Distinguishing Phonological Changes from Interdialectal Interferences in Ancient Records: the case of Egyptian \underline{d} , $\underline{t} \rightarrow c = \text{Coptic } \underline{x}$ versus Egyptian \underline{d} , $\underline{t} \rightarrow t = \text{Coptic } \underline{\tau}$.

Keywords:

Egyptology; Egyptian; Late Egyptian; Coptic; dialects; palatals; historical phonology

Abstract - English

The development of the Egyptian palatals \underline{d} and \underline{t} has long been a thorny issue in Egyptian linguistics. No convincing phonological rule has been identified so far. In the present paper I argue that the distribution of these outcomes is the result of inter-dialectal borrowings between a pre-Coptic C-Dialect in which \underline{d} , $\underline{t} \to c = x$ and a pre-Coptic T-Dialect in which \underline{d} , $\underline{t} \to t = \tau$. It is then argued that the attested Coptic dialects derive from T-Dialects with lexical borrowings from C-Dialects. A preliminary discussion of the sociolinguistic contexts of these dialects is presented in the second part of the article, where it is suggested that the C-Dialect may have been associated with the area of Avaris/Pi-Ramses/Tanis and may have become a prestigious dialect and thus a source of lexical borrowings starting from the 19th dynasty.

Abstract - French

Le développement des palatales égyptiens \underline{d} et \underline{t} constitue depuis longtemps un sujet épineux en linguistique égyptienne. Jusqu'à présent, aucune règle phonologique convaincante n'a été identifiée. Dans le présent article, je tente de démontrer que la distribution finale de ces phonèmes est le résultat d'emprunts inter-dialectaux entre deux variétés d'Égyptien précopte, à savoir un 'dialecte C' dans lequel $\underline{d}, \underline{t} \to c = x$ et un 'dialecte T' dans lequel $\underline{d}, \underline{t} \to t = \tau$. Je montre aussi ensuite que les dialectes coptes attestés dérivent de dialectes égyptiens précoptes T, avec des emprunts lexicaux aux dialectes C. Une discussion préliminaire sur les contextes sociolinguistiques de ces dialectes est présentée dans la deuxième partie de l'article, où il est également suggéré que le dialecte C pourrait avoir été associé à la zone d'Avaris / Pi-Ramses / Tanis et pourrait être devenu un dialecte de prestige et donc une source d'emprunts lexicaux pendant et après la 19e dynastie.

Abstract - German

Die Entwicklung der ägyptischen Palatale \underline{d} und \underline{t} ist seit langem ein heikles Thema in der Ägyptologie. Bisher wurde hierzu noch keine überzeugende phonologische Regel identifiziert. Im vorliegenden Artikel argumentiere ich, dass die Verteilung dieser Resultate keine unterschiedlichen phonologischen Entwicklungen innerhalb einer einzelnen Varietät des Ägyptischen darstellt, sondern viel eher auf interdialektale Entlehnung zwischen zwei vorkoptischen Varietäten des Ägyptischen zurückgeht, dem C-Dialekt, in dem \underline{d} , $\underline{t} \rightarrow c = x$, und dem T-Dialekt, in dem \underline{d} , $\underline{t} \rightarrow t = \tau$. Desweiteren argumentiere ich, dass die bezeugten koptischen Dialekte den vorkoptischen T-Dialekten des Ägyptischen mit Entlehnungen aus den C-Dialekten entstammen. Eine Diskussion der soziolinguistischen Kontexte dieser Dialekte wird im zweiten Teil des Artikels vorgestellt, wo auch dafür argumentiert wird, dass der C-Dialekt möglicherweise dem Gebiet von Avaris/Pi-Ramses/Tanis entspricht und als

Prestigedialekt die Quelle der lexikalischen Entlehnung während und nach der 19. Dynastie war.

Introduction

Ancient Egyptian is characterized by one of the longest attested histories. During most of its history, the language has been written with a partially phonetic writing system:² it is thus possible to follow the developments of various phonemes over multiple millennia. Variations are common, both in the way many of these phonemes are recorded in the texts, and in the way they seem to evolve over time. This latter point is especially interesting: it is in fact not uncommon that a same single Ancient Egyptian phoneme seems to correspond to two or more distinct phonemes within the same single Coptic dialect. Somehow surprisingly, most of these variations have not received any specific, convincing explanation. Some rules have been suggested, but in general they are not satisfying, as they usually apply only to selected instances and they are usually unable to coherently explain most of the cases. In spite of that, the general assumption is that these variations are indeed the result of specific sound changes controlled by specific phonological rules. Simply, it is usually assumed that the specific conditions governing these rules still need to be discovered. The present paper aims at challenging this idea, suggesting that at least some of the variations observed in relation with these phonemes are not the outcome of complex yet-to-discover rules of phonological change, but rather they derive from inter-dialectal 3 borrowings and are thus the result of sociolinguistic phenomena.

The Egyptian-Coptic case is, of course, the main focus of this paper. Nevertheless, the approach employed, and the results obtained, can be of interest well beyond the field of Egyptian or Afro-Asiatic linguistics.⁴ In particular, the question of variation in ancient records is crucial for many languages, and so is the issue of distinguishing genuine phonological developments and genuine inherited words from those that, instead, are the result of interdialectal borrowings and sociolinguistic phenomena in general. This is especially true for languages without living descendants, as written records provide only a fragmentary and scattered (both geographically and temporally) glimpse of their socio-historical linguistic complexities. This paper, therefore, can also be seen as a case study that aims at illustrating how different perspectives and different types of evidence can be combined into a coherent approach to explore these kinds of questions.

§1 The Issue

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¹ From Archaic and Old Egyptian in the 3rd millennium BCE, to Coptic well into the Middle Ages. In particular, the language is usually divided into a sequence of phases that can be approximated as follow (the dates can slightly vary depending on the parameters considered by the various authors): Old Egyptian (from before 3000 to circa 2000 BCE), Middle Egyptian (from c. 2000 to c. 1300 BCE), Late Egyptian (from c. 1300 to c. 700 BCE), Demotic (from c. 700 BCE to c. 400 CE), and Coptic (from c. 1st century CE until at least the 13th century). For a general discussion see Loprieno 1995, especially 5–8.

² Initially it was a writing system that indicated only consonants. During the Late Bronze Age, some strategies to mark selected vowels in selected words were devised. Finally, in the Coptic period, an alphabetic script based on the Greek one that marked both consonants and vowels emerged at the end of the Pharaonic Age and became generalized in the Coptic period.

³ For the definition of "dialect" used in this paper, see below §4.

⁴ Ancient Egyptian is the earliest-attested Afro-Asiatic. A better understanding of its internal history and development is thus crucial for the study of the Afro-Asiatic family as a whole.

The development of the Egyptian palatals \underline{d} and \underline{t}^5 has long been a thorny issue in Egyptian linguistics. Both \underline{d} and \underline{t}^6 appear to have two distinct reflexes in Coptic: on the one end, in some cases, they merge but preserve their palatal feature, thus resulting in Coptic⁷ \times /c/. On the other hand, in many other cases these phonemes were fronted and lost their palatal feature, thus merging with the dentals and resulting in Coptic τ /t/.⁸ If on the one hand the loss of distinction in voice⁹ is trivial and can be observed with other phonemes, the split into palatal \times /c/ and dental τ /t/ is problematic: as Peust (1999: 123) puts it, the conditions triggering the fronting of these phonemes in some cases but not in others are not known. Although various scholars have discussed the issue, and although various phonological factors have been suggested, no satisfactory explanation that coherently accounts for all the attestations has been put forward so far.

§2 Previous Hypotheses - discussion

Various interpretations have been offered for this phenomenon. Steindorff (1892: 720) suggested that the signs corresponding to \underline{d} and \underline{t} concealed since the beginning two phonemes each. One of them would have then merged with the dentals, while the other would have preserved its palatal feature up to Coptic. Although initially followed by some scholars, this interpretation is hardly convincing: not only there is no additional evidence for a double phonetic value for those signs, but there are also a few rare cases in which both a Coptic reflex with \underline{x} /c/ and one with $\underline{\tau}$ /t/ are attested for a same single Egyptian root, and therefore for a same single phoneme (see nos 42–49 in Appendix A).

Vycichl (1934: 390), by contrast, tried to find a phonological explanation, and suggested that \underline{d} and \underline{t} were fronted before the vowels a and u, but were preserved as palatals before i, but only in the stressed syllable and only in substantives. This rule, however, is far from being convincing: besides accounting only for nouns and therefore being unable, by its very definition, to explain all instances, it can be easily shown that even with nouns this rule does not really hold. This is evident, for instance, from words like $xon < *\underline{t}ab = "a kind of cup"$ (ID: T.07)¹⁰ or $xoq < *\underline{d}a3vf^{11} =$ "to burn up" (ID: D.19), where these consonants are preserved as palatal even before the vowels Eg. *a > Cpt. o and Eg. * $\bar{a} >$ Cpt. o, or like $tin < *\underline{t}\bar{t}nvy =$ "Thinis" (see §8) where t develops into a dental even before Eg. * $\bar{t} >$ Cpt. 1.

