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Tonio Sebastian Richter

Koptisch

Copte

Coptic is the youngest written standard of the Egyptian language. Spelled with the characters of the Greek alphabet plus some extra signs, it was productively used for almost a thousand years, from the fourth to the fourteenth centuries CE, to record texts of a wide range of types and purposes, and is still being used in the liturgy of the Coptic church. Coptic texts have survived in enormous numbers and comprise literary, semi-literary, and documentary corpora in a range of dialects and genres. Analysis of salient grammatical features of the Coptic language elucidates both innovative and conservative features in comparison to those of its predecessor, Demotic.

تعتبر اللغة القبطية أحدث مثال مكتوب للغة المصرية القديمة. اشتقت من أحرف الأبجدية اليونانية، بالإضافة إلى بعض الأحرف الأخرى الإضافية، واستخدمت القبطية لما يقارب الألف عام، من القرن الرابع إلى القرن الرابع عشر الميلادي، وذلك لتأليف مجموعة واسعة من النصوص متعددة الأنواع والأغراض. وما زالت حتى الآن تستخدم اللغة في الطقوس الدينية الخاصة بالكنيسة القبطية. لقد نجت الكتابات القبطية بأعداد هائلة والتي تتألف من نصوص أدبية وشبه أدبية ووثائقية في مجموعة من اللهجات والأنواع. يوضح تحليل السمات النحوية للغة القبطية الميزات المبتكرة والمحافظة للغة على حد سواء بالمقارنة مع سابقتها الديموطيقية.

The term “Coptic” is the modern designation for several (historically, geographically, functionally, and sociolinguistically diverse) written standards of the Egyptian language in an alphabetic script. An indigenous name of the language was $\mu\eta\tau\rho\mu\kappa\eta\mu\epsilon$ *mnt-rmn-kēme*, “speech of Egyptians.” This alphabetic script is composed of the 24 letters of the Greek alphabet plus six (or, in some dialects, seven or eight) letters derived from Demotic signs (Table 1). Written varieties of Coptic were in use from around 300 CE until the fourteenth century CE, by which time the literate, text-using, and text-producing elite Christian Egyptians had already shifted to Arabic. Certain (Bohairic) Coptic

texts were continuously transmitted within the narrow functional constraints of liturgy in a manuscript tradition lasting well into the nineteenth century. Spoken varieties of Coptic may have remained in use for several more centuries, although reports on Coptic speakers in early modern (Wansleben 1677), and even modern, Egypt (Vycichl 1936; Worrell 1937; Worrell and Vycichl 1942) have been challenged (Peust 1999: 30). Coptic as a spoken language is not accessible to us for any ancient or recent period on a methodologically sound basis (T. S. Richter 2006b), except for its use in the liturgical practice of the Coptic church, where an (earlier) pronunciation based on Arabic phonology competes with a newer one,

ⲁ	a	/a/	Ⲑ	t ^h	/t/+h/	ⲟ	o	/o/	Ⲅ	x	k ^h	/k/+h/	Ⲇ	č	/c/, /tʃ/
ⲃ	b	/v/	ⲓ	i	/i:/, /j/	ⲡ	p	/p/	ⲥ	p ^s	/p/+s/	Ⲅ	c	/k ^j /	
Ⲅ	g	/g/	ⲕ	k	/k/	ⲣ	r	/r/	Ⲙ	ô	/o:/	ⲧ	t'	/t/+i/	
ⲅ	d	/d/	ⲗ	l	/l/	Ⲛ	s	/s/	ⲙ	š	/ʃ/	Ⲛ	x'		
Ⲇ	e	/ɛ/	ⲛ	m	/m/	ⲧ	t	/t/	Ⲟ	f	/f/	ⲛ	ç		
ⲇ	z	/z/	ⲛ	n	/n/	Ⲯ	u	/u:/, /v/	ⲟ	h	/h/	ⲟ	ç'		
Ⲉ	ê	/e:/	ⲛ	k ^s	/k/+s/	Ⲟ	p ^h	/p/+h/	ⲃ	x					

Table 1. Coptic alphabetic signs (left-hand columns), their transliteration according to the *Leipzig-Jerusalem Transliteration of Coptic* (Grossman and Haspelmath 2015: 147) (middle columns), and their phonemic value in Sahidic Coptic according to M. Müller (2011: 521-522) (right-hand columns). The signs ⲙ, Ⲟ, ⲟ, ⲃ, Ⲅ, ⲥ, ⲧ are derived from Demotic alphabetic signs. The sign ⲃ is confined to dialects B and P, ⲟ to A, ⲛ to I, and ⲟ to P. (B, P, A, and I are among the sigla used to reference “dialects”; see also Table 2.)

oriented towards Modern Greek phonology (Sobhy 1915 and 1940). Efforts to revitalize (Bohairic) Coptic as a spoken idiom, begun early in the twentieth century (Ishaq 1993), have not advanced far as yet.

The term “Coptic” thus covers roughly the last millennium of active use of Egyptian as a written (and spoken, inaccessible though it is to us) idiom, as well as its usage as the sacred language of the Coptic church from the Middle Ages through the present day, when it is no longer promoted by a language community based on native speaker competence but by a religious community based on philological knowledge.

The Coptic Corpus: Its Subdivision in Dialectal Corpora

A striking feature of Coptic, as compared to earlier stages of the Egyptian language, is its original division into several literary standards—so-called “dialects” (Kahle 1954: 193-268; Funk 1988a, 1991a; Satzinger 1990; Kasser 1991g, 1991h, 1991k)—not to mention the plethora of less standardized or de-standardized local idioms seen in non-literary texts (Crum 1926; Kahle 1954: 48-192; Gardner et al. 1999: 84-95; Boud’hors 2008, 2018). What we call *the* Coptic language is therefore an abstraction covering various written standards of third-century CE (and later) Egyptian, spelled in widely uniform

(though not completely identical) alphabetic scripts.

The early stage of Coptic (fourth to sixth centuries CE) exhibits the greatest diversity of such dialects, including: early varieties of Bohairic, the literary norm of Lower Egypt (designated B₄); a range of literary norms emerging from the landscape of northern Middle Egypt and the Fayum Oasis (designated F₇, F₄, K, M, V, and W); norms whose features point to a southern Middle Egyptian or northern Upper Egyptian origin (designated L₄, L₅, and S); and dialects that might be based somewhere in southern Egypt (designated L₆, I/I₇, A, and P). The blatant lack of a binding linguistic standard reflects the fact that, at the time Coptic emerged, all central institutions exercising authority in Egypt officiated in Greek. This holds for governmental as well as religious institutions, notably the central authority of the evolving Christian church of Egypt, the Alexandrian episcopate. There was thus no supra-regional authority that could have imposed its written norm of the Egyptian vernacular as a statewide standard. It was therefore by authority of local institutions, within their locally limited reach, that standards of Coptic were set. These institutions could conceivably be called “scriptoria,” or more cautiously, local centers of Coptic book production, since we know so little about monastic or any scriptoria at the early period of Coptic (Lundhaug and Jenott eds. 2018). Major

Dialect	Siglum	References
Early Bohairic	B ₄	Kasser (1958, 1992, 2001); Shisha-Halevy (1991a; 2007: 19-20); Bosson (2012, 2017); Grossman and Delattre (2017); Miroshnikov (2019)
Early Fayumic	F ₄	Asmus (1904); Funk (1988b); Kasser (1989, 1991i); Boud'hors (2005); Funk (2020)
Middle Egyptian (a.k.a. Mesokemic, a.k.a. Oxyrhynchite)	M	Kahle (1954: 220-227); Quecke (1974); H-M. Schenke (1978, 1981, 1990, 1991 a and b, 1992, 2001); Funk (1981 and 2020); Bosson and Kasser (1997)
Sahidic	S	Stern (1880); Steindorff (1894, 1930, 1951); Till (1955/1978); Shisha-Halevy (1988, 1991b); Layton (2004); Reintges (2004); Peust (2020)
Lycopolitan (a.k.a. Subakhmimic), subdividing into the standards of: - Manichaean texts from Medinet Madi and Kellis - Acta Pauli (Bodmer manuscript), Gospel of John (London and Dublin manuscripts) - Acta Pauli (Heidelberg manuscript) and the Lycopolitan share of the Nag Hammadi library	L L ₄ L ₅ L ₆	Schmidt (1904: 14-20); Thompson (1924: xviii-xxi); Chaîne (1934); Nagel (1964, 1969, 1991b); Funk (1984, 1985, 1988a)
Akhmimic	A	Stern (1886: 129-135); Rösch (1909); Till (1928); Nagel (1991a)

Table 2. The most prominently attested early Coptic literary dialects, geographically north to south.

early literary standards of Coptic are listed in Table 2 in an approximate order from north to south.

Several Coptic standards are represented by only a few manuscripts, and indeed some are represented by a single specimen:

- dialect F₇, a.k.a. “Proto-Fayumic” (Diebner and Kasser 1989) = P.Hamb.biling. 1 = PM16, third/fourth centuries CE, Greek-Coptic biblical miscellanies including Acta Pauli (Greek), Canticum (Coptic), Lamentationes (Coptic), Ecclesiastes (Greek and Coptic);
- dialect I/I₇, a.k.a. “Proto-Lycopolitan” (Kasser 1991e) = Ascensio Iesaiæ scroll edited

by Lacau (1946), third/fourth centuries CE, Berlin Genesis fragments edited by Leipoldt in *Ägyptische Urkunden aus den Königlichen Museen zu Berlin: Koptische Urkunden (BKU)* (1904) and re-edited by Funk (1987b), so-called “Hierakas psalm” P.Scherling inv. 127 edited by Lefort (1939), see also Peterson (1947), and two tiny fragments (Funk 1987b);

- dialect K, located in Karanis in the Fayum (Kasser and Satzinger 1982; Kasser 1991k) = P.Mich. 5421, third-/ fourth-century-CE fragment from the Old Testament Book of Job;

- dialect P, a.k.a. “Proto-Sahidic” or “Thebaic” (Kasser 1960, 1963, 1991f, 1994, 2003; Nagel

1965; Cherix 2000) = P.Bodmer VI = PM34, third/fourth (?) centuries CE, the Old Testament Book of Proverbs;

- dialect V, a.k.a. “Fayumic without lambdacism” (Kasser 1989, 1991i, 1992–1993; H-M. Schenke and Kasser 2003; Funk 2020) = P.Michigan 3520 = PM2207; fourth/fifth centuries CE, biblical miscellanies: Ecclesiastes, 1st letter of John, 2nd letter of Peter;
- dialect W, a.k.a. “Crypto-Mesokemic” (Husselman 1962; Kasser 1991i; Funk 2020) = P.Michigan 3521 = PM6331, fourth/fifth centuries CE, the Gospel of John;
- dialect H, a.k.a. “Hermopolite” or Late Sahidic (Kasser 1991d; Peust 2021) = Pierpont Morgan Library M636, ninth century CE, Hermeneia, a private copy and single specimen of this remarkably late literary standard.

To account for such evidence, descriptive terms such as “local written conventions” or “idiomatics of scriptoria” may be more applicable than, strictly speaking, the term “dialectal variation.” But it is hard to estimate to what extent, and in what way, pure chance of survival shaped this evidence. In any case, the picture emerging from the early manuscript evidence shows a surprisingly diversified landscape of Coptic written standards, especially throughout Middle Egypt and the Fayum Oasis (Funk 2020).

By the sixth and seventh centuries CE, Coptic had grown into a more productive written language in a wider range of functional domains of literary and documentary writing, and liturgy. By this time, the Sahidic dialect—a standard supposedly originating in Middle Egypt (Funk 1988a and more recently Peust 2020 have argued for Hermopolis) and integrating northern as well as southern features—had absorbed all other literary standards in the Nile Valley, from Lower Nubia in the south to Saqqara in the north. Sahidic thus gained the status of a standard language, mainly leaving room for only two other literary varieties, F₅ “classical Fayumic” (Asmus 1904; Funk 1988b; Kasser 1989, 1991f; Boud’hors 2005) and B₅ “classical” and B_{nit} “Nitrian” Bohairic (Stern 1880; Mallon 1956;

Shisha-Halevy 1991a, 2007; Müller 2021). The success of Sahidic was probably based on an early complete translation of the Bible. It was presumably further promoted by the choice of the prolific Coptic writer, Shenoute (Emmel 2004), and by developments in the Egyptian church after the schism of the Egyptian miaphysite clergy from Byzantine orthodoxy in the wake of the fourth ecumenical council of Chalcedon (451 CE). These saw the subsequent emergence of an Egyptian Christian identity (Booth 2017) and the formation of an Egyptian Christian literature, especially from the second half of the sixth century on (Orlandi 1997: 113-120). At any rate, Sahidic yields the vast majority of extant Coptic texts and manuscripts (Kasser [1990: 188] estimated its share to be 90 percent of the Coptic textual corpus) and kept its status as a supra-regional language throughout the tenth century. After that time, Fayumic dropped out and Bohairic (Lower Egyptian) Coptic—which had become the language of the miaphysite patriarchate of Alexandria after the decline of Greek in Egypt—began replacing Sahidic. Bohairic thus became the variety of Coptic that survived Coptic’s demise as a productive language.

At surface level, Coptic literary dialects differ in spelling peculiarities, such as the quality of stressed and unstressed vowels, and the graphemic indication of *h* as opposed to *b* (Table 3). While such orthographic features normally encode actual phonological differences, in some cases varying orthographic habits may disguise uniform underlying phonology. For instance, the rendering of final unstressed vowels as *-i* vs. *-e*—a stable distinguishing feature between northern and southern dialects (see Table 3)—seems to be merely an orthographic rather than a phonological difference: Arabic transcripts of Coptic names, though generally based on Bohairic Coptic, render the final unstressed vowel by *ta’ marbiṭa* (or *alif maqsura*), indicating a spoken form ending in /*ě*/ rather than /*ĩ*/ (e.g., S: ⲠⲚⲟⲩⲧⲉ; B: ⲠⲚⲟⲩⲧⲓ; Arabic: *Šimda*).

