Borrowing into Coptic, the Other Story

Arabic Words in Coptic Texts

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1 Outline of a fallow field of research

Research on pre-Arabic Semitic loanwords in Egyptian has a long tradition,[2] and the study of non-Semitic and particularly Greek loanwords in Egyptian has long since been acknowledged as a *desideratum*, which is currently being tackled anew by the *DDGLC* project.[3] However, the language contact between Coptic and Arabic – this is to say, the very phase in the history of Egyptian-Coptic that eventually led to the obsolescence of the earliest and longest-lasting human language attested so far – has received relatively scarce scholarly attention.[4] While one outcome of this contact – the Coptic substrate in Egyptian Arabic – has been dealt with on occasion,[5] Arabic loanwords in Coptic passed almost unnoticed up to now.[6]

A bit unbelievable at first glance, this situation becomes easily understandable if the distribution of Arabic words throughout Coptic texts is taken into account. It is in fact only a very small segment of genres/registers within the Coptic textual universe whose lexical decorum went so far as to allow Arabic words to surface in the Coptic written langauge. Moreover, the Coptic texts representing these registers belong to the ones most

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2   Cf. e.g. Burchardt 1909/1910 (1259 entries though including proper names); Hoch 1994 (595 entries); Vittmann 1996, 435–447; Quack 2005, 307–338; Winand in this volume.

3   See most recently Grossman 2013 and the articles in this volume. On earlier approaches to the Greek loan vocabulary in Coptic see, e.g., Abel 1876, 549–50; Rahlfs 1912; Hopfner 1918; Blok 1927; Gaselee 1929/30; Lefort 1934; Böhlig 1953, 1954a, 1954b; Weiss 1969; Tubach 1999a, 1999b; Girgis 1963–2001 [= id., 2010]; Förster 2002; on the recent labors of the project Database and Dictionary of Greek Loanwords in Coptic, see Almond et al. 2013 and Richter (forthcoming).

4   Cf. most recently Papaconstantinou 2012; Richter 2009b; Zaborowski 2008.

5   Cf. Praetorius 1901, 1902; Galtier 1902; Sobhy 1950; Bishai 1960, 1961, 1962, 1964; Ishaq 1975, 1991; Diem 1979; Behnstedt 1981, 1997; Schenkel 2002; Soliman 2007; Corriente 2008; Lucas & Lash 2010; Peust 2010a, 2010b.

6   Cf. Stern 1885, 117–119; von Lemm 1903b, 35f.; Chassinat 1921, Worrell 1934, Vycichl 1991, more recently Richter 2001, 2006 and 2015b. The article published by Ahmed 2013 is a mess of uncritically quoted instances of Arabic words from BL Ms. Or 3669(1) and P.Méd.Copt.IFAO based on Stern 1885 and Chassinat 1921, and transcriptions of Arabic words from the Copto-Arabic allographic ms. edited by Casanova 1901, Sobhy 1926 and Burmester 1965/66, which Sohair senselessly takes as "loanword" instances.

persistently neglected by editors: the large corpus of late Coptic documentary texts[7] and the small corpus of Coptic scientific texts, especially medical[8] and alchemical[9] recipes in manuscripts from the 9th to the 11th centuries. In contrast, the entire body of Coptic literature up to compositions of the later or even latest period[10] – namely, the Coptic literary language – is entirely free of Arabic words.[11] This is the reason why the basic lexicographical data have not yet been systematically collected, let alone philologically commented on or even linguistically analyzed.[12]

The glossary of Arabic words in Coptic on which I have been working over the last few years contains ca. 500 lemmata by now.[13] This number is not impressive if compared with the massive Coptic loan vocabulary borrowed from Greek (it amounts to about a tenth of the latter);[14] rather, it approximates the number of Semitic loanwords in Late Egyptian as counted by Hoch 1994.

The two aforementioned genres – late Coptic scientific and documentary texts – are not closely related to each other, but they share an emergence from functional domains more directly tied to real life than the extra-quotidian, ceremonial domains of literary texts. The concomittant effect is that their vocabulary is more receptive to contemporary colloquial expressions, such as modern product names or currently valid terminologies.

Roughly half the share of Arabic words recorded so far comes from late Coptic scientific (including magical) texts.[15] It is evident that many of the terms rendered by Arabic

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7 Cf. Richter 2000, 2003, 2008.

8 Till 1951; Richter 2014a.

9 Vgl. Richter 2009, 2010a, 2014b.

10 One single exception being the late Bohairic martyrdom of the neo-martyr John of Phanijoit dating to the 13th century, where a couple of Arabic words are used; see most recently Krueger 2015.

11 Scholars judging from the perspective of Coptic literature are thus right to deny the mere existence of borrowing from Arabic into Coptic, as did already Schwartze & Steinthal 1850 (p. 5): "Es ist auch leicht erklärlich, dass man nur Griechische und Lateinische Wörter, nicht aber Arabische einflocht, welche letztere als zu trivial verschmäht wurden."

12 An early advocate of this kind of work is Oskar von Lemm 1903b (35f., n. 41): "Eine grosse Anzahl arabischer Lehnwörter im Koptischen wird sich noch in den koptischen Papyrusurkunden finden, besonders in der Sammlung Erzherzog Rainer. – Es wäre eine nützliche Arbeit einmal ein möglichst vollständiges Verzeichnis dieser Wörter zusammenzustellen".

13 A list of some 170 Arabic proper names in Coptic texts is now available in Legendre 2014.

14 The Greek lemma list of the *DDGLC* project contains about 5000 types by now.

15 *Mathematical exercises* BL Or. 5707 (ed. Drescher 1948/49, reed. SBKopt. 331–332), parchment, about 900 CE; *astronomical list* BN 132,5 fol. 9 ed. Bouriant 1904, cf. von Lemm 1903b, 35f., paper, 10th–11th c. CE; *alchemical recipes* BL Or. 3669(1) = P.Lond.Copt. I 374 (ed. Stern 1885), parchment quire, 10th c. CE; Bodl. Ms.Copt. a.1, 2 and 3 (unedited, Kahle notebook 33, Crum notebook 83, cf. Richter 2009, 2010a and 2015), vertical stripes of papyrus, 10th c. CE, P. Chassinat 1 & 2 (cf. Chassinat 1955, 15); *list of (dying?) substances* CG 8028 (ed. Crum 1902v, n° 8028; von Lemm 1903b, xviif.; Richter 2015,163) paper; *medical recipes* BKU I 26, paper, 10th–11th c. CE, from the Fayyum; P.Lond.Copt. I 527 + P.Ryl.Copt. 412, paper, 10th–11th c. CE, from the Fayyum; *two medical recipes* ed. Munier 1919 (reed. Chassinat 1950) paper; P.Louvre AF 12530 (ed. Richter 2014), papyrus, 10th c. CE; P.Méd.Copt.IFAO (ed. Chassinat 1921), papyrus scroll, from Meshaikh (Lepidontopolis), 9th–10th c. CE; P.Ryl.Copt. 106, paper, 11th–12th c. CE; P.Ryl. Copt. 110 paper, 11th c. CE; SBKopt. 001 (ed. Till 1952), paper, 10th–11th c. CE; SBKopt. 005,