Osing, instead, suggested a rather complicated rule to explain these developments (1980: 946–47). According to him, (a) \underline{d} and \underline{t} always \rightarrow Coptic τ /t/ (b) whenever they are the last strong consonant (c) and not the first radical of the root, (d) although \underline{t} can be preserved if reduplicated within the word. Moreover, (e) \underline{d} always \rightarrow Coptic τ /t/ before b and b, but (f) not before b, b, and b. Finally, (g) in all the other cases the development b Coptic b /t/ is

⁵ The transcription employed here reflects the traditional Egyptological transliteration system; this system uses conventional signs that are not based on the International Phonetic Alphabet. For a discussion of the possible corresponding phonological values see Loprieno 1995: 15 and 33.

⁶ The actual realization of these phonemes is open to debate but is not relevant for the present study: in the present paper I focus only on the development of these phonemes, rather than on their phonetic realizations. For a general discussion of the phonology of Egyptian see Loprieno 1995: 28–50, Peust 1999, and Allen 2013: 11–56.

⁷ In this paper I use Sahidic as the dialects of reference, as they provided the larger corpus of evidence. Therefore, whenever I use the term "Coptic", it should be understood as "Coptic as exemplified by Sahidic". In Bohairic, Sahidic x corresponds either to x or to 6 depending on the position. Other dialects seem to behave in a comparable way regarding these phonemes, which justifies, I think, this terminological conflation.

⁸ In all main attested Coptic dialects.

 $^{^9}$ Or whatever feature originally distinguished \underline{d} and \underline{t} . On this issue, see Loprieno 1995: 32–34, 41–44, with refs. 10 This ID numbers refer to the IDs in Appendix A.

¹¹ v = unspecified unstressed vowel.

"facultative", or in other words in all other cases one cannot predict if the Egyptian phonemes will develop into Coptic x /c/ or τ /t/. Besides the quite complicated nature of this rule, 12 and its inability to make predictions for all environments (point g), it can also be shown that it is not fully accurate even for those cases that it should be able to explain. Words like $z + x \le h m d = v$ inagre" (ID: D.08), $c + x \le h m d = v$ (ID: D.01), or $c + x \le h m d = v$ (ID: D.13), for instance, disprove his points a), b) and c).

§3 The data - a Diachronic pattern

On the basis of these observations and these incongruences, Peust (1999: 124) concludes that "the conditions for palatal fronting are unknown". This opinion has been recently reiterated by Allen (2013: 49).

In general, once one looks at the whole set of words presenting the phonemes \underline{d} and \underline{t} which have a reflex in Coptic (the corpus, presented in Appendix A below, has been compiled on the basis of Vycichl 1984), it becomes evident that a phonological rule to explain all the attestations can hardly be found, as minimal pairs showing both developments seem to exist for all most obvious phonetic environments, and occasionally even for the same root (see below). This suggests that, at this point and on the basis of this evidence, a (purely) phonetic explanation may have to be excluded altogether.

An alternative, non-phonological explanation emerges if one looks at the diachronic distribution of the first attestations of each of these words, as summarized in Table 1.

	Old Kingdom and	Middle Kingdom and	New Kingdom and
	First Intermediate	Second Intermediate	Late Period
	Period	Period	
$\underline{d} \rightarrow t = \tau$	33	4	4
$\underline{d} \rightarrow c = x$	8	8	23
$\underline{d} \rightarrow c = \mathbf{x}$ and $t = \mathbf{\tau}$	4	0	0
$\underline{t} \rightarrow t = T$	21	3	2
$\underline{t} \rightarrow \emptyset / \underline{\#}$	3	0	1
$\underline{t} \rightarrow c = x$	2	3	13
$\underline{t} \to c = x / (3)z$	3	0	0

Table 1: numbers of words displaying the various developments, according to their earliest attestation. These dates of attestation have been extracted from the *Thesaurus Linguae Aegyptiae*.

These data can be graphically represented as in figure 1.

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¹² Peust (1999: 124) describes it as "somewhat ... unnatural".

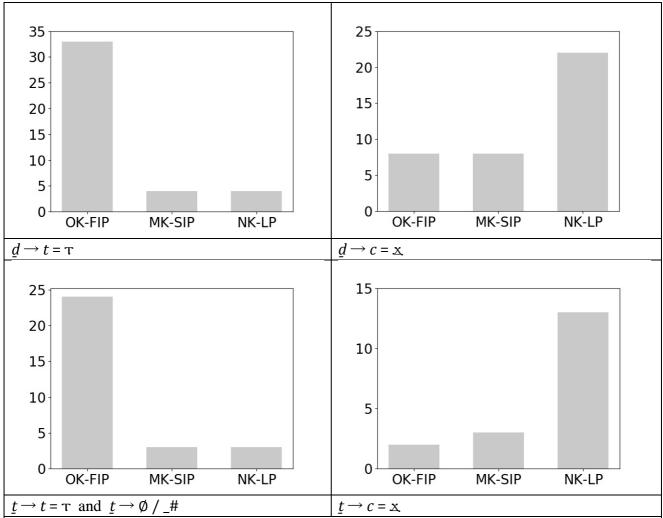


Figure 1: graphic representation of the main categories listed in Table 1.

The data corresponding to the $\underline{d} \to c = \underline{x}$ and $t = \tau$ and to the $\underline{t} \to c = \underline{x}$ / _(3)z cases are not included here because of their marginal nature, as discussed below. The data from the $\underline{t} \to \emptyset$ / _# case are merged with those of the $\underline{t} \to t = \tau$ case (see below).

§4 Interpretation: inter-dialectal borrowings

These data show a clear correlation between the distribution of c = x and $t = \tau$ in Coptic, and the temporal distribution of the first attestations of the words involved. Such correlation can hardly be explained on phonological ground, and it rather points to a sociolinguistic phenomenon. More in particular, I would argue that these distributions could be explained as resulting from the interference of two distinct (groups of) dialects.¹³ In particular, one can imagine the following theoretical scenario:

- Let us imagine two (groups of) dialects characterized by a distinction in the development of a given phoneme A.

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¹³ With "(group of) dialect" I mean here a variety or a cluster or varieties of the language that are distinct from other varieties by specific linguistic isoglosses, and which have clearly defined geographical distributions. Note that the clustering factors in this definition of "dialect" are the common isoglosses, not necessarily the geographical proximity of the varieties involved. I will discuss more about the concept of "dialect" and about the significance of the data presented here below for the issue of dialects in pre-Coptic Egyptian below, in §11.

- In Dialect-1, $A \rightarrow B$, while in Dialect-2 $A \rightarrow C$.
- At some point after both the dialects went through these phonetic developments, Dialect-1 borrowed words from Dialect-2
- As a result, Dialect-1 presents words displaying both its own development A → B and the development A → C typical of Dialect-2.
 If such dialect has a well attested written history, the borrowed words displaying the development A → C are likely to be attested later than the inherited words displaying the development A → B.

This scenario is well-attested crosslinguistically¹⁴ and, I would argue, perfectly fits with the Coptic and Egyptian evidence discussed here.

Within such frame, one can postulate the existence, in pre-Coptic Egyptian, of (at least) two clusters of dialects. In the first cluster, which I will call T-dialect, the original phonemes \underline{d} and \underline{t} were first fronted to *d and *t and then merged into t = Cpt. τ . Instead, in the second cluster, which I will call C-dialect, the two phonemes preserved their palatal feature and were finally merged into Cpt. c = x. At some point after their divergence, the T-dialect borrowed a certain number of words from the C-dialect. The outcome is what appears in Coptic: a T-Dialect with a mix of inherited words in which \underline{d} , $\underline{t} \rightarrow t$ = Cpt. τ combined with words borrowed from the C-dialect in which \underline{d} , $\underline{t} \rightarrow c$ = x.

§5 Improving the model

The phonological framework of the scenario just described can be further improved with a couple of additional observations.

First, it appears that in some words, the development $\underline{t} \to \emptyset$ / _# may also occur.¹⁵ This phonological change seems to affect words that are attested since the Old Kingdom, and therefore can be connected with the T-Dialect. This seems to be supported by the word xxx < $\underline{t}\underline{t}$ = "sparrow", which is attested only from the New Kingdom and which is likely a borrowing from the C-Dialect, in which $\underline{t} \to c = x$ / _#. Coptic words with a final $\underline{t} \to t = \tau$ derive from Egyptian words in which the \underline{t} was originally not in final position, but was followed by another consonant or glide¹⁶ that was later lost.¹⁷ In these cases, therefore, the rule just described does not apply because - \underline{t} - was not originally in final position.

Second, it appears that \underline{t} preserves its palatal feature in both dialects when followed by z. This is the case of the words $\underline{t}(3)z.w$ = "commander" (ID: T.51); $\underline{t}3z$ = "to tie", "to join to" (ID: T.52) and $\underline{t}3z(.t)$ = "vertebra", "spine" (ID: T.53); and $\underline{t}zj$ = "to raise", "to rise", "to levy" (ID: T.54), which are well attested in the OK and therefore should belong to the T-dialect. This exception can be explained on the basis of the incompatibility rules identified by Rössler (1971) and Roquet (1973). In their works, they were able to show that the presence of any given consonant in an Egyptian root was conditioned by the presence or absence of other consonants in the same root. In other words, they showed that some consonants are

¹⁴ One can think, for instance, of the case of Neo-Latin languages like French, whose lexicon contain both inherited words and borrowing from other Neo-Latin languages and dialects like Provencal or Italian.

