 2016. Traditional Egyptian I (Dynamics). In J. Stauder-Porchet, A. Stauder, and W. Wendrich (eds), *UCLA Encyclopedia of Egyptology*. Los Angeles. <http://digital2.library.ucla.edu/viewItem.do?ark=21198/zz002k6th5>
- Vernus, P. 2017. Modelling the Relationship between Reproduction and Production of 'Sacralized' Texts in Pharaonic Egypt. In T. Gillen (ed.), *(Re)productive Traditions in Ancient Egypt. Proceedings of the Conference Held at the University of Liège, 6th–8th February 2013*. Aegyptiaca Leodensia 10. Liège: Presses Universitaires de Liège, 475–509.
- Vittmann, G. 1991. Zum koptischen Sprachgut im Ägyptisch-Arabisch, *Wiener Zeitschrift für die Kunde des Morgenlandes* 81: 197–227.
- von Lieven, A. 2007. *The Carlsberg Papyri 8. Grundriss des Laufes der Sterne: das sogenannte Nutbuch*. Copenhagen: Museum Tusulanum Press.
- Winand, J. 1989. L'expression du sujet nominal au Présent I en néo-égyptien, *Chronique d'Égypte* 64: 159–71.
- Winand, J. 1992. *Études de néo-égyptien, 1. La morphologie verbale*. Aegyptiaca Leodiensia 2. Liège: Centre Informatique de Philosophie et Lettres.
- Winand, J. 1995. La grammaire au secours de la datation des textes, *Revue d'Égyptologie* 46: 187–202.
- Winand, J. 1997. La négation *bn... iwn* en néo-égyptien, *Lingua Aegyptia* 5: 223–36.
- Winand, J. 2006. *Temps et Aspect en Égyptien. Une approche sémantique*. PdÄ 25. Leiden: Brill.
- Winand, J. 2011. The Report of Wenamun. A Journey in Egyptian Literature. In M. Collier and S. Snape (eds), *Rameside Studies in Honour of K.A. Kitchen*. Bolton: Rutherford, 541–60.
- Winand, J. 2014a. When *and* Meets *with*. In E. Grossman, S. Polis, A. Stauder, and J. Winand (eds), *On Forms and Functions: Studies in Ancient Egyptian Grammar*. LingAeg SM 15. Hamburg: Widmaier, 339–66.
- Winand, J. 2014b. On the Increasing Relevance of Time in Late Egyptian: *jw sdm=f* and *jw jw=f r sdm=f*, and Other Things, *Lingua Aegyptia* 22: 231–66.
- Winand, J. 2015. The Oblique Expression of the Object in Ancient Egyptian. In E. Grossman, M. Haspelmath, and T.S. Richter (eds), *Egyptian-Coptic Linguistics in Typological Perspective*. Trends in Linguistics 55. Berlin/New York: de Gruyter, 533–60.
- Winand, J. 2016. Dialects in Pre-Coptic Egyptian. With a Special Attention to Late Egyptian, *Lingua Aegyptia* 23: 229–69.
- Winand, J. 2017. Identifying Semitic Loanwords in Late Egyptian. In E. Grossman, P. Dils, T. Richter, and W. Schenkel (eds), *Greek Influences on Egyptian-Coptic: Contact-Induced Change in an Ancient African Language (DDGLC Working Papers 1)*. LingAeg SM 17. Hamburg: Widmaier Verlag, 418–511.
- Winand, J. 2017. Words of Thieves. In J. Cromwell and E. Grossman (eds), *Scribal Repertoires in Egypt from the New Kingdom to the Early Islamic Period*. Oxford Studies in Ancient Documents. Oxford: Oxford University Press, 127–52.
- Zöllner-Engelhardt, M. 2016. *Sprawandelprozesse im Ägyptischen. Eine funktional-typologische Analyse vom Alt- zum Neuägyptischen*. Ägyptologische Abhandlungen 72. Wiesbaden: Harrassowitz.