words in these texts were loaded with technical meaning,[16] and may accordingly belong to parts of vocabulary less widely shared and less conventionalized than the Arabic words found in documentary texts. On the other hand, it is likely that these terms were not merely idiosyncratic choices and *ad hoc* code-switches, but formed a regular component of a technical jargon (or repertoire, in the terms of Matras 2009), shared by the community of Coptic-speaking (and Coptic-reading) people who were involved in these kinds of practices. Regardless of their status as loaned vocabulary, these words are of great benefit to our understanding, since the identification of their Arabic input forms is mostly unproblematic, and our idea of regular correspondences between Arabic phonemes and Coptic graphemes (see below, point 2) and of the loan morphology of Arabic items in Coptic (see below, point 3) are mainly based on this body of evidence.The other half comes from around 100 edited and a handful of unedited Coptic documentary texts – legal deeds, lists, accounts and letters.[17] They attest for the borrowing of colloquial Arabic words starting as early as in the 8th century, and more intensely in the 10th and 11th centuries. While Arabic loanwords in 8th-century Coptic documents exclusively belong to the "new things and new concepts" type of borrowing (such as the name of the Arabic silver currency ⲧⲉⲣ2ⲁⲙ *dirham*), later texts bear evidence for the successive integration of less specific Arabic words into the Coptic everyday language up until what looks like the beginning of relexification.[18] It is thus sufficiently clear that at the end of the 1st millennium CE, Arabic words – mostly nouns, but also a few verbs (see below, 3.2) – had become an intergral part of the Egyptian lexicon. Due to the semantic deficiency of documentary texts in general, it is sometimes difficult to identify such words and their meanings with a fair degree of certainty, especially if phoneme-grapheme correspondences are ambiguous (see below, 2). On the other hand, Coptic spellings of Arabic words can sometimes inform Middle Arabic lexicography. For instance, the unpunctuated spelling of an attribute of the Arabic

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paper, 11th–12th c. CE; *magical recipes* P.Cairo 42573 (ed. Chassinat 1955), paper, 10th–11th c. CE; P.Berl. 5744 (ed. W. Beltz 1983, p. 63), papyrus; P.Heid. inv. K 137 (ed. Grohmann/Bilabel 1934), parchment, dated 684 *Hijra* = 967 CE; P.Heid inv. K 685 (ed. Meyer); P.Heid. inv. K 686 (ed. Kropp 1966); P.Heid. inv. K 408 (ed. Beck, fc.), paper, 10th–11th c. CE.

16 Cf. Richter 2009a.

17 *P.Fay.Copt.* (ed. Crum 1893) 15, 18, 22, 23, 26, 45, 48, 55, *CPR II* (ed. Krall 1895) 1; *CPR IV* (ed. Till 1958) 111, 168c, 168e; *O.Vindob.Copt.* (Till 1960) 121, 146; *P.Bal.* (ed. Kahle 1954) 102, 187, 286, 291, 322, 323, 326, 334, 338; *P. BL Or. Ms. 13885* (unpublished late Fayyum account book, 11th c. CE); *P.HermitageCopt.* (ed. Jernstedt 1959a) 51; *P.Gascou* 60 (ed. Richter 2016a, late Coptic account book dated 1063 CE); *P.Köln.* 466 (ed. Schenke, legal document from Teshlot archive, 11th c. CE); *P.Ibrîm* (unpublished letter of Pe(t)ro, Paper, 11th c. CE, by courtesy of Joost Hagen); *P.Lips. inv.* 250 und 260 (ed. Richter 2008); *P.Lond.Copt. I* (ed. Crum 1905) 459, 487 529, 530, 531, 552, 569, 613, 659, 660, 673, 684, 699, 700, 702, 706, 707, 708, 1100, 1118, 1119, 1118, 1132, 1135, 1140, 1141, 1142, 1166, 1204, 1230; *P.Mich.Copt. III* (Worrell 1942) 18; *P.Monserrat* (ed. Torallas Tovar 2006); *P.Pushkin* (Jernstedt 1959b) 9, 10, 21, 24; *P.Ryl.Copt.* (Crum 1909) 32, 229 236, 243, 290, 298, 344, 351, 364, 367, 368, 373, 374, 377, 380, 382; *P.Strasbourg* (ed. Boud'hors et al.) 332, 333; *P.Teshlot* (ed. Green 1983; reed. Richter 2000, dated 413 *Hijra* (= 1022 CE) to 454 *Hijra* (= 1062 n. Chr.) 1–13; *P.Vindob. K* (Krall 1889 and information by courtesy of M. Hasitzka) 195, 803, 1001, 1167, 1229, 1298, 4727, 4824, 7694, 1101, 11890, 1712; 17305 17315, 17316; *O.CrumVC* (ed. Crum 1939) 49, 115, 129.

18 See Richter 2008.

gold coin, the *dīnār*, frequently attested in Arabic papyri and paper documents, could be read either as *al-maʕsūl* 'prepared with honey' (whatever this might mean), participle of a *verbum primae ʕayin*, or *al-maġsūl* 'washed' (whatever this might mean), participle of a *verbum primae ġayn*. The evidence of the Coptic spelling ⲁⲗⲙⲁⲕⲥⲟⲩⲗ helps to disambiguate the reading which apparently was *al-maġsūl* (primae ġayn).[19]

The following overview is meant to provide a more detailed and updated version of the entry in the *Encyclopedia of Arabic Language and Linguistics* (Richter 2006). A German version of it is to appear in the proceedings of an Academy colloquium at Leipzig in 2013 (ed. Dils, Fischer-Elfert & Popko).

2 Grapheme correspondence and loanword spellings

In this paragraph, practical problems in interpreting Coptic spellings of Arabic words, rather than general problems of late Coptic and Middle Arabic phonology,[20] will be addressed. Such issues in the intersection of phonology, philology and orthographic conventions were raised for the first time by Worrell in 1934. While Chassinat 1921 in his edition of the large Coptic medical papyrus belonging to the IFAO tacitly took the Arabic words therein to be Coptic spellings of written classical Arabic, Worrell rightly argued that

"they are records of the spoken word" and "They are colloquial. (…) In colloquial Arabic (…), there are no final long vowels in open syllables; and in colloquial one must make allowance for great variation in the short vowels of foreign words, particularly names of drugs, that do not fit into the noun morphology of the language."[21]

Worrell proposed a three-stages model to account for three different types of evidence and their sociolinguistic significance: 1) Arabic words in Coptic texts, 2) Copto-Arabic allography (Arabic text transcribed in Coptic script) and 3) Arabo-Coptic allography (Coptic text transcribed in Arabic script).[22]

Regarding his first stage – the one whose outcome interests us here – Worrell explained that "while Coptic was still a vigorous language the attempts at transliterating occasional Arabic words into it were clumsy and tentative."[23] However, the evidence upon which Worrell based this opinion amounted to no more than two manuscripts: the aforementioned IFAO medical papyrus (ed. Chassinat 1921) – a text displaying an exceptional de-

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19 As Werner Diem (personal communication) confirmed, this is likewise evidenced by Judaeo-Arabic spellings of the word.