In addition to phonological differences, dialectal diversity throughout the Egyptian

Dialect (north to south)	1) Short stressed vowel in closed syllable (< *i), e.g., *rĭn “name”			2) Short stressed vowel in closed syllable (< *ā), e.g., *sān “brother”		3) Unstressed final vowel, e.g., *rāmə “man”		4) Contrast v. conflation (h/b >) b: h, e.g., hr hĭ “at, under s.o.’s heart”	
B	paN rān			CON sōn		paMI rōmi		ba, ʒəh= hā, ht ^h ē=	
F		leN lēn			caN sān	laMI lōmi			ʒaʒTH= hahtē=
M		peN rēn			caN sān		poME rōmē		ʒaʒTH= hahtē=
S	paN rān			CON sōn			paME rōmē		ʒaʒTH= hahtē=
L		peN rēn			caN sān		paME rōmē		ʒaʒTH= hahtē=
A		peN rēn			caN sān		paME rōmē	ʒaʒTH= hāhtē=	
P			piN rĭn	CON sōn			paME rōmē	baʒTH= hāhtē=	

Table 3. 1) Short stressed vowel (historically derived from *i) in closed syllable: a (S/B) v. e (F/M/L/A) v. i (P); 2) short stressed vowel (historically derived from *ā) in closed syllable: o (S/B/P) v. a (F/M/L/A); 3) unstressed final vowel: i (B/F) v. e (M/S/L/A); 4) phonological contrast between b and h: conflation in ʒ (F/M/L/S) v. distinction between ʒ and b (B/P) / ʒ (A).

linguistic landscape included lexical (Feder 2001), morphological (Funk 1981, 1984, 1991a), and syntactic features. These three levels of linguistic information, however, have thus far not received equal scholarly attention. Continuous alteration in the spectrum of features helped in placing dialects at relative geographic positions on the north-south axis of Egypt (Funk 1988a; Kasser 1991k; Peust 2020), though it is striking to observe cases of discontinuous distribution, such as the agreement between B, S, and P in the quality of short stressed vowels (Table 3: no. 2), or the distinction between b and h in the farthest northern and southern dialects (Table 3: no. 4).

Comparison between literary standards and the evidence of local non-literary norms shows, furthermore, that dialectal variation may in some cases reflect a *differential selection of features*

from supraregional repertoires rather than *regional isoglosses* in a strict sense, i.e., variants of limited geographical reach (I. S. Richter 2016a).

The Coptic Corpus: Texts and Text Types

Coptic texts have survived in enormous numbers and in a widely diverse range along parameters such as genre and register, provenance and age. Throughout the period of its productive use, Coptic was embedded in essentially bilingual constellations, and Coptic writing was accordingly limited to certain, historically shifting, functional domains. The outline of the Coptic corpus, therefore, does not delineate the realms of written and unwritten culture in Late Antique Egypt, but rather domains of written culture open to the Egyptian vernacular as opposed to those

reserved for the prestige languages—namely, Greek (until the eighth century: van Minnen 1998; de Jong and Delattre 2015; Berkes 2019; Fournet 2020a; Greek continually played an important role in liturgy through the Middle Ages: Mihálykó 2019b), followed by Arabic (from the eighth century onward).

The history of Coptic literature is still unwritten (for overviews see Krause 1977; Orlandi 1986, 1997, 1998, 2016; Emmel 2007)—as indeed is the history of written culture in Late Antique and Early Islamic Egypt in its multilingual complexity.

Literary texts

Coptic literary texts—i.e., texts produced through copying in a scribal tradition—include translations (mostly from Greek) and texts originally composed in Coptic.

a) Translations

- translations of canonical books of the Old Testament, based on the Septuagint version of the Greek Old Testament (Feder 2007; Funk 2013; Behlmer 2016), and of the New Testament (Askeland 2012 a and b; Feder 2007; Funk 2013; S.G. Richter 2013, 2016; Haelewyck 2014). S.G. Richter (2016: 807) counts a total of 953 New Testament manuscripts for all Coptic dialects. Full versions of the New Testament exist(ed) only in the Bohairic and Sahidic dialects; the Old Testament is nearly completely attested by manuscript evidence (so as to support the assumption of a former complete version) solely in Sahidic (Feder 2016).

- translations of deuterocanonical Old Testament texts (Feder and Henze eds. 2019)

- translations of Greek patristic texts (Orlandi 1995), such as those of the so-called Apostolic fathers (Didaskalia apostolorum, Pastor Hermae, 1Epistula Clementis), the so-called Corpus Canonum (canons of Basil and Athanasios, acts of ecumenic councils, etc.), and homilies (e.g., Melito of Sardis)

- translations of early hagiographical works (e.g., Acta Pauli, Acta Andreae) and Greek monastic literature (e.g., Apophthegmata patrum, Historia monachorum in Ægypto)

- translations of sacred texts from Late Antique religious traditions and movements other than standard Christianity, notably “gnostic” writings such as Codex Tchacos; P.Askew; P.Bruce; many of the texts in the Nag Hammadi Codices (*NHC*) (Brakke 2010; van den Broek 2013); Hermetic writings (Bull 2018); and the large corpus of Manichaean writings from Medinet Madi (S. G. Richter 2005) and Kellis, Dakhla Oasis (Gardner 2013, 2019)

- a few specimens of translations from Classical and Hellenistic Greek heritage (Pietruschka 2015), such as the Alexander romance (von Lemm 1903); parts of the collections of sayings circulating under the names Menandros (*Sententiae Menandri*: Buzi 2017) and Sextus (*Sententiae Sexti*: Wisse 1990; Buzi 2017); an excerpt from Plato, *Politeia* 588b-589b (*NHC* VI,5); and a few verses of the *Iliad* (Colomo 2019)

b) Literature originally composed in Coptic

- texts emerging from earliest monasticism, notably the works of Pachom and his successors (Lefort 1956)

- An enormous (and as yet not completely edited) œuvre was left by Shenoute, the third and most influential abbot of the monastic congregation centered around the White Monastery near Sohag (Emmel 2004; Behlmer 2019). Shenoute’s work was transmitted in a 17-volume edition of collected works, subdivided into nine volumes of *kanones* (“rules”)—homilies and letters more narrowly concerned with the monastic congregation—and eight volumes of *logoi* (“discourses”). Today it is becoming increasingly recognized as a sizeable patristic œuvre, original for its time. The library of the White Monastery (Orlandi 2002; Takla 2005; Louis 2008; Emmel and Römer 2008; Orlandi and Suciú 2016), and the works of Shenoute housed therein, give us a sense of quantities: from some 600 extant codices (out of an estimated 1000 volumes making up this library in medieval times), approximately 100 contained works of Shenoute. None of these is completely preserved, and many comprise only a few pages or fragments thereof. It is estimated that the

approximately 4000 extant pages preserve a share of one-sixth of their original textual substance (Behlmer 2019: 827).

- The upturn of Coptic literary production after the dogmatic schism of the Egyptian church resulting from the ecumenical council of Chalcedon 451 CE, especially from the time of the patriarch Damianos (576 – 605 CE), yielded a broad array of texts and genres that were relevant to, and functional in, ecclesiastic and monastic practices (Orlandi 1986, 1997, 2016; Boud’hors 2012). These include homiletic texts (Müller 1954), apocryphal compositions (Lundhaug 2020a, 2021), the fusion of both (homilies with apocryphal insertion, recently apostrophized as “diaries” or “memoirs” of the apostles: Hagen 2004, 2010; Suciu 2017), and hagiographical texts—lives of saints, panegyrics, martyrdoms (Papaconstantinou 2011). Hagiographic traditions were at some point arranged in hagiographic cycles that would later feed into liturgical traditions such as the Sahidic Antiphonarium (Cramer and Krause 2008), the Arabic Synaxarium (thirteenth century), the Arabic-Bohairic *Difnar* (fourteenth century), and the Arabic-Bohairic *Theotokia* (fourteenth century). A salient feature of much of the Coptic original literature is the habit of pseudepigraphic attribution of texts to pre-Chalcedonian or miaphysite authorities, including Athanasius, Basil of Caesaraea, Gregory of Nazianzus, Proklus of Cyzikus, Cyrill of Jerusalem, John Chrysostom, Severus of Antiochia, Severian of Gabala, Timothy Aelurus, and others. There were also substantial works circulating under the names of Egyptian writers (Moawad 2020 deals with 37 such authors in the period of the fourth to the ninth centuries), although investigation on post-Shenoutean Coptic writing is still in its infancy (Moawad 2018). The transmission of Coptic literary compositions includes translations into Arabic and Old Nubian, and (via Arabic) into Ethiopic (Bausi 2016).

The *PATbs* database (<https://atlas.paths-erc.eu/>) recently counts approximately 6600 extant Coptic codicological units (often reconstructed from several manuscript items

dispersed over many collections), testifying to more than 1100 literary works.

Documentary texts

Documentary texts, defined by their mode and aim of production, are texts drawn up to chronicle the ephemeral occurrences of daily life. Like other periods of Egyptian history, the last centuries of Byzantine and the first centuries of Islamicate Egypt yielded a huge corpus of such documents. Demotic had dropped from the production of documentary texts by the second century CE (Zauzich 1983; Lewis 1993; Bagnall 1993; Muhs 2005; Depauw 2012; T. S. Richter 2013a), leaving a gap of a century when Egyptian was no longer employed for everyday writing (Clarysse 1993). This changed when Coptic appeared in the documentary field early in the fourth century CE (as early as any literary production), gaining entrance slowly, since it remained for centuries limited to private milieus (O. and P.Kellis) and monastic environments (P.Nag Hammadi, Melitian correspondence, P.Nepheros 15 and 16, Apa John correspondence; Choat 2006, 2007; Lundhaug 2016) within an overall context where Greek remained the dominant language. Only in the later sixth and seventh centuries, a period likewise crucial for the composition of original Coptic *literary* texts, did the language begin to access a wider range of functional domains in documentary writing (Bagnall 2011; Choat 2012; Fournet 2020a). Coptic ultimately reached its peak in the first half of the eighth century, when it served even as a language of administrative (i.e., state driven) writing. Coptic documentary texts form two major corpora, the papyrological and the epigraphic.

- Coptic documentary texts written on papyrus (or ostraca, sometimes pieces of parchment or leather, or, from the mid-tenth century on, paper) include testimonies of everyday life—i.e., administration, economic and legal practices, such as private and business letters (from the fourth to the eleventh centuries; Choat 2007, 2017; T. S. Richter 2008), legal documents (from the later sixth to the eleventh centuries, T. S. Richter 2010b, 2013b; Bagnall 2011: 75-94; Fournet 2011, 2016, 2018, 2020a), and administrative documents issued by

governmental representatives, mostly relating to tax collection (during the earlier eighth century: Berkes 2014; Cromwell 2018; T. S. Richter 2010a; Sijpesteijn 2007). The decreased number of Coptic day-to-day documents in the ninth century and Coptic’s final decline in the second half of the eleventh century (with the latest known Coptic documentary papyri dating to 1062/1063 CE: T. S. Richter 2017b) seem to mark crucial points in the history of the gradual language shift from Egyptian to Arabic.

- Coptic documentary inscriptions (van der Vliet 2017a, 2018) represent for the most part funerary stelae (Tudor 2011) and inscriptions left by visitors and locals at sacred places (e.g., Dilley 2008; Heurtel 2004; Krastel 2020; van der Vliet 2017b). Pious donations and their benefactors were commemorated by donor inscriptions displayed in a public space (architecture: Schaten 1999; a paved road: T. S. Richter 2016b) or on portable items (on the closely related corpus of colophons see van Lantschoot 1929; Soldati 2018). Coptic entered the epigraphic domain apparently not before the sixth century CE (van der Vliet 2017c), and only in the eighth century, with the demise of Greek in Egyptian day-to-day writing (de Jong and Delattre 2015; Berkes 2019), did it become a common choice in epigraphy. On the other hand, inscriptions are among the latest testimonies to any productive use of the Sahidic language, outliving by centuries the decline of Coptic in other domains of written production. The latest Sahidic text currently known is an inscription at Deir Anba Hadra, near Aswan, dated to 1404 CE. A thousand years prior, epigraphy was the last resort of Demotic (on fourth-/fifth-century-CE Demotic graffiti on the island of Philae see Cruz-Uribe 2002 and Dijkstra 2008).

The bulk of documentary texts from Saqqara in the north to Nubia in the south are written in lesser or de-standardized, locally tinged varieties of Sahidic Coptic (Crum 1926; Kahle 1954: 48-192; Boud’hors 2008, 2018). Comparison between documentary linguistic varieties and Coptic literary dialects can be illuminating for the localization of the latter (Kahle 1954). Due to the original

regionalization of Coptic writing and the increasing sector of private scribal activity therein, the range of variation of non-standardized Coptic norms and their difference from literary standards are more pronounced than those in earlier phases of the Egyptian language. A few single specimens and corpora of documentary texts attest to dialects or dialectal substrates other than Sahidic, such as Bohairic (Kasser 1975; M. Müller 2021: 183), Fayumic (Garel 2018), Middle Egyptian (H-M. Schenke 1990, 1992; G. Schenke 2008), and a Lycopolitan-related early documentary norm (L*: Funk in Gardner et al. 1999: 84-94).

Coptic “semi-literary” texts

Destandardized idioms, such as those used in documentary writings, can also be found in literary compositions of later date and of (supposedly) diminished literary dignity—for example, in the works of religious poetry apostrophized by Erman as “Coptic folk literature” (Erman 1897; Junker 1908 – 1911), as well as in the kind of writings often vaguely labeled as “para-,” “semi-,” or “sub-literary,” such as liturgical, magical, medical, and scientific texts.

If their “semi-literary” character, i.e., their position halfway between literary and non-literary text production, can be reasonably linked to any feature of such texts, it is their differential production in two possible ways: in “literary” copies (i.e., papyrus, parchment, or paper codices) or in “documentary” manuscripts (i.e., ostraca or a single sheet of papyrus, parchment, or paper).