 $^{^{15}}$ See in particular: мееүє $< m3w\underline{t} =$ "to think" (ID: T.47); роме $< rm\underline{t} =$ "man" (ID: T.48); сове $< zb\underline{t} =$ "to laugh" (ID: T.49); снее $< zf\underline{t} =$ "to make a sacrifice", "knife" (ID: T.50).

¹⁶ Whether such glides represented fully pronounced consonants, or were an orthographic devise to represent a final vowel is irrelevant for the present argument, because in both cases the \underline{t} would not have been in final position, and would have rather been followed by at least one vowel.

¹⁷ See in particular: qent < fntj = "worm" (ID: T.23); нит < m3tr.t = "parsely or celery" (ID: T.24); ноет < mtn = "path", "road" (ID: T.25); еснт < z3t.w = "ground" (ID: T.30); сорт < sntj = "to found" (ID: T.31); сорт < st3 = "to stretch" (ID: T.34); сорт < st3 = "aroura" (ID: T.35); феннт < sntj = "a fish or snake" (ID: T.38).

incompatible and cannot appear within the same root. Now, according to their studies, t is incompatible with z. It is thus possible that the presence of z in these roots prevented the development $\underline{t} \to t$ and thus caused the \underline{t} to preserves it palatal nature also in the T-Dialect. To sum up, the following phonetic rules can be inferred:

C-Dialect:

 $d, t \rightarrow c = x$

T-Dialect:

 $d, t \rightarrow t = \tau$

except:

$$\underline{t} \rightarrow t \rightarrow \emptyset / \#$$

 $t \rightarrow c = x / (3)z$

These rules provide also a series of clues concerning the relative chronology for these changes. First, the rule $\underline{t} \to c = x$ / _(3)z suggests that the \underline{d} , $\underline{t} \to t = \tau$ development must have taken place when the rules of compatibility between consonants identified by Rössler (1971) and Roquet (1973) were still valid, at least for the T-Dialect. Second, the disappearance of \underline{t} at the end of words in the T-Dialect can be connected with the well-known general disappearance of final -t in Egyptian (e.g. Loprieno 1995: 38). This suggests that in the T-Dialect the shift $\underline{t} \to t$ took place before the disappearance of final t, which thus affected in the same way both etymological t and t derived from \underline{t} . This observation provides also clues for an absolute chronology: Allen has argued, in my opinion convincingly, that there is evidence of the dropping of final -t already in the Pyramid Texts of Unis (Allen 2017: 26–27). This would push the $\underline{t} \to t$ back to the Old Kingdom or before, with the time of Unis as a *terminus ante quem*. This temporal frame is possibly supported by Allen's observation (2017: 30) that the word $rm\underline{t}$ is occasionally treated as a feminine in the Pyramid Texts: if \underline{t} had already shifted to t (and possibly had already been dropped), then the word $rm\underline{t}$ may have looked like a regular feminine noun ending in -t and may have thus being reinterpreted as such. ¹⁸

§6 Verification: Semantic distribution in Coptic

The semantic evidence also supports this scenario. Words related with core vocabulary¹⁹ and numerals tend to be more stable and less frequently borrowed. Therefore, if the scenario sketched above is correct, one can expect the core vocabulary and numerals to be primarily

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¹⁸ Alternatively, the feminine form may have to be understood as being a collective, as collective are usually feminine in Egyptian. In principle, this possibility cannot be excluded, but in that case one may expect an explicitly feminine form *rmtt*, with the final –*t* spelled out.

 $^{^{19}}$ As defined for instance in the so-called Swadesh list – I use here the version with 215 items, see Swadesh 1952: 456–7. I prefer this list to shorter ones (like the 100-words Leipzig-Jakarta one), because the corpus analysed here is rather small, and does not include enough of the 100 most stable words to provide meaningful results. If instead one extends the range to the items covered by the Swadesh 215 list (which contain most of the words of shorter 100 word lists and an addition of another hundred or so core lexical items), then the underlying patters become evident.

inherited, and therefore to display the \underline{d} , $\underline{t} \to t$ = Cpt. τ development. By contrast, words with \underline{d} , $\underline{t} \to c = x$, which therefore should be the result of inter-dialectal borrowing, should appear to be mainly non-core vocabulary.

This is exactly what the data show, as summarized in Table 2:

	Core words displaying the development + numerals
\underline{t} – T Dialect : inherited	, , , , , , , , , , , , , , , , , , ,
$\underline{t} \rightarrow t = T$	7
$\underline{t} \rightarrow \emptyset / \#$	3
$\underline{t} + z \rightarrow c = x$	0
total:	10
<u>t</u> – C Dialect : borrowed	
$\underline{t} \rightarrow c = \underline{x}$	0
total	0
<u>d</u> – T Dialect : inherited	
$\underline{d} \rightarrow t = T$	10 + 1 + 2 (see below)
$\underline{d} \rightarrow c = x$ and $t = \tau$	1
total	14
<u>d</u> – C Dialect : borrowed	
$\underline{d} \rightarrow c = x$	5
total	5
Table 2: core vocabulary and	numerals containing the phonemes \underline{d} and \underline{t} .

One can see that all the items of core vocabulary²⁰ characterized by a \underline{t} participate in the $\underline{t} \to t$ = τ and $\underline{t} \to \emptyset$ / _# developments, while none display the development $\underline{t} \to c = x$. This strongly supports the idea that words in which $\underline{t} \to t = \tau$ and $\underline{t} \to \emptyset$ / _# are inherited, while words in with $\underline{t} \to c = x$ are the result of inter-dialectal borrowing.

Words with \underline{d} show similar results: out of 19 items of core vocabulary and numerals in Egyptian containing a \underline{d} , 14 display the development $\underline{d} \to t = \tau$, while only 5 display the development $\underline{d} \to c = x$. Among the first, both the numerals with \underline{d} show a development $\underline{d} \to t = \tau$. Moreover, it is also interesting to note that there are two words that belong to the core vocabulary and which are attested in Coptic both as $\underline{d} \to t = \tau$ and as $\underline{d} \to c = x$ words. Interestingly, in one of these words the meaning of the core item is preserved in the $\underline{d} \to t = \tau$ form, while the $\underline{d} \to c = x$ form has a secondary, derived meaning. Once again, this suggests that the word in which $\underline{d} \to t = \tau$ is inherited, while that in which the $\underline{d} \to c = x$ is a

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²⁰ Namely the words corresponding to "worm" (ID: T.23), "road" (ID: T.25), "throw" (ID: T.36), "smell" (ID: T.37), "wind" (ID: T.39), "where" (ID: T.42), "all" (ID: T.43), "think" (ID: T.47), "man" (ID: T.48), "laugh" (ID: T.49).

²¹ Namely: "ear" (ID: D.45), "wing" (ID: D.48), "fat" (ID: D.50), "green" (ID: D.51 and D.52, D.53), "(to bear) fruit" (ID: D.58), "nine" (ID: D.59), "breast" (ID: D.61), "ten" (ID: D.63), "rub" (ID: D.70), "fear" (ID: D.71), "hear" (ID: D.74), "fire" (ID: D.76), "mountain" (ID: D.80), "hand" (ID: D.93).

²² Namely: "throw" (ID: D.07), "hand" (ID: D.13), "head" (ID: D.17), "burn" (ID: D.19), "say" (ID: D.37 and D.38).

 $^{^{23}}$ Namely: $\mbox{\it dnh}$ = "wing" \sim S tnr, tnrz, tenrz = "wing" (ID: T.48).

²⁴ Namely: dnh = "wing" ~ S xnaz = "forearm" (ID: D.49).

both the $d \to t = \tau$ and $d \to c = x$ forms preserve the primary meaning, but it is worth noticing that the forms with c = x are overall quite irregular, which may suggest they were subject to some interdialectal influence. Finally, the 5 words displaying the $d \to c = x$ development do not invalidate this analysis: core vocabulary is generally more resistant to borrowing, but it is not immune to it. Moreover, borrowed synonyms for core vocabulary items can coexist side by side with their inherited counterparts. These words, which are clearly a very small fraction of the ensemble, can probably be explained in this way.²⁶

Finally, it is worth noticing that also personal pronouns behave as T-Dialect words, as summarized in Table 3.

$\underline{t} \rightarrow t = \tau$				
2nd pl. suffix	=tn	S/B =TN		
2nd pl. independent	nttn	S/В итшти		
$\underline{t} \rightarrow t \rightarrow \emptyset / \#$				
2nd sg. f. suffix	= <u>t</u>	S/B =€		
2nd sg. f. independent	nt <u>t</u>	S/B ито		
Table 3: personal pronouns containing the phoneme <u>t</u> .				