20 As for these, cf. Blau 1988; Peust 1999; Satzinger 1972, 1991.

21 Worrell 1934, 123.

22 Worrell 1934, 122: "1, Coptic in full vitality, but taking up Arabic words; 2, Coptic still a living language, but Arabic in Coptic letters also used; 3, Coptic a dead language, represented in Arabic letters. To the first period belong the medical text of Chassinat and the alchemistic text of Stern. To the second period belong the text of Casanova and that of Sobhy. To the third period belong Galtier's liturgical texts in Arabic characters. (…) With the steady decay and arabization of Coptic has grown up a conventional system of transliteration." Cf. Worrell 1934, 3.

23 Worrell 1934, 5.

gree of variation in loanword spelling – and the alchemical treatise BL Or.MS 3669(1) (ed. Stern 1885). The volume and diversity of texts which I have been studying (see footnotes 15 and 17) throw a much brighter and quite differerent light on the regularity of loanword spellings. Indeed, the majority of philologically secure attestations shows rather stable, recurrent correspondences between Arabic sounds and Coptic graphemes, hence some degree of conventionalization of single word orthographies: to wit, the standardization of Arabic loanword spellings in Coptic was already in the 9th/10th century considerably higher than Worrell had assumed.[24]

Nonetheless, one faces real problems at the level of philological interpretation. There is a number of phoneme-grapheme-correspondences based on one-to-one relations, such as

$$\text{п} = \text{ب}\ (b),\ \text{р} = \text{ر}\ (r),\ \text{ш} = \text{ش}\ (\check{s}),\ \text{к} = \text{ق}\ (q),\ \text{λ} = \text{ل}\ (l),\ \text{м} = \text{م}\ (m),\ \text{ν} = \text{ن}\ (n)$$

or, likewise unproblematic, relations where more than one Coptic sign correspond with one single Arabic phoneme, such as

ч or в = ف (f),
ϭ (Sahidic) or ⲭ (Bohairic) = ج (ǧ).

However, since the phoneme inventory of Arabic goes far beyond that of Coptic, quite a number of Coptic graphemes can regularly or sporadically encode a range of Arabic phonemes. This is especially the case in the realm of dental and laryngal plosives and fricatives, such as

т ≈ ت (t), ث (ṭ), د (d), ذ (ḏ), ض (ḍ), ط (ṭ), ظ (ẓ),
ⲑ ≈ ت (t), ث (ṭ), د (d), ذ (ḏ),
с ≈ ز (z), س (s), ص (ṣ),
х ≈ خ (ḫ) or ك (k),
ϩ ≈ ح (ḥ), ه (h), sometimes even خ (ḫ),
ø ≈ ø, but also ع (ʕ) oder ا (ʔ).

If Coptic spellings contain two or even three signs of the latter type, the number of potentially underlying Arabic roots can quite uncomfortably increase.[25] In table 1 we distinguish frequently attested, i.e., more conventionalized correspondences, less frequently (however philologically secure) deviations from these conventions, and correpondences based on philologically vague identifications:[26]

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24 Significant variants are actually visible in the earliest loanword attestations (from the 8th century). E.g., the word пара is still alternating between spellings with and without аλ- and between feminine and masculine gender assignment.

25 In the Arabic *Apophthegmata patrum* manuscript spelled in Coptic letters (ed. Cassanova 1901, Sobhy 1926 und Burmester 1965/6), a number of Coptic letters are in a regular way accompgnied by Arabic letters above them to disambiguate their phonetic value in terms of Arabic: а (ع), ⲑ (ط), ت, ث), к (ق, ك), т (ط), х (ك), ϩ (ع, ح).

26 Worrell 1934 listed some problematic equivalents which may in turn mislead philology. E.g. the irregular correspondence of Arabic /b/ with Coptic в (instead of п), based on the word лавнс alone, has to be deleted since this word is already attested in pre-conquest Coptic texts and was borrowed

Table 1: Coptic transcription of Arabic consonantal phonemes (cf. also Worrell 1934, 129–131; Legendre 2014, 390–392)

Arabic		Coptic, regular	Coptic, irregular	Philologically insecure
أ	ʔ	ø, ⲁ (ⲁⲗⲗⲁⲥⲁⲁⲧ)	double consonant (ⲁⲙⲙⲟⲩⲣ) ⲋ (ⲭⲓⲑⲓⲣⲋ)	
ب	b	ⲡ		
ت	t	ⲇ, ⲧ	ⲑ (ⲁⲗⲭⲓⲡⲣⲓⲑ, ⲁⲗⲭⲉⲑⲓⲃ, ⲍⲉⲗⲑⲓⲑ)	
ث	ṯ	ⲑ	ⲧ (ⲁⲗⲙⲓⲣⲉⲧ, ⲁⲗⲙⲁⲧⲕⲁⲗ)	
ج	ǧ	Sahidic: ϭ, Bohairic: ⲭ (ⲉⲗⲉⲙⲭⲉⲗ and CG 8028)	ⲭ (ⲁⲥⲥⲉⲣⲓⲭ) ⲕ (ⲧⲏⲣⲕⲟⲩⲙⲁⲛ, ⲱⲉⲛⲕ) ⲱ (ⲁⲛⲁⲩⲣⲁⲱ)	ⲅ (ⲁⲣⲅⲁⲙⲟⲥ)
ح	ḥ	ⲋ	ø (ⲁⲗⲁⲥⲉⲗ, ⲕⲟⲗ),	ⲭ (ⲁⲗⲙⲉⲗⲭ)
خ	ḫ	mostly ⲭ, in Bohairic spelling also ⳉ (ⲁⲗⲙⲁⲓⲣⲏⳉ)	ⲱ (ⲁⲥⲥⲁⲣⲛⲏⲱ) ⲋ (ⲁⲗⲋⲁⲣⲁϭⲓ, ⲍⲁⲩⲗⲉⲛ, ⲁⲣⲣⲱⲍⲁⲙ) ø (ⲁⲩⲗⲁⲛ)	ⲕ (Bohairic ⲁⲗⲗⲓⲛⲉⲕ)
د	d	ⲇ, ⲧ	ⲑ (ⲁⲥⲥⲁⲑⲁⲣ, ⲟⲩⲧⲁⲣⲓⲑ)	
ذ	ḏ	ⲧ (ⲁⲧⲧⲁⲋⲁⲡ)		
ر	r	ⲣ	ⲗ	
ز	z	ⲥ	ⲍ (ⲅⲁⲍⲁⲟⲩⲁⲛ)	
س	s	ⲥ		
ش	š	ⲱ		
ص	ṣ	ⲥ		
ض	ḍ	ⲧ (ⲁⲡⲓⲁⲧ)		ⲑ (ⲁ(ⲛ)ⲛⲁⲑⲉⲣ)
ط	ṭ	ⲧ	ⲇ (ⲋⲱⲇⲱⲧ)	
ظ	ẓ	ⲧ (ⲁⲧⲧⲁⲋⲉⲣⲓ)		ⲥ (ⲛⲁⲥⲉⲣ)
ع	ʕ	ø	ⲁ (ⲁⲗⲗⲁⲕⲣⲁⲡ, ⲁⲥⲥⲁⲗⲁⲉ, ⲁⲣⲣⲱⲡⲁ) ⲉ (ⲁⲗϭⲉⲙⲉ) ⲉⲓ, ⲓ (ⲁⲗⲙⲟⲩⲥⲁⲉⲓⲇ, ⲁⲥⲥⲓⲣⲓ) ⲱ (ⲁⲣⲣⲁⲡⲱ) ⲣ (ⲥⲁⲣⲧⲁⲣ)	double consonant (ⲁⲗϭⲉⲗⲗⲉ)
غ	ġ	ⲅ (ⲁⲛ†ⲙⲁⲅ, ⲁⲗⲙⲟⲩⲗⲅⲁⲙ, ⲁⲗⲙⲁⲅⲣⲁ)	ⲕ (ⲁⲗⲙⲁⲕⲥⲟⲩⲗ)	ϭ (ⲁⲗϭⲁⲃⲓⲣⲓ, ⲁⲗϭⲉⲗⲗⲉ)
ف	f	ϥ, ⲃ	ⲟⲩ (ⲁⲗⲛⲟⲩ, ⲁⲑⲉⲥⲟⲩⲉ)	ⲡ (ⲁⲥⲡⲓⲋⲉⲛⲓ, ⲉⲥⲡⲓⲧⲉⲭ – note however variant spellings with b instead of f!)
ق	q	ⲕ (ⲁⲥⲥⲓⲡⲁⲕ)	ⲅ (ⲁⲥⲥⲓⲡⲁⲅ) ϭ (ⲁⲧ†ⲡⲁϭ)	ⲭ (Bohairic ⲭⲁⲗⲗ)