Coptic (Sahidic, Fayumic) liturgical texts appear on a larger scale from the sixth to seventh centuries, starting with liturgical prayers (Mihálykó 2019a). From the eighth century onward, hymns are attested (Mihálykó 2019a), while Coptic liturgical books appear only in the later ninth century (Quecke 1970; Kuhn and Tait 1996; Cramer and Krause 2008), to become more frequent in the late Sahidic and medieval Bohairic traditions (Atanassova 2014; Zanetti 1995). Liturgy is the (only) domain in which Greek continued to be widely used in Egypt through the Middle Ages and beyond (Mihálykó 2019b).

Magical texts (Kropp 1930 – 1931; Meyer and Smith 1994) represent a remarkably well-documented segment of Coptic writing that endured from the fourth to the twelfth centuries CE (Bélanger-Sarrazin 2017; University of Würzburg’s *Kyprianos* database: <https://www.coptic-magic.phil.uni-wuerzburg.de/>). “Handbook” copies provide formularies with generic names (Greek: ὁ Δεῖνα τῆς Δεῖνος; Coptic: **ⲛⲓⲙ ⲡⲞⲩⲢⲈ ⲛⲛⲓⲙ** “so-and-so, son of so-and-so”) and incorporate instruction (Greek: **ⲡⲣᾶξις**; Coptic: **ⲪⲒⲛⲢⲢⲟⲨ** “way of working”) in both the non-verbal components of magical performances (such as utensils to be used and preparatory action) and the incantations to be spoken or written. In contrast, copies produced for, and used in, actual performances contain the personal names of their specific beneficiaries (as on amulets) or victims (as in curses) and exhibit signs of use, such as traces of folding and wear.

About 40 known manuscript items of Coptic medical texts (Till 1951; T. S. Richter 2014; Grons 2022)—that is, compilations of recipes arranged according to body parts, medical indications, or medicinal herbs (Erichsen 1963; T. S. Richter 2014)—are extant, both in literary exemplars (two of them originating from the library of the White Monastery: T. S. Richter 2022), as well as in documentary copies recorded for the needs of daily life.

Other, broadly-speaking, scientific texts, such as pages of an exercise book with mathematical exercises (Drescher 1948 – 1949; Hasitzka 1990), astrological records (Bouriant 1904; Till 1936; Theis 2018; T. S. Richter 2022) and compilations of alchemical recipes (T. S. Richter 2015a), survive in small numbers and in mainly late (ninth- to eleventh-century) copies.

A striking linguistic feature of “semi-literary” texts of later date is their use of terminology borrowed from Arabic, indicating their writers’ participation in contemporary discourses circulating throughout the “Islamicate world” (Hodgson 1974). They thus bear early evidence for the intellectual exchange between educated Copts, Muslims, and Jews, subsequently attested by Christian

Arabic works of the so-called “golden age” of Coptic literature in the thirteenth and fourteenth centuries (Sidarus 2002; Swanson 2014; Vollandt 2014 a and b; 2018).

The Coptic Script: An Outcome of Practices to Render Egyptian in Greek Script

The launch of the Coptic system of transcribing Egyptian language in Greek script has a long prehistory. First attempts to render Egyptian sounds with Greek letters can be traced back to the early sixth century BCE, when Greek mercenaries under Psammetichus II transcribed Egyptian proper names—for example, ΠΟΤΑΣΙΜΤΟ < *P3-dj-sm3-t3.wj*, ΑΜΑΣΙΣ < *Jḥ-ms*, ΨΑΜ(Μ)ΑΤΙΧΟΣ < *P3-s-n-mḥ* (graffito of Abu Simbel SB 10018a = TM 6062; Hägg 1994; Hauben 2001). Their spellings exactly match those still used by Herodotus in the mid-fifth century BCE, thus indicating early conventions of correspondences between Egyptian phonemes and Greek graphemes, centuries before the intensification of Greek-Egyptian language contact in the Ptolemaic Period (Clarysse 1993; Vierros 2012). From the third century BCE onwards, Greek papyri bear abundant evidence of Egyptian personal names rendered in Greek script (Quaegelbeur 1974, 1982; Clarysse and Blasco Torres 2019). The earliest known attempts to spell Egyptian common nouns (i.e., words that are generally translatable, as opposed to, in a sense, untranslatable proper names) and nominal phrases in Greek letters date from about 200 BCE, such as a graffito from Abydos (Lacau 1934; Pestman 1977, Vol. 1: 102-105, n° 11) with names and epithets of Egyptian Gods, a second-century BCE stela (Alexandria, Graeco-Roman Museum inv. 26.050; V. Girgis 1965) spelling out the Egyptian name and epithets of “Thot, the thrice-greatest, lord of Hermupolis [or Hermopolis],” and an Egyptian-Greek word list (P.Heid. G414 = TM 65708; Quecke 1997) with bilingual pairs of words for domestic animals and utensils. The early development of conventions enduring over longer periods of time may also account for the observation (Satzinger 2003) that the Greek phonology underlying the Coptic alphabet does not reflect contemporary (i.e., third-century CE) Greek

phonology, but rather phonetic realities of the third century BCE.

The first centuries of Roman rule saw an increase not only in approaches to rendering the Egyptian language with Greek alphabetic signs, but also in their sophistication. The stock of 24 Greek letters was at that time augmented with varying sets of Egyptian (Demotic) signs so as to allow for a more precise mapping of phonological and graphemic values. The resulting alphabetic systems were thus based on the same principles as the Coptic script itself and are therefore called “Old Coptic” (Osing 1976b; Kasser 1991c; Satzinger 1984, 1991a; T. S. Richter 2009; Love 2016: 61-66; 2021; Quack 2017). Such advanced systems to render words (glosses: Osing 1998) and entire texts (Satzinger 1975; Love 2016) in alphabetic writing were further refined in the second and third centuries CE by priests of late Egyptian temples who had of necessity to cope with an increasing societal marginalization of the ancient Egyptian written tradition, the overall loss of functional domains of the Egyptian language, and—last but not least—their own dropping competence in reading and writing inherited hieroglyphic and hieratic texts (Bagnall 2005; Stadler 2008; Quack 2017; Fournet 2020b; Love 2021). A crucial tipping point in the progression towards “script loss” was apparently reached already in the later second century CE (Love 2021). The latest of such “Old-Coptic” testimonies are datable to the later third (P.Mimaut [= Great Magical Papyrus of Paris (*PGM III*)] or even early fourth (Old Coptic passages of *PGM IV*; see Love 2016) century CE. They thus overlap with the earliest testimonies of the fully-fledged Coptic writing system used in prevalently Christian contexts. Greek Old Testament manuscripts with Coptic glosses have been dated to as early as the mid- to late third century (Kahle 1954: 260-263), although Kahles’ dictum has not been disproved yet (*ibid.*: 263): “it is extremely dangerous to date fully standardized Coptic texts earlier than the fourth century.” Frankfurter (1998: 238-264) deduced from this chronological overlap a personal continuity in the sphere of local ritual professionalism from (former) Egyptian priests to (converted) Christian clerics. If this

conclusion is too far-fetched, we can at least safely say that third-/fourth-century missionaries of script-based revealed religions, when refining and using an augmented Greek alphabet to render sacred books into contemporary Egyptian, could rely on previous achievements made in the milieu of late Egyptian temples.

As a result of this process, the hieroglyphic writing system, with its mixed code of phonographic and semographic signs (Kammerzell and Lincke 2012) and its “deep” morpheme-rendering orthography (Glück 1987), was abandoned and replaced by a purely phonographic alphabet allowing for a “shallow” sound-rendering orthography (*ibid.*). One overt functional advantage of the Coptic alphabetic script is its aptness to spell Greek words. These had in fact become an important component of the Egyptian vocabulary but could only awkwardly be rendered in hieroglyph-based consonantal scripts tailored to the root-and-pattern morphology of Egyptian. The second-/third-century CE Demotic ostraca from Medinet Madi (ancient Narmouthis), which display a linguistic norm close to Coptic, point to this difficulty when spelling Greek nouns and verbs *in Greek script* (Bresciani et al. 1983; Bresciani and Pintaudi 1987; Gallo 1997; Menchetti 2005; Menchetti and Pintaudi 2007; Rutherford 2010; Grossman and Richter 2017; Blasco Torres 2015, 2020). The script change of Egyptian had several collateral consequences, such as the rapid obsolescence of the venerable Egyptian literary heritage, and the increased accessibility of literacy to Egyptians from non-Greek-speaking, lower-class milieus, notably women (MacCoull 1985; Bagnall and Criore 2006).

The Coptic alphabet (Kasser 1991 a and b), itself a manifestation of Greek-Egyptian language contact (Kasser 1991a, 1993), received and developed its formal traits initially in close contact with contemporary trends in Greek calligraphy—that is, with its different styles and their historical change. For instance, Coptic biblical manuscripts of the fourth to sixth centuries widely share calligraphic features of the contemporary Greek writing

style known as “biblical majuscule” (Orsini 2019: 57-132). However, with the Coptic written tradition becoming more firmly established and more independent, these straightforward relations between Greek and Coptic palaeography gave way to a more complicated interdependence, and eventually independence. When, by the ninth century, Greek literary manuscripts shifted from so-called “majuscule” to “minuscule,” no such development ensued in the realm of Coptic bookhands, where the traditional typology of the “biblical,” “Alexandrian,” and “sloping” majuscules was retained (Boud’hors 2020).

Salient Linguistic Features of Coptic

Perspectival distortions of phonological and morphological change due to the writing system

If the linguistic norms of Coptic appear quite distinct from those in preceding stages of Egyptian, this is partly the effect of the new writing system (see Table 1). It is important to realize how the Coptic “shallow” alphabetic system, by its very nature, changes our view of a language previously written in a mixed phono-semographic, phonologically “deep” system. For instance, Demotic still displayed written endings of the feminine and the plural, which apparently functioned as graphical classifiers and no longer reflected morpho-phonological realities. The lack of morphological number- and gender-marking in Coptic was therefore not due to recent linguistic change, but became overt only due to the new, sound-rendering writing system. In a further example, Demotic orthography differentiates between several morphemes, such as the sentence-converters (focalizing and circumstantial) usually transcribed as *j-jr-* and *ju-*, and the preposition *r-*, whereas Coptic provides approximate phonetic renderings like *ε-* or *α-* for all three. On the other hand, while Demotic used a single grapheme to mark the relative particle transcribed as *ntj (ju)-*, the range of spellings in Coptic—such as *ε*, and *NT-*—reveals distributional variants in the phonetic realization of this morpheme, which in all likelihood were not among the most recent linguistic innovations. The Demotic

writing system may thus pretend to retention, and the Coptic writing system, on the contrary, to sudden innovation, though actual linguistic change had occurred long before.

This very caveat holds for the recognition of sound change. The Demotic script employs spellings, such as multiconsonantal signs, ligatures, and group writings, that give only limited information about contemporary Egyptian phonology (and are rendered by demoticists with historical transliterations partly based on Middle Egyptian phonology). It is therefore not always easy to determine when certain changes in the phonological system, clearly visible in the Coptic script, had actually happened. Coptic phonology is briefly outlined below.

- The contrast of voiced/voiceless stops—if ever applicable to Egyptian (Peust 1999: 80-84)—had been abandoned in Coptic, which exclusively preserves voiceless stops (*π, τ, κ, χ, σ*); Bohairic phonology additionally has (voiceless) aspirate stops *ϕ, θ, x, σ* (Hintze 1947b; Funk 2009: 70-91). Coptic *β* renders Demotic *b*; its phonemic correlate in Coptic is a fricative /v/ (M. Müller 2011: 516; Hintze 1947b: 200-201; 1949: 46-47): *β* is in non-literary and certain literary norms interchangeable with *ϕ* /f/ (Worrell 1934: 99, 131; Crum 1939: 619; Kahle 1954: 93-94, 136-138), less often with *σϕ* /v/); indeed *ϕ* is completely replaced by *β* in the ninth-century dialect H (Kasser 1991d; Peust 2021). Accordingly, in Coptic spellings of Arabic loanwords, *β* renders *ف* /f/ and *و* /w/, while the Arabic plosive *ب* /b/ is consistently rendered by Coptic *π*. Coptic *τ* is not phonological but is, in some dialects (notably in Sahidic), allophonic for *κ* /k/ in close contact with *ν*; otherwise it is confined to Greek loanword spellings; in Arabic loanwords it renders *ق* /q/ and rarely *ك* /k/. Coptic *κ* stands for Demotic *q* and by default renders Arabic *ق* /q/ and rarely also *ك* /k/, *ق* /q/, and *ج* (certainly a non-palatalized /g/ as in

Egyptian Arabic, rather than /ǧ/). Coptic Δ is strictly confined to Greek loanword spellings. Egyptian *d*, already scarcely written in Demotic, is usually replaced by *t* (except in some conservative orthographies), thus pointing to an earlier conflation of the contrast between Egyptian *d* and *t*. In Arabic loanwords Coptic Δ sometimes renders ت /t/, د /d/, and ط /t/, though these three are usually transcribed by Coptic τ. Coptic τ covers Demotic *d*, *t*, *ḍ* (if not developed into α: Kilani 2021), and *ṭ* (if not developed into α: *ibid.*); in Arabic loanwords it renders ت /t/, د /d/, ذ /ḍ/, ض /ḍ/, and ط /t/, and rarely even ث /ṭ/ and ظ /z/.