This observation is relevant for two reasons: first, personal pronouns are attested since the earliest phases of the language. Second, crosslinguistically first and second person pronouns tend to be very stable and tend to be resistant to borrowing, and are in fact often included in core vocabulary lists. Therefore, the fact that here the Coptic pronouns show the typical development of T-Dialect words, while none show a $t \to c = t$ development, strongly support the scenario sketched above.

§7 C-Dialect and T-dialect: where and when

If one assumes that two (groups of) dialects underlie the different developments of \underline{d} and \underline{t} , then the next questions are what their geographical distributions were, and when and in which context the borrowings took place. The following paragraphs offer some preliminary considerations. Among them, the line that needs to be drawn between later periods for which a general picture can be offered (the New Kingdom and the Third Intermediate Period), and earlier periods for which the data allow only preliminary observations.

§7.1 Coptic

All Coptic dialects present *t*-words in their basic lexicon, while none presents a majority of *c*-words among those terms attested since the Old Kingdom. This suggests that all the attested dialects of Coptic can be classified as T-dialects, while no C-dialect seems to be attested in the available sources. The most likely explanation is, simply, that the C-dialects were used in

 $^{^{25}}$ msdr = ear (ID: D.44 and ID: D.45).

²⁶ One can note, in particular, the semantic doublets $\underline{d}rt > \tau \omega p \varepsilon = \text{"hand" (ID: D.93)} \sim g\underline{d} > \varepsilon i x = \text{"hand" (ID: D.13)}$ and $stj > \varepsilon i \tau \varepsilon = \text{"to throw"}$; "to scatter"; "to sow" (ID: T.36) $\sim n\underline{d}r > \log \chi \varepsilon = \text{"throw"}$, "cast" (ID: D.07).

regions from which no evidence for the local Coptic dialects survive. This possibility is further discussed here below.

§7.2 New Kingdom

The evidence from Late Egyptian is more interesting. A few observations are relevant here. First, as mentioned above, most of the c-words existing in Coptic are attested for the first time in Late Egyptian, and mainly after the reign of Ramses II or at least not earlier than the $19^{\rm th}$ Dynasty (on the basis of the attestations of these words in the Ramses database – http://ramses.ulg.ac.be – last access: 21.11.2019). Moreover, New Kingdom Semitic borrowings tend to survive in Coptic as c-words (on the basis of Hoch 1994). This considered, It is reasonable to suggest that a C-dialect may have been spoken in the area of Avaris/Pi-Ramses/Tanis, while T-dialects were spoken in Upper Egypt and possibly elsewhere in the north.

This interpretation fits with the observations above. First, as no surviving document seems to attest the original local Coptic dialect of the area of Avaris, it would not be surprising that there is no trace of a purely c-dialect in the existing Coptic material. Moreover, Pi-Ramses was the capital of the 19^{th} dynasty, and the dynasty itself likely originated from the area.²⁷ It is thus reasonable to assume that the local dialect might have been adopted as the court language. As such, it might have acquired a position of prestige²⁸ within the country, possibly both as dialect of reference at least in official, literary and didactic documents and as a source of loanwords for the other dialects. This would explain why most c-words are attested for the first time in this period. Finally, the area of Pi-Ramses was relatively close to the Levant and Avaris was the core of the Hyksos phenomenon, with its clear North-West Semitic connections. It is therefore reasonable that the local dialect may have been a major vector in the introduction of Semitic loanwords into Egyptian.²⁹

There is additional evidence that supports the associations C-Dialect \leftrightarrow Avaris/Pi-Ramses/Tanis versus T-Dialect \leftrightarrow elsewhere. One of the most interesting linguistics-related discoveries made a Tell el-Amarna is a tablet (EA 368) with a bilingual Egyptian-Akkadian lexical list in which the entries in both languages are written in cuneiform (Izre'el 1997: 77-82). Little is known about the purpose and function of this tablet, but on the basis of the palaeography it seems that the scribe was trained within the Syrian cuneiform tradition.³⁰ It is possible that the tablet represents an attempt by a foreign scribe to learn Egyptian, or an exercise by an Egyptian scribe to practice his cuneiform. Either way, the petrographic analysis shows that the tablet was produced with local Egyptian clay (Goren et al. 2004: 84) and was thus probably written in Amarna. It is thus fair to assume that the pronunciation of the Egyptian words it preserves reflects the likely Upper Egyptian dialect spoken at the court (likely the Theban dialect). Among the surviving entries, a few Egyptian numerals can be identified, including the numbers "nine" = Eg. psdw = Coptic \forall tr and "ten" = Eg. mdw = Coptic мнт. In the tablet these two numerals are transcribed in cuneiform as pe/i-ši-iţ and mu-ţu respectively. As it appears, the scribe used the groups it and tu, with t, to transcribe the Egyptian d (Izre'el 1997: 77–82). This suggests that the dialect he was transcribing was a T-Dialect.

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²⁷ As suggested, for instance, by the so-called *Stele of the 400 years*.

²⁸ The word "prestige" should be understood here has the superior level of regard (either due to cultural factors, or to the politically dominant positions of its native speakers) enjoyed by a specific dialect of variety in relation with other dialects or languages spoken by a specific community.

²⁹ Either because borrowed in the Hyksos period, or because gateway for the introduction of new words from the Levant due to its geographical position, or both.

³⁰ Minářová, personal communication.

By contrast, the very name of Tanis provides evidence that the local dialect was a C-Dialect. The Egyptian name of the city, dsnt, is in fact transcribed as $sa-a^2-nu = Sa^2$ nu in first millennium Assyrian documents (Ashurbanipal Q003702, 3: I 91; Q003703 4: I 76; Q003710 11: I 96), as sant0 in Biblical Hebrew (Isaiah 19:11, 13, Isaiah 30:4 and Ezekiel 30:14, as well as Numbers 13:22 and Psalm 78:12,43), as sant0 or sant1, with sant2, in Coptic, and it survives in Arabic as sant3 (sant4), with sant5. All these forms point to a fricative/palatal realization of the initial sant6 and therefore suggest that the local dialect was a C-dialect well into the first millennium, at the time of the Assyrian and Hebrew transcriptions, and possibly as late as the Arabic times.

Additional evidence for the distribution of T- and C-Dialects may come from an attentive study of the spellings attested in Late Egyptian documents. As texts using d and t to transcribe historical d and t may suggest a T-dialect. However, due to the sheer amount of texts that would need to be considered, such a study is beyond the aims and scopes of the present article.

§7.3 Middle Kingdom and Second Intermediate Period

The linguistic landscape during the Middle Kingdom is more difficult to define with any precision. Some insights could come from the frequent interchange in writing between $\underline{t} \sim t$ and $\underline{d} \sim d$, which probably implies that the dialect underlying those texts was a T-Dialect. For instance, Pap. Edwin Smith (Breasted 1930) spells msdmt = "eye paint" (XX 17) instead of $ms\underline{d}mt$ (e.g. in the tomb of Khnumhotep, as one of the products brought by the caravan of Asiatics), msdty = "nostril(s)" (0. 11, V 14-15, 15) instead of $ms(3)\underline{d}ty$ (e.g. in the Pyramid of Neith, PT 723), or mndt = "cheek" (C. 11, V 15; C. 12, V 22; C. 15, VI 14, 15, 16 bis; C. 16, VI 18 his, 19; C. 17, VII 1 bis, 2, 4) instead of $mn\underline{d}t$ (e.g. Pyramid of Pepis II, PT 698C). Since Pap. Edwin Smith is supposed to be from Thebes, these spelling are likely betraying an underlying T-Dialect. A systematic analysis of all the available texts might shed some light on the issue, but such analysis is, once again, beyond the scope of the present article.

§7.4 Old Kingdom

The main textual evidence from the Old Kingdom can be divided into two main categories: on the one hand we have the texts preserved in private tombs either in the form of biographical inscriptions or of dialogues in the images (the so called *Reden und Rufen*). The latter may be a very interesting test case, and differences in the rendition of $\underline{t} \sim t$ and $\underline{d} \sim d$ may reveal underlying dialectal patterns. Since however the *Reden und Rufen* have been the subject of a very recent PhD by Aurore Motte (*Les Reden und Rufe dans les tombes privées de l'Ancien Empire à la Basse Époque : Édition et commentaire philologique* – Liège, 2018, unpublished), I think it is safer to postpone any analysis to after the publication of her thesis. She has reassessed the whole corpus, and she certainly has valuable insights that would need to be taken into account.

By contrast, a few observations can be put forwards on the basis a preliminary survey of the biographies of Weni and Harkhuf. Although the consistent use of biliteral or triliteral signs without phonetic complements often prevents the identification of any $t \sim t$ and $t \sim d$ alternation, the few words spelled out with unambiguous uniliteral signs tend to use the palatalized consonants $t \in (V13)$ and $t \in (V1$

consonants. ³¹ A few explanations are possible: a first possibility is that the language underlying these texts was somehow shaped on the actual dialect spoken by the two deceased, and that such language was a C-Dialect, in which these phonemes where still pronounced as palatal. Alternatively, it is also possible that these texts were written in an official or court dialect, or in general in a somehow literary language that tried to imitate a more prestigious or archaic dialect in which these phonemes were (still) realized as palatals. The evidence is not conclusive, at the moment. It can however be said that it is unlikely that the scribes writing these texts were trying to represent a T-Dialect.