from Greek. The likewise irregular correspondence of Arabic /k/ with Coptic ⲕ (instead of ⲭ) is indeed attested (apparently restricted to *qof* in final position), but the word *kušṭ* (quoted by Worrell) is not a valid instance of it because there is a variant form *qušṭ* in Arabic.

ك	k	ϫ	κ (ΑΛΜΙϹΚ)
ل	l	λ	ρ
م	m	м	
ن	n	N or assimilated м (ΑϹϹΟΥΜΠΟΥΛΕ, ΑϹϹΑΜΠΑΚ)	
و	w	ΟΥ (ΑΤΤΑΛΟΥ), Β (ΙΒΑΝ)	ω (ΖΩΛΩ)
ه	h	2 (ΑΤΤΑ2ΕΡΙ, ΑϹϹΟΥ2ΡΕ), ø (tā' marbūṭa)	2 (ϢΕϯΝΕ2)
ي	y	(ε)ι	

Correspondences between stressed or even unstressed Arabic vowels and Coptic graphemes (table 2) are much less standardized. They reflect a wide spectrum of distributional variation in quality and quantity of vowels. Further more, standard tools of Arabic lexicography such as the dictionaries of Lane, Dozy, Wahrmund, and Wehr – on which the identification of Arabic input forms is usually based – depend on Arabic sources chronologically and/ or geographically far from the 10th-century Egyptian colloquial Arabic idiom underlying the Arabic words in our texts, which throws further caveats on the vocalization of single lexemes.

Table 2: Coptic transcription of Arabic vocalic phonemes (cf. also Worrell 1934, 125–127; Legendre 2014, 390–392)

Arabic	Tone vowel	In unstressed syllable
ā	λ, λλ (ΑϹϹΑΡΤΑΑΝ) ε, н, εε (ΑΛΠΕΕΠ, ΑΛϬΕΕΜ), ι (ΑΛΚΙΛΙ), Υ (ΑΛΚΥΛΕΙ), Ο (following 'Ajin: ΑΡΡΑΠΟ), ω (following 'Ajin: ΑΡΑΠω), ωε (ΑΛΜωΕϹ)	λ, ε (ΑΛΠΕϹΟΥΡ, ΑΛΧΕΝΟΥΝ)
a	λλ (ΑΛΛΑϹΑΛΤ, ΑΛΜΝ2ΑΛΛ, ΑΛΠΟΥΤΑΑΚΕ), н (ΑΛΟΥΗΡΤ), ι (ΑΛϬΙϯ), ø (ΑϹϹΝϬΕ, ΑϹϹΟΥ2ΡΕ)	λ, ε, н (ΑΛΜΗΘΕΝΕ, ΑΛΜΗΝϹΗΑ, ΑΛΜΗϹΤΙΧΕ), ι (ΑΛΜΙϹΤΙΧΕ, ΑΛΧΙΘΙΡΕ), ø (ΑΛ2ϬΕΜ)
ū	Ο (ΑΛΧΟΡΕ, ΡΟ2), ΟΟ (ΑΛΧΑΡΡΟΟΠΕ), ΟΥ, ω (ΑΛΧΟΥϹωΡ, ΑΝΝωΡΕ, ΑΝϹΑΡωθ, ΑϢϢωΚΚΕ), ωω (ΑΛΧΑΒωωΡ)	ΟΥ, Ο (ΑΛΠΟΤΑΚΕ), ω (ΑΡΠωΡωΤ)
u	Ο (ΚΟΛ?), ΟΥ (ΑΝΟΥϹΕΛ), ω (ΑΛΜωΡ, ΑΛ2ωϬϬΕ, ΑΡωϹ)	ε (ΑΛΛωΛΕ, ΑΡΡΑϬΕΛ, ΑϹϬΕϬϹ), Ο (ΜΟΡΑΠΕ), ΟΥ, ω (ΑΛϬωΡωΠ, ΑΡΡωϹΑΜ), ø (ΑΛΜΝ2ΑΛΛ)
ī	ι, н	ι (ΑΤϯΠΑϬ)
i	λ (ΑΛΜΑΡϢΑ2), н (ΑΛΚΗΡΤ, ΜΗΡ2)	λ, ε, н, ι, ø (ΑΛΟΥϬϹΠ)
tā' marbūṭa		ε, λι (ΑΛΜΕϢΜΕΛΑΙ), ø (ΑΛΠΟΥΡΑΤ), ε2 (ϢΕϯΝΕ2), Υ (Fayyumic ΑΡΙ2Υ = Sahidic ΑΡΡΙ2Ε)

It has long been known that the duplication of vowels in Coptic transcriptions of Arabic words is used to render long vowels. Based on this observation, Joseph Greenberg has argued that vocalic gemination in Sahidic was not, as often assumed,[27] a means to encode glottal stop, but an indication of vocalic quantity.[28] However it seems to me that this argument does not sufficiently reflect the diachronic dimension of Coptic. It is certainly fair to say that vocalic duplication in 10th-century Sahidic, almost 700 years after the standardization of the Sahidic orthographic system, was phonetically realized in a way that made this spelling a plausible graphemic approximation to long vowels.