- Coptic z is, in some dialects (B, S, F), allophonic for c in contact with n (as in ΔNZHBE, but notably not in the case of conjunctive N=C- > *NZ-, where N=K- normally turns into N=Γ-); otherwise it is confined to Greek loanword spellings. In Arabic loanwords it rarely renders ج /z/ which is normally rendered by c.
- The Coptic signs θ, φ, and χ are monographs (τϥ, πϥ, κϥ), except for Bohairic, where they encode (voiceless) aspirate stops. χ is the standard Coptic sign to represent Arabic ك /k/, and also renders ح /h/.
- Coptic ω stands for Demotic ǰ. In many dialects (B/F/M/W/S/L/I₇) it also renders the kind of h that is rendered as ϥ in dialect A and that is differentiated from ǰ as well as from h/h by a different sign (ϧ), or by a diacritic (ϣ̣) in dialects P and I (Funk 1987b: 129). In Arabic loanwords ω renders ش /š/.
- Coptic ϥ, ϧ, ϩ: while the distinction between *h*, *ḥ*, *ḥ̣*, *ḥ̣̣* is more or less still retained in early Roman Demotic orthography as well as in some Old Coptic norms (Quack 2017: 48), *h* and *ḥ* are conflated into ϥ /h/ in all Coptic dialects (*hp* “right”: B/S ϥαπ, F/M/L/A ϥεπ;

hp “to hide”: B/F/S/L/A ϥωπ, F/M ϥοπ). The *ḥ*, and the kind of *ḥ* that did not develop into ω/ϣ̣/ϧ, are rendered with the same sign ϥ and have thus likewise turned into /h/ in the dialects F/M/S/L, while the dialects B/P/I/A kept *h/ḥ* = ϥ distinct from *ḥ/ḥ* = (B/P) ϩ, (I/A) ϥ (Funk 1987: 129; see Table 2), such as *hr* “under”: S ϥα, B/P ϩα, A ϥα; *hʃ* “winnowing fork”: S ϥα, B ϩα, A ϥα; and *hm hl* “servant”: S ϥμϥαλ, P ϩμϩαλ, A ϥμϥελ. In Arabic loanwords ϥ renders ح /h/, ج /h/, and ح /h/, ϩ is employed in some late Sahidic(!) texts to render Arabic ح /h/ so as to disambiguate its more conventional Sahidic transcriptions such as κ or ϥ (T. S. Richter 2022).

- Coptic α renders Demotic *ḍ* if not developed into τ, and *ṭ* if not developed into τ (Kilani 2021); in Bohairic it represents a non-aspirate allophone of the voiceless palatal stop σ. In Coptic transcripts of Arabic words based on Bohairic orthography/phonology it renders ج /g/.
- Coptic σ renders Demotic *g* and *k*; in dialect B it is the aspirate allophone of the voiceless palatal stop α. In Coptic transcripts of Arabic words based on Sahidic orthography/phonology it renders ج /g/.
- The glottal stop in Coptic—which derives from earlier Egyptian glottal and laryngeal stops (ʕ and ʕ̣) and occasionally from some other “weak” consonants (such as *j*, *r*, and *ṭ*)—is not encoded by any alphabetic sign. However, some Coptic dialects (S/F₅/A/L) use duplicated vowels (αα, εε, ηη, οο, ωω)—a graphemic innovation insofar as this pattern is unprecedented in Greek—in the middle of words (less regularly in word-final position) at the place of a historical glottal stop, e.g., κωωωε (Dem. *krš* “to break”), μεερε (mtr[.l] “noon”), μεεγε (mʕwj “to think”), μηηωε (mšc “people,” note here the transposition of sounds [so-called metathesis]), cωωωϣ (šjf, Dem. *sʃf* “defile[ment]”), ωααρ (hr “skin,

leather”), ⲮⲁⲁⲢ (šʿr “value”), Ⲯⲱⲟⲩ (šʿd, Dem. šʿt and šʿt “to cut”). Whether the corresponding phonetic reality was still glottal stop (Steindorff 1894; Till 1930; Vergote 1973; Kasser 1991j; Schenkel 2002), or merely compensatory lengthening (Kuentz 1934; Greenberg 1962; Peust 1999: 205-210) is still debated. Vocalic duplication renders, indeed, stressed long vowels in Coptic transliterations of Arabic words (such as ⲁⲗⲭⲁⲁⲗⲏⲥ ⲁⲗⲭⲁⲁⲗⲏⲥ *al-ḥālīs* “pure” BL Or. 3669[1] [Stern 1885] II,4; ⲁⲤⲤⲁⲢⲦⲁⲁⲛ ⲁⲤⲤⲁⲢⲦⲁⲁⲛ *al-saratān* “cancer” [zodiac sign] BN 132,5 fol. 9 [Richter 2022] ro 1; ⲁⲗⲢⲉⲉⲡ ⲁⲗⲢⲉⲉⲡ *al-bāb* “door, method” BL Or. 5707 [Drescher 1948 – 1949] fol. 9ro 1.2.3.9 and passim; ⲁⲗⲖⲉⲉⲛ ⲁⲗⲖⲉⲉⲛ *al-ḡām* “cup” P.Heid. 685 [Meyer 1996], 16,10; ⲁⲗⲕⲁⲣⲟⲟⲣⲉ ⲁⲗⲕⲁⲣⲟⲟⲣⲉ *al-qārūra* “flask” BL MS.Or. 3669[1] [ed. Stern 1885] XI,4; XII,2; XIV,5; and ⲁⲗⲭⲁⲖⲱⲟⲩ ⲁⲗⲭⲁⲖⲱⲟⲩ *al-kāfūr* “camphor” *BKU I* 26/1,8-9, P.Ryl.Copt. 412,6). This observation seems to bear evidence for the latter hypothesis, but, as a conclusion drawn from late (tenth/eleventh-century CE) Coptic texts and their phonology, it cannot simply be transferred to the time, seven centuries earlier, when Coptic orthographic conventions were originally established.

The Coptic writing system provides a systematic and complete record of Egyptian sounds, including vowels. Vowel qualities and quantities (Schenkel 1990: 57-63; M. Müller 2011: 520), as well as stress patterns (Steindorff 1894; Edgerton 1947; Fecht 1960; Schenkel 1990: 67-86), which can only sporadically be inferred from cuneiform transcriptions of Egyptian words, from Greek spellings of proper names or toponyms (Quaegebeur 1974; Clarysse and Blasco Torres 2019), and from “Old Coptic” transcripts of Egyptian texts, are systematically analyzable in the Coptic alphabetic script, rendering it our most important source with which to reconstruct Egyptian vocalization patterns and syllabic structure (Osing 1976a: 10-30; Peust 1999: 199-259).

The linguistic standard of Sahidic texts as found in literary copies up to medieval times

barely reflects the linguistic change that occurred during the almost 1000 years from its standardization to its obsolescence. Such changes are, however, accessible in the non-standard language of documentary and “semi”-literary genres, which allowed norms closer to contemporary speech to surface in the written record. A salient feature of phonological change in later Sahidic is the replacement of syllabic sonorants (ṅ, ṁ) by vowels, thus turning, for example, ṁN- into ṁε-, ḡN- into ḡε- or ḡι-, and n- into ε- (Peust 1999: 267-268; T. S. Richter 2000).

Parts of speech: Noun phrase

- Coptic nouns are normally not morphologically marked for gender and number (for exceptional gender marking and plural forms, see Layton 2004: 85-90 §§104-112). Both categories are relocated into a fine-tuned paradigm of determination to which the Coptic noun phrase is yet more rigidly subject than the Demotic noun phrase already was (M. Müller 2016: 65-67).

- An innovative pattern of gender marking came into being in the late second millennium BCE, possibly triggered by the increasing conflation of morphological gender marking at that time: the augmentation of nouns by 3rd-person singular suffixes (εs and εf). Osing (1976a: 326-332) quotes a handful of examples from the Later New Kingdom and the Third Intermediate Period; Quack (fc.) has compiled eight instances from (mostly Roman) Demotic. Coptic provides significantly more instances (Stern 1880: §§99-100; Steindorff 1951: §§121-122), with masculine pronoun indicating masculine gender, ⲟⲩⲙⲉϥ “tempering” (ⲟⲩⲙ, ḥm “to slake”) and ⲡⲒⲕϥ “sheet metal” (ⲡⲕⲉ “to be thin”); with feminine pronoun indicating feminine gender, ϩⲟⲩⲧⲅⲉⲤ “murder” (ϩⲟⲩⲧⲅ, Dem. ḥtb “to kill”); and ⲙⲟⲩⲧⲛⲉⲤ (n.f.) “calmness” (ⲙⲟⲩ, Dem. mtn “to relax”). Thus this noun-formation pattern still appears to be productive, and indeed gaining momentum, in the first millennium CE, though it always remained limited to single lexical items.

Construction	Possessor	Possessee	Pattern
Genitive	nominal	nominal, definite article	π-possessee n-det. possessor
Example 1	π-CON n-τ-ϸIME “the brother of the woman”		
Preposition nTE-	nominal	nominal, other than definite article	ø-/OY-/πEI-possessee nTE-det. possessor
Example 2	OY-CON nTE-τ-ϸIME “a brother of the woman”		
Possessive prefix	nominal	pronominal	πΔ-/τΔ-/nΔ-det. possessor
Example 3	πΔ-τ-ϸIME “that of the woman”		
Possessive article	pro-nominal	nominal, definite article	π(ε)ε...-/τ(ε)ε...-/n(ε)ε...-possessee
Example 4	πE=C-CON “her brother”		
Preposition nTA=	pro-nominal	nominal, other than definite article	ø-/OY-/πEI-/πEQ-possessee nTA=I/=K/etc.
Example 5	OY-CON nTA=C “a brother of hers”		
Possessive pronoun	pro-nominal	pronominal	πOΔI/=K/..., τOΔI/=K/..., nOYΔI/=K/...
Example 6	πO=C “hers”		

Table 4. Adnominal possessive construction by means of genitive, prepositions, and possessive pronominals in Sahidic.

- Adnominal modification: While the Demotic lexicon still contained some members of the receding word class of adjectives, i.e., nominal modifiers immediately following, and grammatically agreeing with, the noun (Quack fc.), as well as a pattern of adjectival predication (Quack fc.), Coptic retained just a few single lexical items that (partly) behaved like adjectives (Shisha-Halevy 1986: 129-130). For relics of the Demotic adjectival predication in Coptic, see Loprieno, M. Müller, and Uljas (2017: 685-697).
- A type of adnominal modifier (τHPε, nΔYΔΔ(τ)ε, OYΔΔ(τ)ε, ϸOΩε, ϸAPIϸAPOε, MNINMMOε) known, variously, as *Verstärker* (amplifiers; Polotsky 1971), “augmentia” (magnifiers; Shisha-Halevy 1986: 155-184), and “inflected modifiers” (Layton 2004: 118-123), combines the semantic feature of emphasis/reinforcement/insistence and the syntactic feature of congruence with the modified noun by inflection. Some members o

f this set, such as τHPε < qtrε, OYΔΔ(τ)ε < wε.tε, and ϸOΩε < hεε, are inherited, while others, such as ϸAPIϸAPOε and MNINMMOε, seem to appear only in Coptic.

- Adnominal possessive constructions (Table 4) have moved further along the grammaticalization path from direct genitive (in Coptic narrowly limited to lexicalized compounds) to indirect construction (marked by the genitive particle n-/n-) towards periphrasis by the preposition nTE-/nTAε (Kammerzell 2000; Egedi 2010; Haspelmath 2015).

- The pattern #NP n-NP# (two nouns linked by the particle n-; NP = noun phrase) is shared by two semantically different types of attribution: restriction/identification v. qualification. Their opposition is marked by determination—yes v. no—of the second noun (Table 5). This pattern had already been evolving in Demotic (Quack fc.).

Pattern	Determination 1 st noun	Linkage	Determination 2 nd noun	Semantics of attribute
Attributive	any	n-	∅-	qualifying
Example	ΟΥ-ΚΡΙΤΗΣ	n-	САВЕ (De Vis 1929: 54)	“a wise judge”
Genitival	def. article (S), any (B)	n-	any but ∅	restricting / identifying
Example	ΘΗΓΕΜΟΝΙΑ	n-	ΟΥ-САВЕ (Ben Sira 10,1)	“the rule of a sage”

Table 5. Determination of the modifying noun: “none” v. “any but none,” distinguishing qualifying from identifying modification in the attributive pattern #NP n-NP#; two Bohairic examples with САВЕ “wise” in the 2nd-noun slot.

Infinitive			Stative	Residual Imperative Forms	Residual Participles	Residual Relative Forms
St. abs.	St. nom.	St. pron.				
СΩΠΠ “to choose”	СЄΠΠ-	СОΠΠϩ	СОΠΠ “... is chosen”	(inf.)	–	–
ΕΙΡΕ “to do”	ρ-	ααϩ	ο “... is (made)”	αρι-	ερ-	–
ΧΩ “to speak”	χε-	χοοϩ	–	αχω, αχε-, αχιϩ	χατ-	πεχε-, πεχαϩ
ΧΙ “to take”	χε-	χιτϩ	χηγ “... is taken”	(inf.)	–	–
ΤΑΛΟ “to lift”	ταλε-	ταλοϩ	ταληγ “... is lifted”	(inf.)	–	–
ΒΩΚ “to go”	–	–	βηκ “... is going”	(inf.)	βακ-	–

Table 6. Sample of Coptic (Sahidic) verb forms: the infinitive (st. abs. = status absolutus = absolute state [without directly attached object]; st. nom. = status nominalis = pre-nominal state [with directly attached nominal object]; st. pron. = status pronominalis = pre-pronominal state [with directly attached pronominal object]), the stative, and residual instances of the morphological imperative, (conjunct) participle, and relative form.