The Pyramid texts, finally, present yet another set of evidence. First of all, their clearly composite nature, and the possible presence of different layers deriving from different periods and different geographical origins (Allen 2005: 4-5) makes any generalization unrealistic. A detailed analysis that considers the compositional history of the texts is both needed, and beyond the scopes of this paper. A few observations, however, can be put forwards. Very few of the c-words attested in Coptic seem to be attested in the Pyramid texts, and most of them are significantly more common in the New Kingdom sources than in the Old Kingdom ones. This supports the idea that the c-words in Coptic are related with a New Kingdom sociolinguistic phenomenon, the few attestations in the Old Kingdom being clearly marginal exceptions. It also suggests that the New Kingdom C-Dialect(s) that are the source for these words may have been rather distant, at least on the lexical level, from the dialect(s) underlying the Pyramid texts. This latter point fits well with a geographical location of the C-Dialect in the area of Avaris/Pi-Ramses/Tanis, far from the royal court and the religious centres in the Memphite area where the Pyramid texts were probably elaborated and edited (Morales 2013). The Pyramid Texts, however, seem to consistently write the phonemes d and t as palatals, through the graphemes I10 and V13. Yet, there are some rare but compelling pieces of evidence that blur this picture. First, as mentioned above, the word rmt may occasionally be treated as a feminine, which may imply it went through the shift $-\underline{t} \to -t \ (\to \emptyset)$ / #. An additional, more intriguing clue comes from the verbal root $sti \sim sti =$ "to scatter", "to throw", which is written stj with t e.g. in PT 350 §567b, where it refers to "scattering/throwing (precious stones)", but is written sti, with t, in e.g. PT 230 §230b, where it refers to "scattering/throwing (water)". 32 This evidence can be interpreted, I think, in two ways. A first possibility is that the main core of the texts was written in a local C-Dialect distinct from the Avaris/Pi-Ramses/Tanis one, while a few spells were taken from distinct traditions characterized by T-Dialects. The spells in which *rmt* is treated as a feminine, those in which sti is written with t, and possibly those in which instances of later Coptic c-words are attested may reflect such external influence. Alternatively, one may also consider that the main vernacular dialect in the environment where the Pyramid texts were put together was a T-Dialect, but the spells themselves were based on earlier, pre-shift compositions, or were intentionally composed in an archaic, pre-shift form of the language. In this case, the elements pointing to a T-Dialect highlighted above could be the result of an interference of the contemporary vernacular language that took place at the moment of the redaction of the texts. Obviously, these interpretations are not mutually exclusive: it may also be that some spells are composed in a more archaic form of the language but were variously affected by contemporary local vernacular dialects, while other spells truly originated from other regions and other dialectal realities. Further studies that will take into accounts other linguistic, literary and socio-cultural aspects may greatly help in shedding some more light on this question, and on the (late) Old Kingdom linguistic landscape as a whole.

³¹ Good examples are $b\underline{s}\underline{t}$ = "to rebel", written with \underline{t} only in the Old Kingdom and with t later on (see the TLA online slides, DZA 22.933.390 and following ones) or $3\underline{t}p$ = "to load", written with \underline{t} in the Old Kingdom but usually written with t in following periods (TLA lemma-no. 340).

³² See also Edel (1955: §112), who mentions also an instance if the pronoun tw beign written tw.

§8 Toponyms

As already emerged above in the case of Tanis, toponyms may be a precious source to investigate the linguistic landscape of ancient Egypt. In the present paragraph I briefly discuss the toponyms containing a \underline{d} or \underline{t} listed by Černý in his etymological dictionary (1976: 343–58). This has to be considered only as a preliminary survey of the data – a reassessment of the topographical data combining Egyptian, Coptic and Arabic evidence is long due, but is obviously not the goal of this paper. The relevant data are summarized in Table 4:

Western	Period	Location	Class	Egyptian	Coptic	Arabic	Černý	Gauthier
name								
Sebennitos	OK	Eastern Delta	₫/ṯ - ¤	tb-ntr	хемноү†	Samannūd	358	VI, 74
Bouto	ОК	Western Delta	₫/ <u>t</u> - τ	pr-w³dyt	воүто	[?] Ibtū	344	II, 65
Abydos	OK	Upper Egypt	<u>d/t</u> - т	3bdw	євот	_	344	I, 4
Thinis	MK	Upper Egypt	₫/ <u>t</u> - τ	<u>t</u> n	TIN		355	VI, 59
Derut	MK	Upper Egypt	<u>d/t</u> - т	t̞rtj	тєршт	Dērūţ	355	VI, 79
Tod	MK	Upper Egypt	<u>d/t</u> - τ	drtj	Τ00ΥΤ	Ţōd	355	VI, 130-1
						2		
Edfu	SIP	Upper Egypt	<u>d/t</u> - τ	₫b₁	ТВО	²Idfū	353	VI, 126-7
Dallas	NK	Middle Egypt	<u>d/t</u> - x	t3-j3dt-r <u>t</u>	ϯλοϫ	Dallāṣ	354	_
Shama	NK	Upper Egypt	₫/ṯ - ¤	<u>t</u> 3mt	хнме	Šāma	358	VI, 65-6
Abu Shusha	NK	Upper Egypt	₫/ṯ - ¤	pr-d3d3	пхох	² Abū Šūša	351	II, 140
Oxyrhynchos	TIP	Middle Egypt	₫/ <u>t</u> - x	pr-md	пемде	Bahnasā	348	II, 83
Tanis	TIP	Eastern Delta	₫/ṯ - ¤	₫∙nt	хаане	Şān	358	VI, 111
Diknas	TIP	Middle Egypt	<u>d</u> / <u>t</u> - τ	tknš	TAKINA(I)	Diknāš	353	_
Ermont	TIP	Upper Egypt	<u>d/t</u> - т	jwnw- mn <u>t</u> w	рмонт	² Armant	351	I, 54-5
Table 4: topo	onyms list	ted by Černý	7 (1976:	343-58).				

The toponyms attested before the New Kingdom agree with the analysis suggested above: they all show the development \underline{d} , $\underline{t} \to t = \tau$ except for Sebennytos, which preserves the palatal consonant at the beginning of the noun, and which is relatively close to Avaris/Pi-Ramses/Tanis. The fact that the \underline{t} of $n\underline{t}r$ in the same name appears as $\underline{t} \to t = \tau$ may be due to an interference of a T-Dialect in the pronunciation of the very culturally relevant word $n\underline{t}r =$ "god" (see below). These spellings, therefore, support the idea of a C-Dialect in the Eastern Delta, and T-Dialects elsewhere. It is worth noting that the name of the city of Buto, which was in the Delta, participates in the \underline{d} , $\underline{t} \to t = \tau$ shift. It is thus clear that the boundary of these isoglosses was not between Upper and Lower Egypt in general, but rather between the Eastern Delta on the one hand, and the Western Delta and Upper Egypt on the other. This division agrees with the Coptic evidence and in particular with the classification of Bohairic and related subdialects located in the Delta as T-Dialects.

As for the toponyms attested in the New Kingdom and later, instead, the situation is more blurred. On the one hand, $d \cdot nt =$ "Tanis", $tkn \dot{s} =$ "Diknas", jwnw-mntw = "Ermont" show the outcome that is expected considering their location: $t \rightarrow c = x$ for Tanis in the Eastern Delta, and $\underline{t} \rightarrow t = \tau$ for the other two toponyms. $t3-j3dt-r\underline{t} =$ "Dallas", $\underline{t}3mt =$ "Shama", $pr-\underline{d}3\underline{d}3 =$ "Abu Shusha" and *pr-md* = "Oxyrhynchos", however, do not fit within this scheme: they preserve the d and t as palatals, but they are located outside of the Eastern Delta, where a T-Dialects would be expected. Two explanations are possible. First, it is possible that the Eastern Delta was not the only area of the country where the shift $d, t \rightarrow t = \tau$ did not take place. Other pockets in which d and t were preserved as palatals may have existed, and these toponyms may attest at least some of them. Alternatively, the form of these names may reflect the interference of a C-Dialect. If we follow the interpretation suggested above and we assume that starting from the 19th dynasty the C-Dialect of Avaris/Pi-Ramses/Tanis became a sort of official (court) dialect, then there are two ways in which such interference may have occurred. First of all, it is possible that these sites were officially founded or renamed during the New Kingdom – in this case, their names might reflect the contemporary official court language. Alternatively, their name may have originally been in T-Dialect, but their pronunciations may have been modified and reshaped during the New Kingdom according to the official C-Dialect. This may have been the consequence, for instance, of a particularly strong interest of the royal court from Pi-Ramses/Thanis for these places, an interest that resulted in the redefinition of the pronunciation of these names – this may have been the case, for instance, of t3mt = "Shama", which was built on and around the mortuary temple of Ramesses III at Medinet Habu. A detailed survey of the archaeological evidence from these sites may shed some light on this point, but such analysis is beyond the scope of the present article.