3 Morphology and syntactic integration of Arabic words in Coptic

3.1 Nouns

3.1.1 Substantives

It comes as no surprise that nouns, viz. substantives, yield the vast majority of Arabic words in Coptic (more than 450 out of ca. 500). As in other contact languages of Arabic, such as Portugese, Spanish, and Hausa,[29] the Arabic article اَل *al-* (ⲁⲗ-) was mostly retained in Coptic, this is to say, became lexicalized as a component of the borrowed noun itself, as in

ⲁⲗⲕⲁⲡⲉⲗⲉ *al-qabāla* 'lease contract',
ⲁⲗⲙⲁⲩⲁⲣⲧ *al-māward* 'rose water',
ⲁⲗⲭⲓⲙⲓⲉ *al-kīmya* 'alchimia (as designation of the elixir)'.

In front of *ḥurūf šamsīja* this lexicalized article is always assimilated and was often spelled haplographically, thus

ⲁ(ⲑ)ⲑ..., *e.g.* ⲁⲑⲁⲥⲕⲓⲉⲓⲉ *al-tasqija* 'watering'; ⲁⲑⲟⲩⲃⲁ *al-ṭufl* 'yeast',

ⲁ(ⲧ)ⲧ..., *e.g.* ⲁⲧⲧⲁⲗⲕ *al-ṭalq* 'mica'; ⲁⲧⲧⲁⲗⲟⲩ *al-dalw* 'bucket'; ⲁⲧⲧⲁϩⲁⲡ *al-ḏahab* 'gold',

ⲁ(ⲥ)ⲥ..., *e.g.* ⲁⲥⲥⲟⲩⲭⲭⲁⲣ *al-sukkar* 'sugar', ⲁⲥⲥⲁⲣϥ *al-ṣarf* 'agio', ⲁⲥⲥⲉⲣⲛⲏϩ *al-zirnīḫ* 'arsenic',

ⲁ(ϣ)ϣ..., *e.g.* ⲁϣϣⲉⲧⲓⲛⲁϩ *al-šadanā* 'hematite'; ⲁϣϣⲱⲕⲕⲉ *al-šuqqa* 'cloths',

ⲁ(ⲣ)ⲣ..., *e.g.* ⲁⲣⲣⲁⲡⲟ *al-rubʿa* '(a measure)', ⲁⲣⲣⲱϩⲁⲙ *al-ruḫām* 'marble'; ⲁⲣⲱⲥ *al-ruzz* 'rice',

ⲁ(ⲛ)ⲛ..., *e.g.* ⲁⲛⲛⲱⲣⲉ *al-nūra* 'lime', ⲁⲛⲟⲩⲥⲁ *al-nuzl* 'allowance', ⲁⲛⲁⲩⲣⲏϣ *an-naurağ* 'harrow'.

As goes without saying, Arabic loanwords prefixed with the article *al-* were indeterminate nouns in terms of Coptic and had to be processed into recipient language noun phrases by means of Coptic nominal syntax:

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27 So Steindorff 1894, 1904; Till 1930; Vergote 1973; Kasser 1991.
28 Greenberg 1962; so already Kuentz 1934; also Peust 1999, 205–210 agreed with this view.
29 See Corriente 2007; Kiesler 1994.

ΟΥ-ⲀⲖⲔⲀⲠⲈⲖⲈ ⲚⲀⲦ-∅-ⲀⲖⲘⲒⲤⲀⲌⲈ 'a lease contract (*al-qabāla*) **without** ∅ surveying (*al-misāha*)'.

The rule of the co-borrowed article has some regular exceptions in words which are also mostly used in Arabic without the article, such as

ⲆⲈⲢⲌⲀⲘ 'Dirham',

ⲌⲀⲠⲈ 'Habba (weight)',

as well as nouns in the (Arabic) construct state (see below, 4.1), such as

ⲌⲀⲠⲀⲐ in: ⲌⲀⲠⲀⲐ ⲀⲦⲦⲀⲌⲀⲠ *habat al-dahab* 'gold slack'.

Apart from those explicable exceptions, there is a range of sporadic, idiosyncratic deviations from this norm. These include early (*i.e.*, 8th-century) attestations of the word ⲠⲀⲢⲀ (*barā'a*) 'receipt' as opposed to the later standard ⲀⲖⲠⲀⲢⲀ, all Arabic loanwords written by the first hand of the medical papyrus P.Louvre AF 12530 (ed. Richter 2014), or a number of the Arabic loanwords in the medical papyrus of the IFAO (ed. Chassinat 1921). The first case may point to a lack of conventionalization of what would become the morphological rule; the latter cases could mean that the scribes were so well-versed in Arabic that they analysed Arabic loanwords in terms of source language usage.[30] Since categories such as gender, number and case relations in Coptic are not morphologically marked but rendered by adpositions (prefixed determinators, casemarking prepositions etc.), any given input form, normally the singular form of the borrowed noun,[31] could easily meet the requirements of Coptic nominal syntax.

Gender assignment of the morphologically gender-marked Arabic nouns in Coptic worked the same way as it already worked with nouns borrowed from Greek: In almost all cases, the gender of the donor language is simply retained, with the result that (Coptic) female gender is assigned to Arabic words ending in *-a* (*tā'marbūṭa*, in Coptic mostly spelled ⲉ), and (Coptic) masculine gender to all others:

Feminine nouns:[32]

(Ⲧ-)ⲀⲖⲄⲞⲨⲘⲖⲈ *al-ǧumla* 'sum',

(Ⲧ-)ⲀⲖⲄⲞⲨⲠⲠⲈ *al-ǧubba* 'overgarment, cloak',

(Ⲧ-)ⲀⲤⲤⲞⲨⲌⲢⲈ *al-zuhara* '(planet) Venus'

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30 All words written by the first hand of P.Louvre AF 12530 belong to a list of inorganic substances specified by different quantities, and are therefore indeterminate in terms of Coptic as well as Arabic.

31 When the plural has a specific usage or meaning in Arabic, plural forms can appear as input forms, as ⲀⲖⲘⲞⲨⲘⲈⲚⲒⲚ *mu'minīn* (sg. *mu'min*) 'believers (*i.e.*, the congregation of Muslims)' in the Coptic spelling of the caliph's title *amīr almu'minīn* 'commander of the believers' (also in Greek documents of the 8th c. such as P.Lond. IV *passim*: ἀμιραλμουμνιν) or (ⲀⲖ)ⲞⲨⲤⲰⲖ < *al-'uṣūl* (sg. *'aṣal*) 'honeys' in *Bodl. MS Copt. (P) a.2*, 68–70 where several sorts of honey are mentioned, possibly due to the usage recorded by Lane I/5 2046a: "pls. are used when one means sorts of *'asal*".

32 An exception being the word ⲠⲀⲢⲀ (*barā'a*) which is sometimes used as a feminine noun, probably due to its morphology resembling (Greek and Arabic) feminine nouns.

Maculine nouns:[33]

(ⲡ-)ⲁⲗⲁⲁⲕⲧ *al-ʕaqd* 'fixed, thickened substance',

(ⲡ-)ⲁⲗⲗⲱⲗⲉ *al-lū'lu'* 'perl',

(ⲡ-)ⲁⲗⲅⲟⲩⲙⲉ *al-ğummā'* 'total amount'.