• Pronominal possessor marking by suffixation has been replaced by the head-marking construction via possessive article (see Table 4, Example 4), a change that first surfaces in Early Middle Egyptian (P.Heqanakhte), to gain momentum in Late Egyptian. In Demotic, inalienable possession is still expressed by suffixed possession marking, such as *jtʿs* (besides *pʿyʿs jt*) “her father,” *mw.tʿf* (besides *tʿyʿf mw.t*) “his mother,” and *rn=k* (besides *pʿyʿk rn*) “your name,” as opposed to Coptic *πεϩc-ειωτ* “her father,” *τεϩq-μααγ* “his

mother,” and *πεϩκ-ραν* (besides *ριντϩκ*) “your name.” As the last example shows, there is a closed set of possessee nouns still extant in Coptic, for the most part ancient body-part terms such as *τοοτϩ* (*dr.tʿ*) “hand,” *αωϩ* (*dʿdʿz*) “head,” *ρατϩ* (*rt.tʿ*) “foot,” and *ειατϩ* (*jr.tʿ*) “eye.” Their Coptic usage is mostly confined to compound prepositions (Nyord 2013) such as *ε-αωϩ* “upon” (lit. “to s.o.’s head”), *ρδ-ρατϩ* “underneath” (lit. “unders.o.’s

foot”), and **ϩΙ-ΤΟΟΤ** “by, from” (lit. “on s.o.’s hand”), or fixed verbal phrases such as **αϩε-ρατ** “to stand up” (lit. “to set one’s foot”), **κα-τοοτ** “to break off” (lit. “to lay one’s hand”), **κτε-ειατ** “to look out” (lit. “to turn one’s eye”), and **να-ειατ** “blessed be...” (lit. “may s.o.’s eye be big”), while the actual body-part terms are different and would be marked for possession by the regular possessive article (e.g., **πεκ-βαλ** “your eye,” **τα-σιλ** “my hand,” **τεφ-απε** “his head”).

Parts of speech: Verbal morphology

- Coptic verbal morphology is reduced to three main types: the absolute infinitive, the construct infinitive with two allomorphic variants (pre-nominal v. pre-pronominal status responding to directly attached nominal v. pronominal objects), and the stative (Hintze 1980: 78-84). Some relics of otherwise obsolete morphological patterns such as morphological imperatives, participles, relative forms (Table 6), and *sdm=f* constructions survived in single lexicalized items.

- The infinitive, in predicative function, covers the whole range of verbal predication and parts of the adverbial predication. Except for a small number of high-frequency verbs preserving distinct imperative forms, the infinitive also serves as imperative and without exception as verbal adjunct of the prohibitive *mnp-infinitive* “don’t do...” As a verbal noun, the infinitive can fill any nominal slot, functioning as subject or object (or as predicate in the nominal predication), e.g., **πετν-†** “your giving”; **π-κοοc-τ** “the inhuming (i.e., burying) of myself”; **νανοϩ-τμ-οϩεμ-αϩ** “not eating flesh is (a) good (thing).”

- The stative is limited to the predicative function in adverbial sentences. By allowing for stative passives of transitive verbs it forms part of the Coptic diathesis system, i.e., its strategies of voice marking (Speransky 2022).

- Only a few lexicalized relics of morphological imperatives and verbal nouns such as participles and relative forms have survived

into Coptic. Unstressed (dependent) forms of the active participle of some verbs have lexicalized into Coptic nominal prefixes, so-called conjunct participles, such as **-μαι** “...-loving” (**με** “to love”), e.g., **μαι-ρωμε** “philanthropist”; **οϩαμ** “...-eating” (**οϩωμ** “to eat”), e.g., **οϩαμ-σαρϩ** “carnivore”; **ϩαι** “...-carrying” (**ϩι** “to carry”), e.g., **ϩαι-ϩινε** (message-)carrier; and **ϩαι** “...-receiving” (**ϩι** “to take”), e.g., **ϩαι-βεκε** “wage earner” (Steindorff 1951: §§285-286, 131-132). A few early dialects kept the grammaticalized active participle of *jrj* (Demotic *j-jr-*, Coptic **ερ-**) to mark past relative clauses (clause formation and conversion are discussed below).

Clause formation: Nominal predication

Coptic has at least five nominal predication patterns (Polotsky 1962; 1987: 17-43). These differ in their number of constituents (two or three) and in the order of predicative/rhematic and subject/thematic noun phrase(s) (Table 7).

- The bipartite interlocutive pattern in Demotic allows for a \emptyset -determined noun phrase (and so still did the Old Coptic norm of P.Schmidt: Satzinger 1975, line 8: **ανεκ ααρην** “I am barren”). In Coptic, determination has become an indispensable element of the pattern (Polotsky 1987: 23-24, §27; Funk 1991b: 33-34): **ανϩ οϩκαμη** Song of Sol. 1:5: “I am (a) black (one).”

- Demotic had nominal sentences composed of two noun phrases without a subject pronoun (Quack *fc.*; Loprieno, Müller, and Uljas 2017: 317-332). This pattern is almost entirely replaced in Coptic by tripartite patterns with nucleus extension (see Table 7).

Only Akhmimic exhibits the earlier pattern, examples of which, though rare enough to underline its recessive character, are too numerous to ignore or emend away (Loprieno, Müller, and Uljas 2017: 332-333).

- The Pattern NP **πε/τε/νε** NP (bipartite nucleus with right-side extension) can be traced back to Middle Demotic and became more

Bipartite nominal sentence (A = thema, Z = RHEMA)					
Interlocutive pattern (1 st /2 nd -p. subject pronoun + NP) (Polotsky's A-Z)	1 st		ΔΗΓ-NP	ΔΗ(Ο)(Ν)-NP	ΔΗΓ-ΟΥ-ΔΙΚΑΙΟΣ I am (a) RIGHTEOUS (one)
	2 nd	m.	ΝΤΚ-NP	ΝΤΕΤΝ-NP	
		f.	ΝΤΕ-NP		
Delocutive pattern (NP+3 rd -p. subject pronoun) (Polotsky's Z-A)	3 rd	m.	NP ΠΕ	NP ΝΕ	ΟΥ-ΔΙΚΑΙΟΣ ΠΕ he is (a) RIGHTEOUS (one)
		f.	NP ΤΕ		
Tripartite nominal sentence (A = nominal thema, a = pronominal thema, Z = RHEMA, c = copula)					
(Bipartite nucleus) (Z-a) extended	left-side extension (A-[Z-a])	NP(A) [NP(Z) - ΠΕ/ΤΕ/ΝΕ(a)]		ΠΕΙ-ΡΩΜΕ [ΟΥ-ΔΙΚΑΙΟΣ ΠΕ] this man is (a) RIGHTEOUS (one)	
	right-side extension ([Z-a]-A)	[NP(Z)- ΠΕ/ΤΕ/ΝΕ(a)] NP(A)		[ΟΥ-ΔΙΚΑΙΟΣ ΠΕ] ΠΕΙ-ΡΩΜΕ this man is (a) RIGHTEOUS (one)	
"Copular pattern" (Polotsky's A-c-Z)	(without bipartite nucleus)	NP(A) ΠΕ/ΤΕ/ΝΕ(c) NP(Z)		ΠΚΛΟΗ ΝΝΕΛΛΟ ΠΕ ΖΗΩΗΡΕ ΝΩΗΡΕ Prov. 17,6 the crown of the aged are GRANDCHILDREN	

Table 7. Nominal sentence patterns in Coptic (Sahidic) according to Polotsky (1987) (NP = noun phrase).

SUBJECT			PREDICATE	
Pronominal (proclitic pronoun)				
Person	Demotic	Coptic		
1 st sg.	<i>twɣy-</i>	†-	1) Infinitive (st. abs.) 2) Stative 3) Adverbial phrase 4) ΝΔ-infinitive (Future I)	
2 nd sg.	m. <i>tyɰk, jwɰk-</i>	κ-		
	f. <i>twɰt-</i>	τε-		
3 rd sg.	m. <i>jwɰf-</i>	ϕ-		
	f. <i>jwɰs-</i>	ς-		
1 st pl.	<i>twɰn-</i>	ΤΝ-		
2 nd pl.	<i>twɰtn-</i>	ΤΕΤΝ-		
3 rd pl.	<i>s.t-</i>	ςΕ-		
Nominal				
Definite determination		NP		
Indefinite determination		ΟΥΝ-NP		

Table 8. The bipartite conjugation pattern in Coptic (Sahidic).

widespread in Late Demotic (Quack 2006: 215-216; *fc.*).

- Polotsky’s “copular pattern” (A-c-Z) has the rhematic noun phrase in final position and the (original) subject pronoun **πε/τε/νε** underway to freeze into a particle **πε** (Polotsky 1987: 64-65, ex. **ⲛ-ⲉⲧⲉ-ⲧⲉϣ-ⲥϨⲛⲏⲟⲓⲁ ⲛⲉ ⲛⲓⲟⲩⲉ ⲛⲏⲛⲁⲕ** [Shenoute ed. Leipoldt 1908: 78, 16-17] “those whose habit is to fight with you”). This seems to be an innovative development of the nominal sentence, which became fully conventionalized only in Coptic.

Clause formation: Adverbial predication (bipartite conjugation pattern)

The bipartite conjugation pattern allows for different “adverbial” predicate types (Table 8): 1) the durative infinitive, tracing back to the *hr-/m-infinitive* syntagm of the pseudo-verbal construction; 2) the stative (Polotsky 1990: 203-213; Funk 1977, 1978); and 3) locative adverbs and adverbial phrases (Loprieno, Müller, and Uljas 2017: 55-56). All these predicate types share the overall “durative” semantics of this pattern, expressing the agents’ sojourn in a state. They also share the same set of (proclitic) subject pronouns (Polotsky 1987: 9-11), and the same restriction to definite determination of the nominal subject (see Table 8). The bipartite pattern lacks explicit Tense-Aspect-Mood-marking (as opposed to the tripartite, explicitly Tense-Aspect-Mood-marking pattern of verbal predication, discussed below).

Suspending the intrinsic tenselessness of the pattern, a fourth type of predicate, the stative form **-na-** followed by infinitive, constitutes a “ventitive” or “allative” future (**q-na-infinitive** “he is coming [to] . . .” → “he will . . .”), the so-called Future I. A similar usage of the same verb (Late Egyptian *nʃj, nʃj*; Demotic *nʃ*) can be traced back to sporadic Late Egyptian instances (*tw-ʃy m-nʃj r-infinitive*), which can thus be identified as source construction of Future I (Gardiner 1906; see also Grossman, Lescuyer, and Polis 2014). The strict absence of the preposition *r-* (an option for verbs of motion plus final infinitives already in Late Egyptian),

non-etymological spellings of *nʃ*, and increasingly relaxed selectional restrictions indicate the further grammaticalization of the construction into a full-fledged future tense (Table 9) in later Ptolemaic and Roman Demotic (Grossman, Lescuyer, and Polis 2014). Still in late Roman Demotic, however, the most frequently used future construction was Future III, itself deriving from the earlier allative future *jw=f r-sdm*. Only in Coptic had Future I **q-na-cwtm** become the most frequent and most productive future tense. In contrast to Coptic Future III **ʃqʃcwtm** (as well as to Future II **ʃqna-cwtm**, at least in southern Coptic), Future I **q-na-cwtm** does not (yet) convey modal nuances but is (still) “purely” temporal in most Coptic dialects (although Grossman, Lescuyer, and Polis 2014 point to clear examples of a tense-to-mood cline in Bohairic). Focalizing, circumstantial, preterite, and relative conversion (discussed below) of Coptic future-tense clauses is mainly based on Future I, while Future III tends to resist conversion.

Clause formation: Verbal predication (tripartite conjugation pattern)

In formal contrast to the bipartite durative pattern, tripartite conjugations are marked for tense, aspect, and mood (and for their overall “eventive” semantics) by special morphemes (“conjugation bases,” using Polotsky’s term: Polotsky 1960) preceding the subject and the verbal predicate (Table 10). In terms of the diachronic change from inflecting (synthetic) structures in Earlier Egyptian to head-marking (analytic) structures in Later Egyptian (Ewald 1862; Hintze 1947a, 1950; Loprieno 2000, 2001; Reintges 2012; Zöllner-Engelhardt 2016), the #Verb-Subject-Object# → #Subject-Verb-Object# shift has moved further in Coptic. Demotic still retained *sdm=f*-based constructions for past, prospective, and aorist. These are replaced in Coptic by #Subject-Verb# constructions with prefixed Tense-Aspect-Mood (TAM) markers and postponed predicative infinitives (Quack 2006: 196-197; *fc.*).

- The pattern *jr=f-infinitive* “he did (do)” was initially, and was still in Demotic, employed as

Pron. subject	Independent clause		Converted: circumstantial		Converted: relative	
	Demotic	Coptic	Demotic	Coptic	Demotic	Coptic
1 st sg.	<i>twzy-nze-</i> (LL 20,19) <i>tjzj-nzw-</i> (HS x+2,7) <i>twzy-nzj-</i> (GA B19)	†-na-	<i>jwzy nzw-</i> (Ph 416,21)	εa-na-		
2 nd sg. m.	<i>jwk-nze-</i> (LL v ^o 28,1)	κ-na-	<i>jwk-nze-</i> (LL v ^o 33,3)	εκ-na-		
3 rd pl.	<i>s.t-nze-</i> (LL 18,31)	ce-na-				
Nom. subject			<i>jw-N-nze-</i> (LL 8,14)	εNP-na-	<i>ntj-nze-</i> (LL 29,2.3)	ετ-na-
					<i>ntj-jjr-jw-NP-nze-</i> (LL 23,21)	ετερε-N-na-

Table 9. Examples of the grammaticalized (later) allative future in late Demotic: P.London-Leiden (LL), P.Vienna 6920 (HS), Late Demotic Gardening Agreement (GA), and Graffito Philae 416 (Ph) (Johnson 1976: 63-66; Quack 2006: 193-194; fc.).