§9 One or more borrowings events?

As just discussed, one major borrowing even dating to the New Kingdom seems to be recognizable. It is unlikely, however, that this was the only linguistic interference that took place during the long history of the language. In fact, it may be more reasonable to imagine a rather dynamic reality, in which inter-dialectal borrowings took place at various moments in time. Such a scenario may explain the few scattered pre-New-Kingdom attestations of terms that will become c-words in Coptic. Moreover, the direction of the borrowings may have not always been the same: it can be expected that in periods in which the centres of power were located in T-Dialect areas, T-Dialects were perceived as more prestigious and therefore were a main source of inter-dialectal borrowings. A possible example of such a T-Dialect > C-Dialect borrowing may be hidden under the pronunciation of the name of Sebennytos discussed above: the initial consonant betrays an underlying C-Dialect, but the pronunciation of ntr with $t = \tau$ may reflect an (earlier?) inter-dialectal borrowing, or at least a phonetic interference from a T-Dialect. Considering that multiple major religious centres were present in T-Dialect areas both in the Valley and the Delta, it would not be surprising that the word for "god" was affected by a T-Dialect pronunciation all across the country. A systematic study of the spellings of this word, which in hieroglyphs can indeed be spelled with t (X1) instead of t(V13), may provide precious insights on this matter. Similarly, words with original d and t which are systematically written with d or t in supposedly C-Dialect 19th dynasty and later sources may be explained as earlier borrowings from a (once prestigious?) T-Dialect. A good example is the verb 3tp = "to load", which etymologically has a t but in the New Kingdom Late Egyptian sources³³ is systematically written with t or even with d:³⁴ we may have here the trace of a pre-New-Kingdom borrowing or of a generalization of a T-Dialect pronunciation.

A somehow related question concerns the spread of the \underline{d} , $\underline{t} \rightarrow t = \tau$ shift itself: did it occur once, more or less simultaneously in all the regions where a T-Dialect can be identified, did it emerge in various regions independently and possibly at various times, or did it emerged in a restricted specific area first, and then it spread to other regions over time, possibly in different waves? This question cannot currently be answered, but it is worth keeping it in mind in future investigations.

§10 A K-dialect as well?

The evidence discussed so far attested of the presence of two dialects, one in which $d, t \rightarrow t =$ τ , and one in which instead \underline{d} , $\underline{t} \rightarrow c = x$. There are, however, few curious hints that may be tray the existence of a third subgroup in which Egyptian d and t seem to correspond to some kind of velar or uvular consonant (marked here as K). In particular, the Egyptian word $\cdot nd =$ "part of a falcon's wing (tip?)" (OK and MK) may be related with S aloo, B alox = "thigh", "knee", "arms or shoulders" – the correspondence between Egyptian d and Sahidic $k^j = 6$ is irregular and cannot be explained as a graphic interference from Bohairic³⁵ because the Bohairic form is spelled with x, not with 6. The same correspondence Eg. $d \leftrightarrow S$ 6, B x can be found also in Eg. db3.w = "leaves", "foliage" (NK and sporadically MK) \leftrightarrow Cpt. S 600B6, 6000B6, B x0B6 = "leaf". This word is also likely related with the Late Egyptian word gb(t) = "leaves", 37 which however displays a g instead of the expected d. Moreover the fact that this latter word is usually spelled in group writing suggests it was perceived as somehow unusual or "nonstandard". In P. Anastasi I (10:6) the word gb(t) is used together with the related db3.w ="leaves", "foliage", the first being spelled in group writing, the latter in standard orthography. This suggests that the scribe may have perceived gb(t) as foreign to the dialect of the text, in which *db3.w* was the normal form.

Another interesting case is the verb w3h(j) = "to flood", "to make verdant", "to rejoice" and related words (attested in the OK and sporadically in the NK), and possibly j3qt = "leeks", "vegetables" (also attested mainly in the OK, and sporadically in the SIP and NK) which are clearly related with the more common verb w3d = "to be green", "to flourish", "to cause to flourish"³⁸ but which display a h and a d instead of the expected d.

One may also mention here the name $K\alpha\mu\epsilon\nu\tau\epsilon\beta\omega\nu\chi$, attested on a mummy label dating to after 300 CE, ³⁹ which seems to be a rendition of the well-attested Egyptian name <u>Dd-Mnt</u>-

³³ At least judging from the attestations in the Ramses database - http://ramses.ulg.ac.be - last access: 21.11.2019.

 $^{^{34}}$ In the *Teachings of Amenemope*, P. BM 10474: 12,8. Note that this spelling may reflect the loss of aspiration and the full merging of t and d either in all positions (as perhaps in Sahidic) or in post-stressed position (as in Bohairic).

³⁵ As instead it is probably the case for Sahidic 6ΝΟΟΥ, variant of ΣΝΟΟΥ, as Bohairic has 6ΝΟΟΥ.

³⁶ For attestations in other dialects see Crum 804.

 $^{^{37}}$ Attested in P. Anastasi I 10:6; P. Leiden I 350 II:7; P. Lansing: 6:9 (=LEM 105:9); P. Turin 1966 r° 2:3; P. Turin 1879+1899+1969 v° 2:5 (= KRI 6 337:14). The word is usually spelled in Group Writing as gA-bU => gUb, which can represent a vocalization * $g\bar{o}b$ (\bar{e}) as in Coptic. For this way of reading the Group Writing spelling, see Kilani 2019.

³⁸ And which ultimately goes back to a pre-Egyptian root *w-r-q = "be green", "to flourish", cf. Proto-Semitic w-r-q "green", "yellow", "leaf" (Loprieno 1995: 32).

³⁹ Vycichl 1984: 82, see: www.trismegistos.org/ref/368503 - last access: 22.12.2019.

jw=f-cnb, 40 and in which the initial \underline{d} appears to be transcribed with Greek K. However, the late date of this attestation, and the fact the name is transcribed in Greek within a Greek text, rather then being a purely Coptic or Egyptian, calls for caution.

Finally, it is a well-known fact that some passages of the Pyramid Texts use the sign for k in words were \underline{t} would be expected (see Allen 2017: 26 for examples). Since it is well known that Egyptian \underline{t} may derive from earlier k (Kammerzell 1998: 37–38; Loprieno 1995: 31–32), these spellings are usually interpreted as archaisms and the passages containing them are assumed to have been composed before such $k \to \underline{t}$ shift (see Allen 2017: 26 and 43). Since however such shift must have occurred in a very early time (Kammerzell 1998: 37–38), and considering the cases of $\underline{n}\underline{d}$, $\underline{d}\underline{b}\underline{s}.w \sim gb(t)$, $\underline{w}\underline{s}\underline{b}(j) \sim j\underline{s}qt$, and possibly of $\underline{K}\alpha\mu\epsilon\nu\tau\epsilon\beta\dot{\omega}\nu\chi$ just discussed, I wonder if these pieces of evidence could actually betray the existence of another dialect or language variety in which \underline{d} , $\underline{t} \leftrightarrow some\ velar/uvular\ corresponding\ to\ k \sim g \sim \underline{b} = S\ 6 \sim B\ x$, or because the initial shift q, $k \to \underline{d}$, \underline{t} never happened in the first place. Considering the very scanty evidence, however, if such a dialect truly ever existed, it must have been very marginal at least in relation with the attested written tradition in all phases of the language.

§11 Conclusion

The question of dialects in pre-Coptic Egyptian is an issue that has been discussed multiple times over the years. Although there is an overall general agreement that some kind of dialectal differentiation most have existed in pre-Coptic Egyptian, even just because the Egyptian themselves seem to suggest that, 41 the opinions about the extent of such differentiations, and above all about the possibility of identifying them in the available written sources, vary greatly. As exhaustively summarized by Jean Winand (2016), there has been a general tendency over the years to consider the identification of pre-Coptic dialects as a generally intriguing but somehow hopeless task: in view of the importance of vowels in the differentiation of Coptic dialects, the nature of the hieroglyphic writing system and its mainly consonantal nature has been seen as a rather insurmountable obstacle. This idea has been occasionally challenged (see Winand 2016: 229-41 for discussion), more recently by Winand himself, who convincingly showed how different morpho-syntactic features could reflect wider dialectal distinctions. In his paper Winand mentions also the possibility of recognizing dialectal distinctions on the phonological level, but he maintains a very cautious stand and he suggests, "with much hesitation" only the possible example of dialect influence in some unusual spellings of the verb 3tp < 3tp = "to load" in some documents form the Memphite area (Winand 2016: 247). He is also very cautious about the degree of resolution one can hope to achieve, and concludes that "in our present state of knowledge, it seems too adventurous to go beyond a basic distinction between a northern and a southern dialect" (2016: 245, 256, and passim).

The first conclusion that can be drawn from the present paper is that yes, it is indeed possible to recognize dialects in pre-Coptic Egyptian on the basis of purely phonological evidence. And in contrast with Winand's considerations (2016: 245, 256, and passim), I believe that the degrees of accuracy that can be reached does not have to stop to a generic Northern Dialect

⁴⁰ See: www.trismegistos.org/namevariant/5473 - last access: 22.12.2019.