3.1.2 Adjectives

Among Arabic nouns in Coptic, there is a number of adjectives from several semantic and morphological classes, such as

Color terms:

ⲁⲡⲓⲁⲧ *abjaḍ* 'white'

ⲁⲗⲁ²ⲙⲁⲣ *al-aḥmar* 'red'

(ⲁⲗ-)ⲁⲥⲃⲁⲣ *(al-)aṣfar* 'yellow'

Nisbas derived from toponyms:

ⲁⲗⲕⲟⲩⲡⲣⲟⲩⲥⲓ *al-qubrusī* 'Cypriote'

ⲁⲥⲡⲓ²ⲉⲛⲓ *iṣbahānī* 'from Isfahan, Persian'

ⲁⲱⲉⲙⲓ *al-šāmī* 'Syriac'

Nisbas derived from personal names:

ⲁⲗⲍⲁⲭⲉⲓⲙⲉⲓ *al-ḥākimī* 'of (the caliph) al-Hakim'

ⲁⲧⲧⲁ²ⲉⲣⲉⲓ *al-ẓāhirī* 'of (the caliph) al-Ẓahir'

Participles:

ⲙⲁ²ⲗⲟⲩⲗ *maḥlūl* 'dissolved'

ⲁⲗⲙⲟⲩⲥⲁⲁⲧ *al-muṣaʕʕad* 'sublimed, volatilized'

ⲁⲗⲙⲟⲩⲥⲁⲃⲃⲓ *al-muṣaffi* 'pured, filtered'

ⲁⲗⲙⲟⲩⲟⲩⲉⲓ *al-māwiyy* 'diluted (with water)'

ⲁⲗⲙⲟⲩⲅⲁⲣⲣⲁⲡ *al-muğarrab* 'proven'.

The usage of all of them is more or less restricted to particular contexts or even to collocation with specific substantives. Color terms as well as nisbas derived from toponyms, for instance, occur mostly in designations of mineral ingredients in recipes. Nisbas derived from names of Fatimid caliphs are used to specify certain issues of the *dīnār*, as in the contemporary Arabic terminology around coins and currency.[34] Participles of verbs from the terminological set of alchemical procedures (*tadābīr*)[35] surface in alchemical contexts, as does the adjective ⲁⲗⲁⲙⲓⲉ *al-ʕamyā* 'blind', whose application is restricted to the blindness of things like a 'blind flask' ⲁⲗⲕⲁⲣⲁ ⲛⲁⲗⲁⲙⲓⲉ (*al-qarʕa al-'amyā*, an alchemical device)[36].

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33 Exceptions being the words ⲁⲑⲁⲥⲕⲓⲉⲓⲉ *al-tasqija* 'watering' and ⲁⲑⲉⲥⲟⲩⲉ *al-tasfija* 'purification', as well as ⲁⲗⲡⲟⲩⲣⲁⲧⲉ *al-burāda* 'filings', which, though feminine-gendered in terms of Arabic, are masculine in Coptic, for no recognizable reason.

34 Cf. Grohmann 1954, 181–219; Richter 2000, 112f. note *f-f*.

35 Ullmann 1972, 261–265, see Richter 2015a, 177f. and 2015b, appendix II, p. 236.

36 See Siggel 1950, 99, s.v. *qarʕa*. The Coptic attestation comes from the recipes of *Bodl. Ms.Copt. a.2*, line 51.

3.2 Verbs

Against all expectations, time and time again I came across Arabic verbs in Coptic texts – almost 30 types, by now.[37] While Arabic nouns in Coptic are mostly unmistakable (due to the lexicalized Arabic article),[38] the morphology of Arabic loan verbs is not as obvious. It is therefore not unlikely that a number of Arabic verbs remained still unrecognised in already published late Coptic documents, if not hidden in the many unpublished items of this type of text.[39] The most frequently attested and easily identifiable Arabic verbs in Coptic are the ones belonging to the terminological set of *tadābīr* 'procedures',[40] such as

ⲁⲕⲏⲧ   '*aqada* II 'to fix, to thicken',

ⲁⲍⲙⲓ   *ḥamma* IV 'to heat up',

ⲉⲓϣⲟⲩⲓ   *šawā* I 'to roast, to calcinate',

ⲛ2ⲁⲗ   *ḥalla* VII 'to dissolve',

ⲥⲁⲃⲃⲓ   *ṣafā* II 'to clean',

ⲥⲁⲉⲓⲁ   *ṣaʿida* II 'to distil, to evaporate',

ⲧⲁⲡⲉⲣⲓ   *dabara* II 'to process'.

Occurring in Coptic medical as well as alchemical texts, these terms help us shape an idea of the morphology of Arabic loan verbs in Coptic and their possible input forms.[41] From unambiguously determinable forms, we get the impression that the most common input forms of Arabic verbs were imperatives; infinitives or imperfect forms (though stripped of personal prefixes) are found only rarely, if at all.[42] Notwithstanding the (source language) meaning of these input forms, the syntactic status of Arabic verbs in Coptic was generally that of an absolute state infinitive. As already in the much better established case of verb borrowing from Greek to Coptic,[43] loan verbs were not integrated in the morphosyntactic patters of the Coptic construct state and the stative.[44] The accusative case is therefore always realized by the object-marking construction with ⲛ-/ⲙⲙⲟ=.[45]

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37 See Richter 2015b for more details.

38 As far as I am aware, Crum has taken just one single Arabic word as an unknown Coptic item: Crum, *Coptic Dictionary* 15b, s.v. ⲁⲣⲱⲥ: "F-an f, obscure word: *P.Lond.Copt. I* 684". The form itself and its context corroborate the identification of this word with *al-ruzz* 'rice'.

39 An edition of the many unpublished Late Coptic letters is still a *desideratum*.

40 Ullmann 1972, 261–265.

41 On morphological patterns of Arabic verbs in Coptic, see Richter 2015b.

42 See Richter 2006, 498 and Richter 2015b.

43 On which see the papers of Egedi and Grossman & Richter in this volume.

44 The only exception which has come to my knowledge so far are two instances of a pronominal state form of the verb ⲙⲓⲥⲟⲟⲩ 'to rent' in the late Coptic poem *Triadon* (429,1 and 721,2), both of them forced by the necessity of a rhyme pattern, see Richter 2015b, 233, n. 19.