Main clause	Affirmative (TAM-prefixed)		Antecedent (Demotic)	Negative (TAM-prefixed)		Antecedent (Demotic)
	Pronoun	Noun		Pronoun	Noun	
Past	α=q-inf.	α-NP-inf.	<i>jrʒf</i> -inf.	μπ(ε)=q-inf.	μπε-NP-inf.	<i>bn-pwʒf</i> -inf.
Aorist	αα=q-inf.	ααρε-NP-inf.	<i>hr-jrʒf</i> -inf.	με=q-inf.	μερε-NP-inf.	<i>bw-jrʒf</i> -inf.
Optative (Future III)	ε=q-ε-inf.	ερε-NP-(y)-inf.	<i>jwʒf-r</i> -inf.	ηνε=q-inf.	ηνε-NP-inf.	<i>bn-jwʒf</i> -inf.
Completive	(αφογω εq-inf.)		<i>wʒhʒf</i> -inf.	μπατ=q-inf.	μπατε-NP-inf.	<i>bw-jr-twʒf</i> -inf.
Jussive	μαρε=q-inf.	μαρε-NP-inf.	<i>my jrʒf</i> -inf.	μπρ-τρε=q-inf.	μπρ-τρε-NP-inf.	<i>m-jr tj jrʒf</i> -inf.
Subordinate clause	Affirmative (TAM-prefixed)		Antecedent (Demotic)	Negative (infix negator τμ-)		Antecedent (Demotic)
Subject	Pronoun	Noun		Pronoun	Noun	
Temporal	ητερ(ε)=q-inf.	ητερε-NP-inf.	(n-)dr(.t)ʒf-inf.	ητερ(ε)=q-τμ-inf.	ητερε-NP-τμ-inf.	<i>n-dr.t-bn-pwʒf</i> -inf.
Limitative	ααντ(ε)=q-inf.	ααντε-NP-inf.	<i>ʒc-mtwʒf</i> -inf.	ααντ(ε)=q-τμ-inf.	ααντε-NP-τμ-inf.	
Conditional	ε=q-ααν-inf.	ερααν-NP-inf.	<i>jwʒf</i> -inf.	ε=q-(ααν)-τμ-inf.	ερααν-τμ-NP-inf.	<i>jwʒf-tm</i> -inf.
Conjunctive	η=q-inf.	ητε-NP-inf.	<i>mtwʒf</i> -inf.	η=q-τμ-inf.	ητε-NP-τμ-inf.	<i>mtwʒf-tm</i> -inf.
Future conjunctive	ταρ(ε)=q-inf.	ταρε-NP-inf.	<i>tjzy jrʒf</i> -inf.	ταρ=η-τμ-inf.	(barely attested)	

Table 10. Verbal sentence patterns in Coptic (Sahidic) (TAM = Tense-Aspect-Mood).

a light-verb construction to integrate morphologically opaque verbs, such as borrowed verbs and verbs with more than three consonants, into the *sḏm=f* pattern. In Coptic this construction has become grammaticalized as a Tense-Aspect-Mood marker $\alpha=q$ (M. Müller 2016: 60-61; Quack 2006: 204-205; fc.), indicating narrative (past) tense as well as perfect. The Demotic perfective construction *wšḥ(-jw)=f-infinitive* “he had already done,” attested from Early Demotic on, conflated morphologically and semantically with the conjugation $\alpha=q$ -*infinitive*.

- Instead of *jr=f-infinitive* → $\alpha=q$ -*infinitive*, dialects M and W employ, for both past and perfect, the earlier perfective *wšḥ(-jw)=f-infinitive* → $\varrho\alpha=q$ -*infinitive*. Residual “offspring” of *wšḥ=f-infinitive* (such as [α] $\varrho\alpha=q$ -*infinitive*) occur as distributional or free variants without semantic difference sporadically beside $\alpha=q$ -*infinitive* in the dialects V, L₆, I, and A (Funk 1984, 1987b; T. S. Richter 1997 – 1998). The periphrastic perfective construction of Coptic $\alpha=q$ - $\text{OY}\omega$ $\epsilon=q$ -*infinitive* “he stopped doing . . .” → “he had already done . . .” (Grossman 2009b) has a precursor in the Roman Demotic construction *wšḥ=f jr=f-infinitive* (Quack fc.), which may indicate the beginning conflation of *jr=f-infinitive* and *wšḥ(-jw)=f-infinitive* at that time.
- The shift of aorist from #Verb-Subject# (*hr sḏm=f*) to #Subject-Verb# in the Coptic conjugation $\text{W}\alpha=q$ -*infinitive* (L₅/L₆: $\text{W}\alpha\text{p}\epsilon=q$, P: $\varrho\alpha\text{p}\epsilon=q$, A: $\varrho\alpha\text{p}\epsilon=q$ -) advanced already in Late Demotic (*hr jr=f-infinitive*, Johnson 1976: 87-88; Quack 2006: 203-205). In non-literary and later Coptic this conjugation begins to take on future-tense semantics (ex. $\text{H}\alpha\text{I}\text{T}\alpha\alpha\text{Q}\ \text{N}\alpha\text{K}\ \epsilon\text{N}\epsilon\varrho$ · $\alpha\lambda\lambda\alpha\ \text{W}\alpha\text{I}\text{T}\alpha\alpha\text{Q}\ \text{M}\text{P}\alpha\text{C}\text{O}\text{N}$ P.Col. inv. 600 [ed. Schiller 1968], line 38: “I will not give it to you ever, but I’ll give it to my brother”).
- The Demotic conditional *jr=f-infinitive* ($\epsilon=q$ -*infinitive*) has been widely replaced in Coptic by an augmented construction $\epsilon=q$ - $\text{W}\alpha(\text{N})$ -*infinitive*. The innovative infix $-\text{W}\alpha(\text{N})$ - occurs in one instance in a Late Demotic non-

etymological spelling *jr=f-š-c-n^ce-infinitive* (P.Lond.-Leid. 3,29-30; Johnson 1976: 155-156; Quack 2006: 195-196). Its source construction has not yet been identified (an alleged “conditional particle,” *hn*, in a construction *j-jr-hn* [Spiegelberg, *Demotische Grammatik* §499; Erichsen 1963: Glossar 361; Černý 1976: 38; Vycichl 1983: 46], is now being read *j-jr-hr* and re-analyzed as second-tense aorist [Johnson 1976: 155-156; Quack fc.]). The conservative (unaugmented) conditional is still found in Coptic (here called “protatic $\epsilon\text{q}\omega\text{T}\text{M}$ ”; Shisha-Halevy 1974; Funk 1987a; Grossman 2009a). Homonymy with other patterns such as Circumstantial Present, Present II (S), or Perfect (B) may have been a trigger for the spread of the infix $-\text{W}\alpha(\text{N})$ -. The affirmative pattern of protatic $\epsilon\text{q}\omega\text{T}\text{M}$ is rare except for dialect M, where $\alpha=q$ - $\omega\text{T}\text{M}/\alpha=q$ - TM - $\omega\text{T}\text{M}$ is a regular variant. The negated pattern $\epsilon=q$ - TM -*infinitive* is a fairly common variant besides the augmented $\epsilon=q$ - $\text{W}\alpha\text{N}$ - TM -*infinitive* since it was unambiguous due to the negator TM -, which is inapplicable to homonymous forms.

- Conjunctive: The Coptic conjunctive morphology displays three different patterns across dialects, shifting from $\text{N}\text{T}\epsilon=q$ -*infinitive* (< LEg, Dem. *mtw=f-infinitive*) in Bohairic, via $\text{N}\epsilon=q$ -*infinitive* in Fayumic, Mesokemic, Sahidic, and prevailing in the L dialects (first surfacing in Late Demotic spellings such as *n-j-jr-k*: P.Lond.Leid. xx,26; xx,27, xxxiii,3 > NK ; Johnson 1976: 181; Quack 2006: 194-195; fc.), eventually to q -*infinitive* in L₅, L₄, and Akhmimic. The second pattern (F, M, S, L: $\text{N}\epsilon=q$ -) is similar to Present I, the third pattern (A: q -) even completely homonymous with it. This similarity triggered an analogous alignment of the inherited 3rd-plural pronoun ϵOY (as in Dem. *mtw=w-infinitive* and B: $\text{N}\text{T}\epsilon\text{OY}$ -*infinitive*) with the form of the proclitic pronoun ce - (F, M, S, L: $\text{N}\epsilon\text{ce}$ -*infinitive* and A: ce -*infinitive*; compare the unique Late Demotic instance *n-st* in P.Lond.Leid. ii,9, Johnson 1976: 182;

Nominal Subject	Pronominal subject	Demotic	Meaning	Nominal subject	Pronominal subject	Demotic	Meaning
ⲛⲁⲁ-, ⲛⲁⲉ-	ⲛⲁⲁⲉ	ⲛⲓ-ⲉⲓ-	... is big	ⲟϥⲛ-	(not admissible)	ⲙⲛ-	There is ...
ⲛⲁⲛⲟϥ-	ⲛⲁⲛⲟϥⲉ	ⲛⲓ-ⲉⲛ-	... is good	ⲙⲛ-	(not admissible)	ⲙⲛ-	There is no ...
ⲛⲁⲟⲩⲉ-	ⲛⲁⲟⲩⲟⲉ	ⲛⲓ-ⲉⲥⲓ	... is numerous	ⲛⲉⲗⲁⲉ-	ⲛⲉⲗⲁⲉ	ⲡⲓ ⲣ-ⲉⲉ-	... said (direct speech)
(not attested)	ⲛⲁⲗⲁⲟⲉⲉ	ⲛⲓ-ⲛⲓⲕ-	... is sweet	ⲟϥⲉⲧ-	(not attested)	ⲣ-ⲙⲓⲓⲧ	... is different
(not attested)	ⲛⲉⲥⲃⲟⲩⲟⲉ	ⲛⲓ-ⲥⲃⲓ-	... is wise	ⲛⲉϥⲣ-	(not attested)	ⲛⲉⲣ	... is good

Table 11. Examples of lexicalized relics of *sdm=f* formation and verboids forming verb-subject predications in Coptic (Sahidic).

Conversion type	Demotic	Coptic
Focalizing (“Second tenses”)	<i>j-jr-</i>	Present II/Future II: ⲉ- (S, L), ⲁ- (B, F, M, A) Perfect II: ⲛⲧ- (S, L); ⲉⲧ- (B, F, A), ⲁⲁ- (F ₃); ⲁⲗⲁ- (W); ⲉⲗⲁ- (M) Aorist II: ⲉⲟⲩⲁ- (S, B), ⲛⲟⲩⲁ- (S, F), ⲁⲗⲁⲣ- (A)
Adjectival (relative clause)	<i>ntj-(jw)</i>	(ⲉ)ⲛⲧ-: Perfect S, L ₅ , L ₆ , (B, F, L ₄ , A: ⲉⲧ-, M (in oblique case): ⲉⲧ(ⲉ)- ⲉⲧⲉ-: Nominal sentence, ⲟϥⲛ(ⲧⲉ)-/ⲙⲛ(ⲧⲉ)-, negations, Aorist ⲉⲧ-: Adverbial sentence, adjectival predication (ⲛⲁⲛⲟϥ-), A: Aorist ⲉⲧⲗⲁⲣ ⲉ-: Aorist (variant: ⲛ-)
Circumstantial	<i>jw-</i>	ⲉ- (S, B, F, M, L, A) for all sentence patterns, S, F: variant ⲛ- in aorist, M (Mudil psalter): variant ⲁ-
Preterite	<i>wn-nsw-</i>	ⲛⲉ- (S, L); ⲛⲁ- (B, F, M, A) for all sentence patterns

Table 12. Morphology of converters in Demotic and Coptic.

Quack 2006: 194-195; fc.). The conjunctive in non-standard norms as surfacing in Coptic documentary and “semi-literary” texts shows an amazing range of morphological variation between the three patterns throughout Egypt (Kahle 1954: 160-163; T. S. Richter 2016a), including a fourth morphological variant: *ⲧⲉⲥⲓ- infinitive*. It is actually this one that enjoyed the widest geographical spread, although it was not selected for standard in any Coptic *literary* dialect (except in some later Bohairic texts).

- A few lexicalized forms of *sdm=f* constructions, such as the “existential” clause *ⲟϥⲛ-/ⲙⲛ-* (limited to non-definite nouns in the subject slot) and some members of the Demotic class of *ns*-prefixed adjectives (Coptic *ⲛⲁ-*, *ⲛⲉ-*), as well as some verboids (such as the, etymologically speaking, substantivized relative form *ⲡⲓ ⲣ-ⲉⲉ-* “what NN said” → *ⲛⲉⲗⲁⲉ-* “NN said: . . .”), form a small retreat of the #Verb-Subject# formation (*sdm=f*) within the overall

reverse Coptic verbal-predication pattern (Table 11).

- The Coptic verboid construction $\text{OYNTE-}/\text{OYNT}(\Delta)\text{z}$, $\text{MNTe-}/\text{MNT}(\Delta)\text{z}$ “to have,” “not to have” (tracing to $\text{OYN-possessee NTE-possessor}$ “There is x at y ”) superseded the mixed Demotic paradigm of possessive predication with complementary distribution of js -“belonging to X ” (X = nominal possessor), jnk - NP / $-s$ / $-st$ etc. “Mine (pronominal possessor) is Y ” and (Y ntj) mtw - X “(Y which) is at X ” in relative constructions. It is in the process of becoming lexicalized into verbs of possession and non-possession, though the Coptic case of “have drift” (Stassen 2001, 2009, 2013) is more sophisticated than often thought (Speransky 2020).
- The Coptic verbal conjugation and the converted adverbial conjugation saw the rise, based on analogy, of an innovative second-person singular feminine pronoun $\text{p}(\epsilon)$ (Funk 1986; Uljas 2009).

Clause formation: Conversion

The focalizing conversion is an information-structuring pattern, turning an independent clause into a *thematic* statement (termed the *glose* by Polotsky 1960) to be complemented by an adverbial phrase of *rhematic* rank (termed the *vedette* by Polotsky 1960, thus marked as focal point in terms of information structure), e.g., $\text{zH-pek-OYwO} \Delta\text{N } \epsilon\text{-k-} \epsilon\text{ipe N-naI}$ (NHC VII 89,2-3) “it’s not *by your own will* that you are doing this.” In Coptic it is no longer a distinct morphologic pattern as it had been in Late Egyptian and Demotic (*j-jr=f-infinitive*), but aligns with other (usually circumstantial or relative) converters (Table 12). The Coptic focalizing construction thus disambiguates different tenses of the converted clause (Polotsky’s *glose*) predication (as did the Earlier Egyptian “emphatic” construction) at the expense of the morphological distinctiveness of conversion types (sustained in Late Egyptian and Demotic).