⁴¹ See the famous passage in p.Anastasi i, 28,5-6:

n³y=k sdd shw.t hr ns.t_j mn hr-tp sp.t_j jw=w thth m sdm bn ³‹‹ wh‹=f st st mj md.t n z jdhw hn‹ z n ³bw

[&]quot;Your words are regrouped on my tongue and remained fixed on my lips. They are so confused when heard than there is no interpreter who can explain them. They are like a conversation between a man of the delta and a man of elephantine" (see Winand 2016: 241).

versus Southern Dialects, but it can attain, at least in some cases, a much more precise resolution, reaching the regional level if not even the city level. In fact, I believe that framing our investigation of pre-Coptic dialects within a predefine frame of "Northern" versus "Southern" dialects may not only be excessively cautious, but it may also be methodologically misleading: such a conceptual frame implies (and actually impose) a preconceived grouping of the supposed pre-Coptic dialects which is shaped by geographical and/or historico-political considerations (and perhaps by the Coptic linguistic landscape), but which is not based on factual contemporary linguistic data. I thus believe that it would be wise to refrain, at least for now, from any general classification of the dialects into any general macro-grouping, and it would be better to focus on the identification of contrasting linguistics features and on the definition of isoglosses (on the phonological, but also morphological and lexical levels), and of "dialects" conceived as clusters of regional varieties of the language sharing such isoglosses, without looking for any predefined grouping and without imposing on the data any overreaching classification. If the pre-Coptic dialects of Egyptian can really be classified and grouped into somehow coherent and more or less well-defined regional clusters, such groupings and their corresponding geographical distribution will naturally emerge from the data, if and when enough distinctive features and isoglosses will be identified.

In this respect, additional isoglosses could be identified by applying the method presented here to other thorny issues of the Egyptian historical phonology. For instance, it has been noticed that Egyptian k seems to develop into Coptic $\kappa=k$ and $\epsilon=k^j$ without any clearly recognizable rule. Moreover, Peust (1999: 107–8) noticed that most if not all Semitic loanwords that have a k in Late Egyptian and are attested for the first time in the New Kingdom appear to display a $\epsilon=k^j$ in Coptic. These observations hint at a picture that is intriguingly similar to what observed in the case of d and d, and may hide some kind of dialectal interference. This is not the only phonologically unclear case that may betray some kind of dialectal interference: just to mention a few obvious examples, the apparently unpredictable development of Egyptian d into d0 = d0 or d1 in Sahidic, or Eg. d2 into Sahidic d3 in this perspective.

Then, as discussed above,⁴² a careful analysis of texts may help identifying the geographical borders of such isoglosses, and how they evolved over time. This would clearly lead to a better understanding of the pre-Coptic dialectal landscape of Egyptian, both from a synchronic and a diachronic point of view.

The research presented here suggests some interesting considerations also regarding the Egyptian sociolinguistic reality. First of all, the scenario sketched above for the New Kingdom suggests that the usual bilingual system based on an opposition between a "classical language" (Middle Egyptian) and a spoken vernacular language (Late Egyptian) may not be the most accurate model.

Instead, the sociolinguistic reality of at least the New Kingdom may be better described through a *trilingual* model composed of three linguistic layers: on the first level, the "classical language" (= Middle Egyptian) associated with the culturally higher register, on the second level a prestigious vernacular dialect (= one Late Egyptian dialect), likely associated with the royal court and used official administration, contemporary literary compositions and the like at the country level, and a third level formed by all other vernacular dialects (= all other Late Egyptian dialects), some of which may have been used in written form in the ordinary communications or even in literary compositions at the regional level, while others may have never been committed to writing. Comparable trilingual models can actually often be

⁴² And observed already by Winand (2016) on the basis of morphology.

recognized cross-culturally in societies with long and well-established written traditions⁴³ and therefore it should not be particularly surprising if such a system existed in New Kingdom Egypt as well.

Finally, as implied by some of the points discussed in the present study, a better understanding of the Egyptian dialectal reality may yield new insights on the interactions between Egypt and neighbouring societies. In particular, the association of Semitic loanwords with a C-Dialect on one hand, and the association of Egyptian loanwords in Canaanite Akkadian on the other, imply different patterns of interactions between Egypt and the Levant that involved different linguistic components of the Egyptian society and which likely evolved over time. These are all aspects that I plan to further investigate in the near future.

In general, these sociolinguistic phenomena are worthy of being studied more in details, as this domain of research, which is still largely unexplored, has the potential of offering important new insights on the internal structure and dynamics of the ancient Egyptian society.

References

Allen, James P. 2005. *The Ancient Egyptian Pyramid Texts*. Writings from the Ancient World 23. Atlanta: Society of Biblical Literature.

——. 2013. *The Ancient Egyptian Language: An Historical Study*. Cambridge University Press.

———. 2017. *Grammar of the Ancient Egyptian Pyramid Texts.* Languages of the Ancient Near East 7. Winona Lake: Eisenbrauns.

Breasted, James Henry. 1930. *The Edwin Smith Surgical Papyrus*. University of Chicago Oriental Institute Publications 3–4. Chicago: The University of Chicago Press.

Černý, Jaroslav. 1976. *Coptic Etymological Dictionary*. Cambridge: Cambridge University Press. Edel, Elmar. 1955. *Altägyptische Grammatik*. Analecta orientalia 34. Roma: Pontificium Institutum Biblicum.

Goren, Yuval, Israel Finkelstein, Nadav Na'aman, and Michal Artzy. 2004. *Inscribed in Clay:*Provenance Study of the Amarna Tablets and Other Ancient Near Eastern Texts.

Monograph Series (Makhon Le-Arkhe'ologyah 'a. Sh. Sonyah u-Marko Nadler) 23. Tel
Aviv: Emery and Claire Yass Publications in Archaeology.

Hoch, James E. 1994. *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period.* Princeton: Princeton University Press.

Izre'el, Shlomo. 1997. *The Amarna Scholarly Tablets*. Cuneiform Monographs 9. Groningen: Styx.

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⁴³ One can think of cases like pre-Modern, post-Medieval Italy, where Latin = classical language, Florence Dialect = prestigious vernacular dialect, and other vernacular dialects used as spoken languages all across the peninsula, or like late Imperial China, where Classical Chinese = classical language, Mandarin = prestigious dialect spoken at the court and at least partially shaped on the Beijing dialect, and other vernacular dialects used across China. In some cases, the three languages may not belong to the same linguistic stock. A good example of that is provided by Ptolemaic Egypt, where Middle Egyptian = classical language, Greek = prestigious court language, and pre-Coptic Late Egyptian = vernacular dialects. This latter example is interesting both because it shows that in later periods a trilingual system was indeed in place in Egypt, and because the well-known abundance of loanwords from Greek (= prestigious language) into Coptic (= vernacular dialects) provides a compelling parallel for the phenomenon of borrowing form a Dialect-C (= prestigious (court?) dialect(s)) into Dialect-T (= other vernacular dialect(s)) argued for in this paper.

- Kammerzell, Frank. 1998. 'The Sounds of a Dead Language: Reconstructing Egyptian Phonology'. *Göttinger Beträge Zur Sprachwissenschaft* 1: 21–41.
- Kilani, Marwan. 2019. *Vocalisation in Group Writing. A New Proposal*. Hamburg: Widmaier Verlag.
- Loprieno, Antonio. 1995. *Ancient Egyptian: A Linguistic Introduction*. Cambridge: Cambridge University Press.
- Morales, Antonio J. 2013. 'The Transmission of the Pyramid Texts into the Middle Kingdom: Philological Aspects of a Continuous Tradition in Egyptian Mortuary Literature'. Doctoral Thesis, University of Pennsylvania.
- Osing, Jürgen. 1980. 'Lautsystem'. In *Lexikon der Ägyptologie*, edited by Wolfgang Helck, Eberhard Otto, and Wolfhart Westendorf, III:cols 944-949. Wiesbaden: Harrassowitz.
- Peust, Carsten. 1999. *Egyptian Phonology: An Introduction to the Phonology of a Dead Language*. Monographien Zur Ägyptischen Sprache 2. Göttingen: Peust & Gutschmidt.
- Roquet, Gerard. 1973. 'Incompatibilités Dans La Racine En Ancien Égyptien'. *Göttinger Miszellen* 6: 107–17.
- Rössler, Otto. 1971. 'Das Ägyptische Als Semitische Sprache'. In *Christentum Am Roten Meer*, edited by F. Altheim and R. Stichl, 263–326. Berlin; New York: De Gruyter.
- Steindorff, Gerog. 1892. 'Das Altägyptische Alphabet Und Seine Umschreibung'. Zeitschrift Der Deutschen Morgenländischen Gesellschaft 46: 709–30.
- Swadesh, Morris. 1952. 'Lexicostatistic Dating of Prehistoric Ethnic Contacts'. *Proceedings of the American Philosophical Society* 96: 452–63.
- Vycichl, Werner. 1934. 'Das Ägyptische Vokalisationsproblem'. *Mélanges Maspero* 1: 385–92. ———. 1984. *Dictionnaire étymologique de la langue copte*. Leuven: Peeters.
- Winand, Jean. 2016. 'Dialects in Pre-Coptic Egyptian. With a Special Attention to Late Egyptian'. *Lingua Aegyptia* 23: 229–69.