45 On the significance of this lack of full morpho-syntactic integration see Grossman & Richter in this volume.

3.3 Function words

In the alchemical recipes of British Library MS Or. 3669(1), ingredients are usually se-
quenced by ϩι- 'on, and', ⲙⲛ- 'with, and', or ⲁⲩⲱ 'and', while yet another morpheme,
spelled ⲱ, is used here in quite similar contexts. Stern 1885,[46] Chassinat 1921,[47] and the
present author[48] took this morpheme as a variant spelling of Arabic و *wa* 'and', but clear
Coptic transcriptions of the Arabic copulative conjunction (see below) are spelled dif-
ferently, and indeed ⲱ would not be a likely Coptic spelling of it. Therefore, ⲱ should
perhaps be interpreted as a spelling of the Arabic disjunctive conjunction أو *aw-* 'or'. All
examples of ⲱ- in BL MS Or. 3669(1) can, and some even should, be understood as 'or',
thus as suggesting alternative ingredients instead of adding further ones:

ϭⲟⲡ ⲡⲁⲥⲥⲓⲡⲁⲕ ⲛⲁⲗⲙⲟⲩⲥⲁⲁⲧ : ⲱ ⲡⲁⲛⲛⲟⲩϣⲁⲧⲉⲣ : ⲟⲩϣⲓ ⲉⲡⲟⲩⲁ ⲡⲟⲩⲁ 'take the
sublimated quicksilver or (*aw-?*) the sal-ammoniac, one part of each (*i.e.*, of either of
them)' BL Or. MS 3669(1), pag. 11, 2–3

ⲭⲓ ⲛⲁⲕ ⲛ̅ ⲓ̅ ⲛϣⲓ ⲛ̅ϩⲁⲁⲏⲧ : ⲱ ⲓ̅ : ⲛϣⲓ ⲛⲁⲥⲥⲉⲣⲛⲏϩ ⲛⲕⲟⲕⲕⲟⲥ 'Take 10 parts of the 'bird' or
(*aw-?*) 10 parts of red arsenic (*realgar*)' BL Or. MS 3669(1), pag. 11, 9–10

† ⲟⲩϣⲓ ⲛ̅ϩⲁⲧ ⲉⲭⲟ · ⲣ̅ · ⲛⲧⲉⲣϩⲁⲙ : ⲱ ⲟⲩϣⲓ ⲛ̅ⲛⲟⲩⲃ 'Give one part of silver onto 100
dirham, or else (*aw-?*) one part of gold' BL Or. MS 3669(1), pag. 14, 13–15

ϭⲟⲡ [ⲡ]ⲁⲥⲥⲉⲣⲛⲏϩ ⲉⲧⲧⲟⲣϣ : ⲱ ⲡⲁⲗⲁⲥⲃⲁⲣ : ⲟⲩϣⲓ ⲉⲡⲟⲩⲁ 'Take the red arsenic (*realgar*)
or (*aw-?*) the yellow one (*oripiment*), a part of each (*i.e.*, of either of them)' BL Or. MS
3669(1), pag. 20,4–5

ⲁⲩⲱ ⲡⲁⲗⲙⲁⲕⲁⲣ[ⲓϣ]ⲉ : ⲱ ⲡⲃⲁⲣⲟⲧ ⲉⲧⲣⲟϩⲕ ⲱ ⲡⲁⲥⲥⲁⲃⲃ[ⲏϩⲉ] 'And (ⲁⲩⲱ) the marcasite
or (*aw-?*) the burned copper or (*aw?*) the leaf[let of ...]' BL Or. MS 3669(1), pag. 7,
10–11

ϭⲟⲡ ⲡⲁϣϣⲏⲛⲗⲁⲥ : ⲱ ⲡⲁⲗⲙⲏⲥ†ⲭⲉ ⲱ ⲡⲁⲥⲥⲁⲙⲡⲁⲕ 'Take the whey(?) or (*aw?*) the
mastic gum or (*aw?*) the jasmine oil' BL Or. MS 3669(1), pag. 7, 18–19

ϭⲟⲡ ⲟ[ⲩ]ϣⲓ ϩⲛ̅ⲡⲁⲧⲧⲁⲗⲕ ⲧⲁⲁϥ ⲉⲩⲁⲗⲭⲟⲩⲥ : ⲱ ⲟⲩϣⲓ ϩⲙ̅ⲡⲙⲟⲟⲩ ⲉⲥⲟⲟⲩϩⲉ ⲧⲁϥ
ϩⲙⲡⲉϥⲉⲣⲏⲩ 'take one part of the talc stone, put it into a pitcher, or else (*aw-*) one part
of the egg white, stir it together' BL Or. MS 3669(1), pag. 8, 20–22

Yet we do find a few unmistakable instances of the Arabic conjunction *wa-* in Coptic texts.
In the IFAO medical papyrus (ed. Chassinat 1921), the sign و is inserted three times – even
spelled in Arabic script – in an otherwise Coptic sequence of ingredients, thus constituting
a linguistic as well as graphematic code-switch:

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46 Stern 1885, 119: "Das ⲱ findet sich in der Partikel ⲱ و *wa, u*, welche an die Stelle des alten ⲕⲁⲓ
    getreten ist."
47 Chassinat 1921, 155: "Le signe placé entre les différents noms de drogues est la particule copulative
    arabe و employée à la place de ⲙ̅ⲛ ou de ϩⲓ, et qui figure, mais transcrite cette fois par ⲱ, dans les
    fragments alchimiques publiés par Stern".
48 Richter 2006, 498f.

ογʒγρον εναnογϥ εnвaλ cιnϭιnιλ ϫ ʒογλιnϭan ϫ κaλanϥογρ ϫ coγмnογλ 7 ⲁ̄
εnογλ θνοοϥ καλⲱc 'A good powder for the eye: Ginger and (wa-) galangal and (wa-)
clove and (wa-) spikenard, one drachma of each of them, grind it carefully' *P.Méd.IFAO*
92–94, n° xlix (p. 155)

The medical recipes of P.Louvre AF12530 (ed. Richter 2014) also provide one example of
ϫ wa-, spelled ογλ[49] – the very spelling attested also in P.Strasb. 333 (ed. Legendre 2014,
see below):

ⲛⲅⲧⲓ acoγxap ογλ (λ)cаnⲣ ⲛⲅⲡⲁⲥⲧϥ 'and add sugar and (wa-) aloe syrup and boil it'
P.Louvre AF12530, v° 90

It is not likely that *wa-* was in any proper sense "borrowed". From a crosslinguistic com-
parison of the borrowability of utterance modifiers, Yaron Matras concluded a typologi-
cally wide-spread resistence towards borrowing words meaning 'and', even though Coptic
had even a particularly nuanced palette of means to coordinate noun phrases[50]. On Matras'
probabilistic borrowing scale, the meaning 'and' comes after that of 'but' and 'or'.[51] This
scale is corroborated by Coptic fuction words borrowed from Greek: While ἀλλά, δέ, and
ἤ are abundantly attested, καί is hardly existent outside phrases such as καιγαρ (thus not
meaning 'and').[52]

On the other hand, *wa-* was borrowed by some contact languages of Arabic,[53] and our
exemples show after all that *wa-* was accepted as a code-switch in certain contexts of the
late Coptic written language.