For the adjectival conversion, the Coptic phonographic script reveals a range of distributional variation in the morphology of

the relative marker, though all variants are etymologically rooted in ntj (iw)- (see Table 12). Moreover, the functional range of this converter has expanded in Coptic. The participle *j-jr-infinitive* “(s.o./s.th.) who/which made (infinitive)” and the relative form *r-sdm=f* “(s.o./s.th.) whom/that he heard,” still default constructions of past-tense relative clauses in Demotic (Johnson 1976: 118-120), and the Demotic participle/relative form *r-wn-nzw* of the imperfect are all replaced in Coptic by constructions headmarked by the converter nt -/ $\epsilon\tau(\epsilon)$ - (Table 13), though the Coptic imperfect is leaning towards ϵ - ne (M. Müller 2015: 165-167). This alignment is first attested in Late Demotic texts such as P.London-Leiden and the Late Demotic document commonly known as the Gardening Agreement (spelled ntj - r $sdm=f$, ntj - r $jjr=f$ - sdm ; Johnson 1976: 120; Quack 2006: 210-211; fc.).

A residual past-participle construction ϵ -*infinitive* “who/which did . . .” (< Demotic *j-jr-infinitive*) occurs sporadically in early Sahidic texts (e.g., $\epsilon\tau\text{be } \text{p-}\epsilon\text{p-}\omega\text{wpe}$ *Paraphrase of Shem* 20,31 “for what happened”; $\text{p}\omega\text{me } \text{nim } \epsilon\text{p-}\chi\text{i}$ $\text{m}\chi\text{st}\eta\text{rion}$ Pistis Sophia 304 “everyone who received initiation”) and in early Bohairic ($\text{N}\omega\text{t}\epsilon\text{n } \Delta\text{N } \epsilon\text{p}\omega\text{t}\text{t}\text{i } \text{m}\text{m}\text{o}\text{i}$ John 15,1 “It’s not *you* who chose *me*”). In the dialects M and L₅ this construction is consistently used for *casus rectus* relatives, i.e., relative clauses whose subject agrees with the preceding noun (M: $\text{z}\omega\text{b } \text{nim } \epsilon\text{p-}\omega\text{w}\text{p}\text{h}$ Mt 28,11 Schøyen: “everything that happened”; L₅: $\text{p-}\epsilon\text{i}\omega\text{t } \text{p-}\epsilon\text{p-}\text{te}\gamma\alpha\text{z}\epsilon\text{i}$ John 5,36: “It is the father who sent me,” as opposed to S: $\text{p-}\epsilon\text{i}\omega\text{t } \text{pe-nt}\alpha\text{z-}\text{q-}\text{t}\alpha\gamma\text{o}\text{z}\epsilon\text{i}$, B: $\text{p-}\epsilon\text{i}\omega\text{t } \text{p-}\epsilon\text{t}\alpha\text{z-}\text{q-}\text{t}\alpha\gamma\text{o}\text{z}\epsilon\text{i}$), while the converted perfect (M: $\epsilon\tau(\epsilon)$ - $\text{z}\alpha$ -/L₅: $\text{nt}\alpha$ -) is restricted here to *oblique case* constructions, i.e., relative clauses whose antecedent noun agrees with a syntactic function other than subject in the relative clause (M: $\text{z}\omega\text{b } \text{nim } \epsilon\text{te-}\text{z}\alpha\text{-}\text{q-}\epsilon\text{z}\gamma$ $\text{ne}\epsilon\text{i}$ Ps. 115:4: “everything he has done to me”; L₅: $\text{t-}\epsilon\text{nt}[\text{ol}]\text{h } \text{nt}\alpha\text{z}\epsilon\text{i-}[\chi\text{i}]\text{t-}\text{c}$ John 10,18: “the commandment I received”). The first

Demotic	<i>pʒ...r-jr nʒy NN</i> (Migahid 1986: 65)	“the...which NN has done to me”
Old Coptic	ⲛ-ⲉⲣⲁⲗⲁⲛ ⲛⲁⲁⲓ (P.Schmidt, line 4-5)	“what he has done to me”
Sahidic	ⲛⲉ-ⲛⲧ-ⲁⲗ-ⲁⲁⲗⲛ ⲛⲁⲁⲓ (Ps. 115:4, 2Tim 1:18)	“what he has done to me”
Bohairic	ⲒⲬⲬⲛ ⲛⲒⲔⲈⲛ ⲉⲧ-ⲁⲗ-ⲁⲓⲧⲟⲩⲛ ⲛⲛⲁⲓ (Ps. 115:1)	“everything he has done to me”
Mesokemic	ⲒⲬⲬⲛ ⲛⲒⲛⲛ ⲉⲧⲉ-Ⲓⲁⲗ-ⲁⲗⲛ ⲛⲉⲁⲓ (Ps. 115:4)	“everything he has done to me”

Table 13. “What NN has done to me,” phrased by means of relative forms in Demotic and Old-Coptic, v. converted past in Coptic.

work in *NHC VII* employs a preterite relative $\pi\alpha\iota \text{ } \eta\epsilon\text{-}$ “he who did . . .” ($\pi\alpha\iota \text{ } \eta\epsilon\varphi\omega\sigma\theta\iota\text{-}$ = *Paraph. Séem passim* “he who existed”; $\tau\alpha\iota \text{ } \eta\epsilon\omega\gamma\eta\tau\alpha\varphi\varsigma$ *ibid.* 4,18 “the one he possessed”), which seems to represent a continuation of the Demotic relative preterite *pʒ r-wh-nʒw* (note common Demotic unetymological spelling variants such as *pʒy wh-nʒw*) into Coptic.

Lexicon

Of all sub-systems of linguistic signs, the lexicon underwent the most massive and disruptive changes from pre-Coptic Egyptian to Coptic. Etymological dictionaries record approximately 2700 hieroglyphic or hieratic Egyptian (Vycichl 1983) and approximately 1700 Demotic (Westendorf 2008) antecedent words, for a total of c. 3500 Coptic lexeme types. Notwithstanding 100 pre-Arabic Semitic loanwords (Quack 2005), many of which are attested already in Demotic (Vittmann 1996), and a difficult to estimate share of hitherto unnoticed Egyptian-Coptic cognates, there remains a large stock of Coptic lexical material that is not attested in hieroglyphic, hieratic, or Demotic Egyptian, but surfaces for the first time in Coptic texts. This might partly be due to the profound alteration in the Egyptian textual world, the demise of traditional texts and genres (and their linguistic registers), and the rise of a new textual universe centered around translations of Greek (biblical, patristic, Manichaean, gnostic, hermetic, etc.) texts into

Egyptian that occurred collaterally with the rise of the Coptic script and language.

Conspicuous impact on the lexicon of first-millennium-CE written Egyptian was exerted by language contact with Greek that becomes apparent in thousands of Greek loanwords therein (W. A. Girgis and Aba Georgios 1963 – 2001; Kasser 1991; Almond et al. 2013; Grossman, Dils, et al. 2017). Greek-Egyptian language contact intensified in the late fourth century BCE, when Egypt became increasingly dominated by a Greek-speaking elite, enduring for 600 years by the time Coptic was standardized. This contact left only small traces in pre-Coptic (written) Egyptian. For the bulk of Ptolemaic and Roman Demotic texts, Clarysse (1987) counted less than 100 Greek items, exclusively nouns, notably of the “new-things-and-concepts” type (such as titles, epithets, terms for measurements, currencies, etc.). Some late Demotic texts exhibit a significantly higher borrowing rate, such as the London-Leiden magical papyrus (Griffith and Thompson 1904; Ritner 1995; Dieleman 2005), the medical treatise P.Vienna D6257 (Hoffmann 2010), and in particular the second-/third-century CE ostraca from Medinet Madi (ancient Narmouthis) (Bresciani et al. 1983; Bresciani and Pintaudi 1987; Gallo 1997; Menchetti 2005; Menchetti and Pintaudi 2007; Rutherford 2010; Grossman and Richter 2017; Blasco Torres 2015, 2020). The innovative linguistic norms and registers surfacing in Coptic text production give a fuller account of

the cultural and linguistic—especially lexical—hellenization of Egypt, and the effect exerted by the ongoing shift from native cults towards international book-religions.

The *Database and Dictionary of Greek Loanwords in Coptic* (DDGLC), a current lexicographical project of Freie Universität Berlin, compiled more than 5,000 Greek lexemes of almost all parts of speech (Table 14), the totality of which comprised part of the Coptic lexicon, although certainly not simultaneously but in differential distribution according to dialect, time, and text genre. Not surprisingly, nouns categorically prevail with almost 80% types (>4,000 lexical items) and >60% token instances (including adjectives); verbs range between >15% types (>800 lexical items) and >10% tokens; function words hold a share as small as <4% types (about 150 lexical items), but yield roughly a quarter of all token attestations (see Table 14). Even if this discrepancy between type and token frequency is an overall statistical characteristic of function words, such adherence to it seems remarkable for borrowed items. It indicates a prevalent stylistic bias of the Coptic literary language, the

emulation of Greek rhetorical syntax (since this is what the most frequently borrowed Greek function words served for, examples including ἀλλὰ “but, yet, still”; γὰρ “for, since, as”; ἀε “but”; εἰμητι “unless”; εἴτε “either, whether”; η “or”; καὶ “even if”; μεν “indeed”; οὐδέ “neither”; οὖν “now”).

Coptic texts of the eighth century onwards may also contain loanwords from Arabic (Worrell 1934; Vycichl 1991; T. S. Richter 2006a, 2015b, 2017a), though in much lesser numbers. As with any non-standard features, linguistic interference resulting from Egyptian-Arabic language contact is strictly confined to texts outside the canonical literary tradition—that is to say, to documentary texts and texts of the “semi-literary” kind, such as magical, medical, astrological, and alchemical writings. The hitherto identified Arabic words in late Coptic texts, mostly nouns but also a few dozen verbs, sum up to about 500 lexical types, insignificant in comparison with the lexical input from Greek, but still significantly above the number of Semitic loanwords in Late Egyptian compiled by Hoch (1994).

TYPES	Parts of speech in Greek	Share in %	TOKENS	Parts of speech in Coptic usage	Share in %
5,134	total of types	100.0	126,209	total of attestations	100.0
3,205	substantives	62.4	76,629	nouns	60.7
881	adjectives	17.2			
817	verbs	15.9	14,508	verbs	11.5
136	adverbs	2.6	4,465	adverbs	3.5
29	conjunctions	0.6	13,018	function words in 1 st position	10.3
20	particles	0.4	13,526	function words in 2 nd position	10.7
19	prepositions	0.3	4,063	prepositions	3.2
27	not tagged for parts of speech	0.5			

Table 14. Greek loanwords in Coptic: numbers of types (Greek *lemma* list) and tokens attested in a corpus of c. 2,000 texts, subdivided according to part of speech.

The morphology of Arabic nouns in Coptic usually features the Arabic article Ⲡ rendered as ⲁⲗ- (in front of “sun letters” assimilated into ⲁⲗ-, ⲁⲙ-, ⲁⲛ-, ⲁⲣ-, ⲁϢ-, ⲁⲧ-) as first syllable, e.g., ⲁⲓ-ⲧⲓ ⲛⲁⲗⲕ Ⲡⲟⲩ-ⲁⲗⲕⲁⲡⲉⲗⲉ ⲛ-ⲁⲧ-ⲁⲗⲙⲓϢⲁⲗⲉ (P.Lond.Copt. I 487,3-5, ed. T. S. Richter 2003) “I gave you a lease (*al-qabāla*) without surveying (*al-misāḥa*).” Morphological features of Arabic verbs in Coptic (T. S. Richter 2015b) typically point to Arabic imperatives as input forms, e.g., ⲧⲁⲡⲉⲣⲓ ⲙⲙⲟⲥⲟⲩ ⲛⲟⲉ ⲉⲧⲗⲕ-Ϣⲟⲟⲩⲛ (BL Or. 3669[1]: fol. IVro,19-20; ed. Stern 1885; Richter fc.) “Prepare (*dabara* stem II) them as you know”; *ibid.* p. 8, 17-18: ⲧⲁⲁⲗⲕ ⲉ-ⲡ-ⲙⲟⲟⲩ ⲉⲛ-ⲁⲗⲖⲟⲩⲗ ⲟⲩⲁⲛⲧⲗⲕ-ⲛⲗⲁⲗ “Add it to the bean (*al-fūl*) water until it dissolves (*ḥalla* stem VII).”

Language Shift to Arabic

While Greek-Egyptian linguistic contact resulted in stable bilingualism (Oréal 1999; Fewster 2002; Fournet 2009; Torallas Tovar 2010; Depauw 2012; Vierros 2012), Arabic-Egyptian contact in the long run led Egyptian speakers to abandon their language and shift to Arabic (Wasserstein 2003; Papaconstantinou 2012). Starting slowly, probably not before the ninth century, the process of arabization gained momentum in the eleventh century and was completed by the end of the fourteenth century (Garcin 1987; MacCoull 1985, 1989; Décobert 1992; Björnesjö 1996; Helderman 1997; Papaconstantinou 2007, 2012; Zaborowski 2008; T. S. Richter 2009, 2013c; Delattre et al. 2012; Sidarus 2013; Parker 2013). By that time, Coptic had dropped from most domains of written culture and was apparently no longer used by many of its former speakers, the miaphysite Christian Egyptians (at that time called, and who called themselves, Copts), notably those who belonged to the literate elite, whose language choice, and language attitude, we can assess solely from the perspective of written texts. The twelfth to fourteenth centuries witnessed a significant movement of Coptic to Arabic translation (Rubenson 1996 a and b) that prompted a revision of the Coptic literary tradition. Some components, starting with biblical, patristic, canonical, and

hagiographical works, were selected to become part of the Christian-Arabic tradition of Egypt; other parts were left untranslated and were thus consigned to oblivion. At the same time, two formats of Arabic textbooks for second-language learners of Coptic cropped up: short grammars of Sahidic and/or Bohairic Coptic, known as *muqaddimāt* (Arab. *muqaddima* “introduction”) (Bauer 1972; Sidarus 2001), and glossaries of Coptic (plus Greco-Coptic) words and phrases and their Arabic equivalents, called *salālim* (plural of Arab. *sullam* “ladder”) (Munier 1930; Sidarus 1978; Khouzam 2002; Macomber 2020). New texts were then no longer composed in Coptic, but the language survived (in the Bohairic dialect) through biblical books and other texts used in the services and canonical hours of the Coptic church, such as the Mass (*euchologion*), lectionaries, and books of hymns and prayers (*Difnār*, *Theotokia*), whose literary sophistication and poetic power have yet to be fully appreciated by Western scholars.