Further instances of *wa-*, also spelled ογ(λ) as in P.Louvre AF 12530, are found in
the 'list of allowances' (ⲡⲗⲱⲕⲥ [λόγος] (ⲛ)ⲡⲁⲛⲟⲩⲥⲉⲁ [al-nuzl]) of P.Strasb. 333 (ed.
Legendre 2014):

ογλ-εⲓⲛⲛ(ογ)ʒ 'et son fils' P.Strasb. K 333, 20.31
ογ-axⲱʒ 'et son frère' P.Strasb. K 333, 152.159

As examples of multi-morpheme expressions, these instances bring us to the next point:

4 Multi-morpheme expressions

We are talking here about the phenomenon of source language multi-morpheme expressions
internally governed by frozen source language syntax, otherwise called e.g. "chunks", "em-

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49 The Copto-Arabic 'Garshuni' manuscript ed. Casanova 1901, Sobhy 1926, and Burmester 1965/6
    spells it consistently ве *ve-*.
50 As already praised by Heinrich Ewald 1861: "Welche vorzüge hat zb. das Ägyptische schon durch
    seinen höchst mannichfachen aber stets genauen und folgerichtigen ausdruck für dás was wir bei
    uns beständig nur durch *und* ausdrücken!" (Ewald 1861, 162, n. 1).
51 See Matras 1998, 2007, 2009.
52 See the attestations in *Gertrud Bauer Zettelkasten Online*: <http://research.uni-leipzig.de/ddglc/
    bauer/index.html>.
53 See e.g. Kirchner 2009, 585 on *ve* (< *wa*) im Otoman Turkish.

bedded language islands", or "multi-word insertional codeswitching".[54] Arabic "chunks" in Coptic texts are instantiated by three kinds of nominal phrases:[55] the Arabic construct state (4.1), the extension of nouns by adjectival attributes (4.2), and possessive constructions (4.3).

4.1 Construct state

Attributive constructions of two Arabic nouns in Coptic are occasionally construed in the Arabic construct state pattern: A first noun, inevitably lacking the (Arabic) article, is immediately (*i.e.*, without the Coptic relation particle ⲛ- or its allomorphs ⲙ-, ⲉⲛ-, ⲉ-) followed by a second noun which needs to be prefixed with the (Arabic) article, as in

ⲍⲁϭⲁⲣ ⲁⲧⲧⲁⲗⲕ *ḥaǧar al-ṭalq* 'talc stone',
ⲍⲁⲡⲁⲑ ⲁⲧⲧⲁⲍⲁⲡ *ḥabat al-dahab* 'gold slack',

in contrast to the (more frequently attested) attributive construction connecting two Arabic nouns by means of the Coptic relation particle ⲛ-, as in

ⲁⲗⲃⲁⲍⲙ ⲛ-ⲁⲗⲭⲟⲣⲉ *al-faḥm al-kūr* 'furnace coal',
ⲟⲩ-ⲁⲗⲙⲛⲍⲁⲗ ⲉ-ⲙⲁⲩⲁⲣⲧ *al-munḥal al-mā'-ward* 'a rosewater-sieve',
ⲡⲓ-ⲁⲗⲡⲟⲩⲣⲁⲧⲉ ⲛ-ⲁⲗⲍⲁⲧⲓⲧ *al-burāda al-ḥadīd* 'these iron filings'.

N.B.: *al-* attached to the first noun would be impossible in terms of Arabic nominal syntax.

4.2 Attributive extension by adjectives

The Arabic adjective construction, consisting of a noun plus an adjective being congruent in case, gender, number and determination, as in

ⲙⲁⲣⲕⲁϣⲓⲑⲉ ⲁⲡⲓⲁⲧ *marqāšīta abjaḍ* 'white marcasite',
ⲁⲧⲧⲁⲗⲕ ⲁⲗⲁⲍⲙⲁⲣ *al-ṭalq al-aḥmar* 'the red talc'

is occasionally chosen instead of the (more frequently attested) attributive construction by means of the Coptic relation particle ⲛ-, as in

ⲁⲗⲭⲓⲡⲣⲓⲧ ⲉⲛ-ⲁⲗⲁⲥⲃⲁⲣ *al-kibrīt al-aṣfar* 'yellow sulphur' BL Or 3669(1), fol. 9r, 15–16,
ⲙⲁⲣⲕⲁϣⲓⲑⲉ ⲉⲛ-ⲁⲗⲁⲥⲃⲁⲣ *al-marqāšīta al-aṣfar* 'yellow marcasite' BL Or 3669(1), fol. 7r,16.

N. B.: An adjective prefixed by *al-* though extending an indeterminate noun as in ⲙⲁⲣⲕⲁϣⲓⲑⲉ ⲉⲛ-ⲁⲗⲁⲥⲃⲁⲣ would be impossible in terms of Arabic nominal syntax.

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54 The concept behind the term "embedded language island" (Myers-Scotton 1993 and 2002) has been challenged by scholars such as Backhus 1999 (who prefers "chunks"); on the continuum of "one-word" and "multi-word insertional codeswitching" see Matras 2009, 112–131.

55 Similar instances of attributive phrases found in the Greek vocabulary in Coptic, such as ⲁⲡⲟⲥⲧⲟⲗⲓⲕⲏ ⲉⲕⲕⲗⲏⲥⲓⲁ, 'apostolic church', ⲑⲉⲓⲟⲛ ⲅⲣⲁⲙⲙⲁ, 'divine law', ⲑⲉⲓⲟⲥ ⲗⲟⲅⲟⲥ, 'divine word', ⲕⲁⲑⲟⲗⲓⲕⲏ ⲉⲕⲕⲗⲏⲥⲓⲁ, 'universal church', ⲧⲣⲓⲧⲟⲛ ⲙⲉⲣⲟⲥ 'third part', ⲧⲉⲗⲉⲓⲁ ⲧⲓⲙⲏ 'complete price', are systematically collected in the *Database and Dictionary of Greek Words in Coptic*.

4.3 Possessive-marked nominal phrases

The aforementioned list of allowances (ⲡⲗⲱⲕⲥ [λόγος] ⲡⲁⲛⲟⲩⲥⲉⲗ [*al-nuzl*]), in P.Strasb. K 333 (ed. Legendre 2014) which is remarkable in several respects, contains a number of instances of possessive-marked nominal phrases:

ⲉⲓⲡⲛ(ⲟⲩ)ⳅ *ibnūh* 'his son' P.Strasb. K 333, 20.24.31.188

ⲁⲭⲱⳅ *aḫūh* 'his brother' P.Strasb. K 333, 19.152.159.185

side by side with their Coptic equivalents ⲡⲉⲃⲱⲏⲣⲓ 'his son' and ⲡⲉⲃⲥⲁⲛ 'his brother'.

5 Concluding remarks

Compared to the study of Greek-Egyptian linguistic interferences, borrowing from Arabic into Coptic was (and still is) the other, much less well-known story about language contact in 1st-millennium CE Egypt. Although the eventual outcome of the contact between Coptic and Arabic – namely, the obsolescence of Coptic and the language shift of its speakers to Arabic – is a well-known fact, the century-long interrelation between the languages has not properly been studied as of yet, even less so since it is obscured by the conservative norm of literary Coptic. A systematic record and an in-depth study of the linguistic impact of Arabic on certain registers of the later Coptic written language helps us see that the eventual result – the language death of the Egyptian-Coptic language – did not quite "come out of the blue". Although only first attempts have been conducted so far, they already provide evidence for a not insignificant *number* and a certain *range of parts of speech* of Arabic words that had gradually been absorbed by the Coptic language in its terminal phase.

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