There is little evidence that the process of arabization was actively enforced by the Muslim state power. As Greek-Egyptian bilingualism in the Ptolemaic Period was almost exclusively maintained by native Egyptians (Clarysse 1993; Vierros 2012), so the acquisition and use of Arabic became at some point a habit of members of the educated Christian elite of Egypt. By the thirteenth century, Arabic was a productive language of Egyptian Christian literature (Moawad 2014; Swanson 2014) and a medium of inter-religious exchange between Muslims, Jews, and Christians (of different denominations) throughout Egypt and the Middle East (Vollandt 2014 a and b, 2018). The proficiency of educated Christian Egyptians in Arabic, the contemporary language of higher education and science and the shared idiom of Eastern Christianity, allowed for the blossoming of Christian learned writing in medieval Egypt, which has been called the “golden age” of Coptic (though, linguistically, Arabic) scholarship (Sidarus 2002; Parker 2013).

Attempts at the allographic (i.e., rendering a language in a script other than the one normally used to write it) conjunction of Coptic and

Arabic (Le Page Renouf 1888 – 1889; Casanova 1901; Galtier 1906; Crum 1902, 1903; Sobhy 1926; KHS-Burmester 1965 – 1966; Satzinger 1972; Blau 1979, 1988) are few and apparently did not proceed beyond an experimental stage (Richter 2020). In contrast to flourishing allographic practices in the Middle East such as Arabic spelled in the Syriac script (Karshuni) or Arabic spelled in Hebrew letters (Judaeo-Arabic), the practice of transcribing Arabic texts in Coptic script did not feed into major cultural traditions of the Coptic community and remained an ephemeral phenomenon.

Coptic Studies: Recent Acta and Agenda

Coptic studies in general, including fields not dealt with here, such as archaeology and art, profited from the upturn of interest in Late Antiquity over recent decades. Some important corpora of Coptic literature, such as the Coptic “gnostic” and Manichaean texts, and the Coptic New Testament, received scholarly attention of especially long duration. The study of other large corpora has been recently intensified, e.g., Shenoute’s writings, of which a critical edition based on Emmel (2004) is underway, or the [Coptic Septuagint](#), of which a digital edition is currently maintained by the Göttingen Academy. The production of Coptic apocryphal texts has recently become a hot spot of Coptic literary study (Suciu 2017; Hugo Lundhaug’s ERC project *Storyworlds in Transition: Coptic Apocrypha in Changing Contexts in the Byzantine and Early Islamic Periods*). Also, Coptic “semi-literary” corpora are now being edited, re-edited, and compiled, such as school texts (Hasitzka 1990), magical texts (Bélanger-Sarrazin 2017; *Kyprianos* database), medical recipes (Grons 2022), and Coptic alchemical recipes (Richter *fc.*). Coptic papyrology has been flourishing over the last two decades (Richter 2008, 2013b). Some locations long known for yielding Coptic documentary texts have recently yielded bulks of new material, such as the Theban West Bank, including Hermonthis (Boud’hors and Heurtel 2010, 2015; Krueger 2020) and the Bawit Monastery (Clackson 2000, 2008; Clackson and Delattre 2014; Delattre 2007). Some rich but hitherto neglected places have garnered new scholarly

attention, such as the Fayum area (Boud’hors 2005; Garel 2018), the town of Hermopolis, the town of Edfu/Apollonopolis Magna (Boud’hors et al. 2017; Richter 2019), and the island of Elephantine. The corpus of Coptic epigraphy, for the most part funerary stela, has traditionally suffered from insecure provenance and unknown archaeological context due to undocumented excavations and sales. A preliminary synthesis was provided by Tudor (2011), but much work remains to be done (van der Vliet 2017a, 2018).

Thanks to reinforced and systematic editorial and interpretive work, Coptic literary as well as non-literary texts have gained increased attention in the wider fields of late ancient and medieval history (e.g., Wickham 2005; Booth 2017). In the wake of the material turn in philologies, Coptic manuscripts as artifacts have become subject to intensified study (e.g., Buzi and Emmel 2015; Ghigo, Rabin, and Buzi 2020). Coptic palaeography, which has for a considerable time been a domain of mere connoisseurship, is now being studied on the basis of stricter methodologies (Askeland 2018; Boud’hors 2020; Marthot-Santaniello 2021; Lundhaug 2020b; Orsini 2019; Suciu 2020).

Since Coptic linguistics is increasingly based on computer-aided analysis of Coptic digital corpora, distant goals such as cross-dialectal morpho-phonological (Funk 1991a, 2009) and lexicological comparison have come within reach. The study of sociological aspects of the emergence of Coptic (Quack 2017; Love 2021), its changing roles in the Egyptian society under Byzantine and Muslim rulers (Bagnall 2011; Fournet 2020a), its decline and obsolescence in the middle ages (Zaborovski 2008; Papaconstantinou 2012), and its continuing importance for the Christian culture of Egypt in the “Golden Age” of Christian-Arabic erudition and further on, has profited, and will further profit from the increasingly interdisciplinary setting of Coptic studies.

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Bibliographic Notes

For Coptic lexicography Walter Crum's monumental *Coptic Dictionary* (1939), and additionally Kasser's *Compléments* (1964), are still authoritative. Wolfhart Westendorf's *Koptisches Handwörterbuch* (2008) provides not just semantic but also etymological information, as do Jaroslav Černý's *Coptic Etymological Dictionary* (1976) and Werner Vycichl's *Dictionnaire étymologique de la langue copte* (1983). Coptic lexicographical data not yet (or not fully) accessible to earlier Coptic lexicographers is now recorded in concordances (e.g., the section "Concordances" of the Bibliothèque copte de Nag Hammadi). The comprehensive share of loanwords in the Coptic lexicon has not received systematic representation as yet, though Böhlig (1954 and 1958) and Förster (2002) have taken steps towards this goal. The comprehensive compilation of Greek vocabulary in Coptic is already underway (Richter 2017c; Grossman, Dils, T. S. Richter, and Schenkel 2017). A digital dictionary comprising native Egyptian as well as Greek vocabulary is being developed (<https://coptic-dictionary.org/>). Detailed grammatical descriptions and analyses are provided for Sahidic in Bentley Layton's *Coptic Grammar* (3rd edition, 2011) and Chris Reintges's *Coptic Egyptian (Sahidic Dialect)* (2004) and for Bohairic in Ariel Shisha-Halevy's *Topics in Coptic Syntax* (2007) and recently Matthias Müller's *Grammatik des Bohairischen* (2021). Hans Jakob Polotsky's late work *Grundlagen des koptischen Satzbaus* (two volumes: 1987 and 1990) is still an inspiring read. The eighth volume of *The Coptic Encyclopedia* (Aziz Atiya ed. 1991) provides a compendium of Coptic linguistics and contains brief descriptions of all minor Coptic dialects. The (2017) study *Non-Verbal Predication in Ancient Egyptian*, by Antonio Loprieno, Matthias Müller, and Sami Uljas, gives a detailed account of Egyptian non-verbal diachronic syntax, including profound chapters on Coptic in its dialectal variety. With the rise of digital corpora, Coptic electronic text data gain ever-increasing importance for the corpus-linguistic study of Coptic. Two large sources currently available are *Marcion* (<http://marcion.sourceforge.net/>) and *Coptic Scriptorium* (<https://copticcriptorium.org/>). Instructive overviews of Coptic literature are given in Stephen Emmel's "Coptic Literature in the Byzantine and Early Islamic World" (in Robert Bagnall ed. 2007) and in Tito Orlandi's contributions to the *Oxford Handbook of the Literatures of the Roman Empire* (Daniel Seldon and Phiroze Vasunia eds. 2016) and the volume on *Coptic Literature in Context* (Paula Buzi ed. 2020). Samuel Moawad's *Die koptischen Autoren und ihre literarischen Werke* (2020) provides an overview of Coptic indigenous literary production in the first millennium CE. Overviews of Coptic codicology and palaeography are available in Buzi and Emmel (2015), Buzi (2018), and Anne Boud'hors' entry in *The Oxford Handbook of Egyptian Epigraphy and Paleography* (Vanessa Davies and Dimitri Laboury eds. 2020). Metadata for Coptic literary manuscripts are systematically compiled in the *PAThs* database (<https://atlas.paths-erc.eu/>); for documentary texts, such information can be accessed via the *Trismegistos* database (<https://www.trismegistos.org/index.php>). The role of Coptic in the bilingual setting of late ancient Egypt has most recently been dealt with by Jean-Luc Fournet: *The Rise of Coptic: Egyptian versus Greek in Late Antiquity* (2020a).

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- Greek loanwords in Coptic: Freie Universität Berlin: *Database and Dictionary of Greek Loanwords in Coptic (DDGLC)*: <https://www.geschkult.fu-berlin.de>
- Digital edition of the Coptic *Septuagint*: Göttingen Academy: <https://coptot.manuscriptroom.com/>
- Coptic magical texts: University of Würzburg: *Kyprianos* database: <https://www.coptic-magic.phil.uni-wuerzburg.de/>
- *Coptic Dictionary* online: <https://coptic.dictionary.org/>
- *Marcion*: <http://marcion.sourceforge.net/>
- *Coptic Scriptorium*: <https://copticcriptorium.org/>
- *PAThs* database: <https://atlas.paths-erc.eu/>
- *Trismegistos* database: <https://www.trismegistos.org/index.php>

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Table 1. Coptic alphabetic signs (left-hand columns), their transliteration according to the *Leipzig-Jerusalem Transliteration of Coptic* (Grossman and Haspelmath 2015: 147) (middle columns), and their phonemic value in Sahidic Coptic according to M. Müller (2011: 521-522) (right-hand columns). The signs **ϣ**, **ϥ**, **ϧ**, **Ϩ**, **ϩ**, **ϫ**, **Ϭ**, **ϭ** are derived from Demotic alphabetic signs. The sign **ϩ** is confined to dialects B and P, **ϥ** to A, **ϫ** to I, and **ϭ** to P. (B, P, A, and I are among the sigla used to reference “dialects”; see also Table 2.) (Table rendered by the author.)

Table 2. The most prominently attested early Coptic literary dialects, geographically north to south. (Table rendered by the author.)

Table 3. 1) Short stressed vowel (historically derived from ***ī**) in closed syllable: **ⲁ** (S/B) v. **ⲉ** (F/M/L/A) v. **ⲓ** (P); 2) short stressed vowel (historically derived from ***ā**) in closed syllable: **ⲟ** (S/B/P) v. **ⲁ** (F/M/L/A); 3) unstressed final vowel: **ⲓ** (B/F) v. **ⲉ** (M/S/L/A); 4) phonological contrast between **h** and **ḥ**: conflation in **ϥ** (F/M/L/S) v. distinction between **ϥ** and **ϩ** (B/P) / **ϥ** (A). (Table rendered by the author.)

Table 4. Adnominal possessive construction by means of genitive, prepositions, and possessive pronominals in Sahidic. (Table rendered by the author.)

- Table 5. Determination of the modifying noun: “none” v. “any but none,” distinguishing qualifying from identifying modification in the attributive pattern #NP n-NP#; two Bohairic examples with **caBe** “wise” in the 2nd-noun slot. (Table rendered by the author.)
- Table 6. Sample of Coptic (Sahidic) verb forms: the infinitive (st. abs. = status absolutus = absolute state [without directly attached object]; st. nom. = status nominalis = pre-nominal state [with directly attached nominal object]; st. pron. = status pronominalis = pre-pronominal state [with directly attached pronominal object]), the stative, and residual instances of the morphological imperative, (conjunct) participle, and relative form. (Table rendered by the author.)
- Table 7. Nominal sentence patterns in Coptic (Sahidic) according to Polotsky (1987) (NP = noun phrase). (Table rendered by the author.)
- Table 8. The bipartite conjugation pattern in Coptic (Sahidic). (Table rendered by the author.)
- Table 9. Examples of the grammaticalized (later) allative future in late Demotic: P.London-Leiden (LL), P.Vienna 6920 (HS), Late Demotic Gardening Agreement (GA), and Graffito Philae 416 (Ph) (Johnson 1976: 63-66; Quack 2006: 193-194; *fc.*). (Table rendered by the author.)
- Table 10. Verbal sentence patterns in Coptic (Sahidic) (TAM = Tense-Aspect-Mood). (Table rendered by the author.)
- Table 11. Examples of lexicalized relics of *sdm:f* formation and verboids forming verb-subject predications in Coptic (Sahidic). (Table rendered by the author.)
- Table 12. Morphology of converters in Demotic and Coptic. (Table rendered by the author.)
- Table 13. “What NN has done to me,” phrased by means of relative forms in Demotic and Old-Coptic, v. converted past in Coptic. (Table rendered by the author.)
- Table 14. Greek loanwords in Coptic: numbers of types (Greek *lemma* list) and tokens attested in a corpus of c. 2,000 texts, subdivided according to part of speech. (Table rendered by the author; figures © DDGLC project, March 2020.)