Appendix A

ογχιει

Forms marked with L derive from the previous item and have not be counted in the quantitative analyses discussed in the paper. The following data are available in digital form (.json format) in my github repository (www.xxx - I will provide the address once the article is accepted).

$d \rightarrow c = x$	Cpt. transl.: to be whole; to be safe;	Bohairic: мохь, моүхь, моьх	• NK & TIP: 2	
➤ ID: D.01	to be sound	Others: A Maxe; F	Sahidic: гмх, гємх,	
Eg. form: ⁵md	Crum: 511	Maxb, Mox, Max	х мнх	
Eg. transl.: to turn away	Vycichl: 226, 242	Cpt. transl.: girdle of soldier or monk	Bohairic: демх Others: А дмх; A2 дмх;	
TLA ID: 37990	➤ ID: D.04	Crum: 213	F дмх, демх, днмх	
Attestations:	Eg. form: mdȝ.t	Vycichl: 132	Cpt. transl.: vinegar	
• OK & FIP: 0	Eg. transl.: chisel		Crum: 682	
• MK & SIP: 0	TLA ID: 78480	➤ ID: D.06	Vycichl: 303	
• NK & TIP: 4	Attestations:	Eg. form: mdḥ.t		
	• OK & FIP: 0	Eg. transl.: mortar	➤ ID: D.09	
Sahidic: юмх	• MK & SIP: 1	TLA ID: 854642	Eg. form: ḥdy	
Bohairic: ——	• NK & TIP: 10	Attestations:	Eg. transl.: (cool)	
Others: A омх		• OK & FIP: 0	wind	
Cpt. transl.: to wean	Sahidic: Maxe	• MK & SIP: 0	TLA ID: 112700	
Crum: 524	Bohairic: махı, масı	• NK & TIP: 3	Attestations:	
Vycichl: 249	Others: ——		• OK & FIP: 0	
-	Cpt. transl.: axe; pick	Sahidic: אצגעד, אצגדע,	• MK & SIP: 0	
➤ ID: D.02	Crum: 213	мхарх	• NK & TIP: 1	
Eg. form: ⁵₫₃	Vycichl: 132	Bohairic: мхагт,		
Eg. transl.: falsehood;	•	УТАХИ	Sahidic: ——	
guilt	➤ ID: D.05	Others: ——	Bohairic: ౽ᢍᠷ	
TLA ID: 42100	Eg. form: mdḥ	Cpt. transl.: mortar	Others: ——	
Attestations:	Eg. transl.: strip of	Crum: 214	Cpt. transl.: cold	
• OK & FIP: 0	cloth	Vycichl: 133	Crum: 742	
• MK & SIP: 0	TLA ID: 78670	,	Vycichl: 320	
• NK & TIP: 48	Attestations:	➤ ID: D.07	,	
	• OK & FIP: 2	Eg. form: ndr.y	➤ ID: D.10	
Sahidic: ——	• MK & SIP: 1	Eg. transl.: the siezer	Eg. form: qd	
Bohairic: oxı	• NK & TIP: 0	TLA ID: 91680	Eg. transl.: to go	
Others: ——		Attestations:	around; to run	
Cpt. transl.: iniquity	Eg. form: mdḥ	• OK & FIP: 0	(Sem. loan word?)	
Crum: 258	Eg. transl.: fillet	• MK & SIP: 0	TLA ID: 162700	
Vycichl: 156	TLA ID: 78680	• NK & TIP: 1	Attestations:	
,	Attestations:		• OK & FIP: 0	
➤ ID: D.03	• OK & FIP: 1	Sahidic: νογχε, νογχ	• MK & SIP: 0	
Eg. form: wd3	• MK & SIP: 1	Bohairic: νογχ	• NK & TIP: 1	
Eg. transl.: to be	• NK & TIP: 0	Others: A2 νογχε; F		
whole; to be intact		νογχ	Sahidic: ——	
TLA ID: 52090	Eg. form: mdḥ	Cpt. transl.: to throw;	Bohairic: 60x1	
Attestations:	Eg. transl.: to encircle;	to cast	Others: ——	
• OK & FIP: 93	to fasten around	Crum: 247	Cpt. transl.: run	
• MK & SIP: 69	TLA ID: 854517	Vycichl: 152	Crum: 840	
• NK & TIP: 240	Attestations:		Vycichl: 350	
	• OK & FIP: 0	➤ ID: D.08	. ,	
Sahidic: oyxaı, oyxzaı	• MK & SIP: 1	Eg. form: ḥmd	➤ ID: D.11	
Bohairic: 07xai	• NK & TIP: 22	Eg. transl.: vinegar;	Eg. form: qd	
Others: A ογχει,	————	inferior quality	Eg. transl.: thornbush	
ογχεει, ογχειτε; Α2	Sahidic: мохշ, махշ,	wine (Sem. loan	(Sem. loan word)	
ογχεει; F ογχει,	мотхг, мохкг,	word)	TLA ID: 162690	
оүхееі; Sa оухні,	мохгу, мохку,	TLA ID: 105840	Attestations:	
over or	Norgal Norgan Nard	Attestations:	• OK & FID: O	

Attestations:

• OK & FIP: 0 • MK & SIP: 0 • OK & FIP: 0 • MK & SIP: 0

• NK & TIP: 1

нохиги, рхон, ругон

махку, мох

Sahidic: 60YX, KOYX, 6ωΣ, 60γ6, κογκ Bohairic: xογα, ωρογα Others: -Cpt. transl.: safflower, cardamum Crum: 840 Vycichl: 350

➤ ID: D.12 Eg. form: qdm Eg. transl.: handful (as a measure) TLA ID: 600590 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 1

Sahidic: 62xme, 62xme, 6ахмес Bohairic: хамн Others: --Cpt. transl.: fist,

handful Crum: 842 Vycichl: 351

➤ ID: D.13 Eg. form: gd Eg. transl.: hand TLA ID: 168780 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 1

Sahidic: 61x

Bohairic: x1x Others: A 61x: A2 61x: F 61X, X1X2 Cpt. transl.: hand Crum: 839 Vycichl: 350

➤ ID: D.14 Eg. form: d3j Eg. transl.: not clear TLA ID: 181800 Attestations: • OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 2

Sahidic: xo Bohairic: xo, axo Others: —— Cpt. transl.: crookback Crum: 753 Vycichl: 323

➤ ID: D.15

Eg. form: d3.y Eg. transl.: [a large riverboat] TLA ID: 181770 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 2

Crum: 754

Sahidic: xoi, xoei Bohairic: xoi Others: A xai, xaei; A2 αλι, αλει; F αλι; Sa **ጀ**ልፎ፤ Cpt. transl.: boat

Vycichl: 324 ➤ ID: D.16 Eg. form: d3m Eg. transl.: offspring; youths; generation

TLA ID: 182160 Attestations:

• OK & FIP: 3

• MK & SIP: 7

• NK & TIP: 65

Sahidic: хом, хооме (once) Bohairic: xωογ Others: A хюм; A2 хом, хооме; F хом Cpt. transl.:

generation

Crum: 770 (B 793) Vycichl: 327

➤ ID: D.17 Eg. form: d3d3 Eg. transl.: head: tip TLA ID: 182330 Attestations: • OK & FIP: 3

• MK & SIP: 21

• NK & TIP: 78

Sahidic: xwx Bohairic: xwx Others: A2 xox; F xox Cpt. transl.: head Crum: 799 Vycichl: 328 & 334

➤ ID: D.18 Eg. form: d3d3.t Eg. transl.: pot TLA ID: 182440 Attestations: • OK & FIP: 0

• MK & SIP: 1

• NK & TIP: 4

Eg. form: d3d3.w

Eg. transl.: pot TLA ID: 872144 Attestations:

• OK & FIP: 0

• MK & SIP: 2

• NK & TIP: 0

Sahidic: xw Bohairic: -Others: A xoy; A2 xw; Sa xoy Cpt. transl.: cup Crum: 759 Vycichl: 324

➤ ID: D.19 Eg. form: d3f Eg. transl.: to burn up TLA ID: 182120 Attestations:

• OK & FIP: 0

• MK & SIP: 1

• NK & TIP: 12

Sahidic: xoyq, xoyb, γων, γων Bohairic: xoyq

Others: A xoγq; A2 γογα

Cpt. transl.: to burn; to scorch Crum: 795

Vycichl: 333

➤ ID: D.20 Eg. form: d3r.t Eg. transl.: scorpion TLA ID: 182270

Attestations: • OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 2

Sahidic: — Bohairic: 6хн Others: -Cpt. transl.: scorpion Crum: 810 Vycichl: 337

➤ ID: D.21 Eg. form: de Eg. transl.: to be abandoned TLA ID: 182540 Attestations: • OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 1

Sahidic: xaie, xaeie, Xλε

Bohairic: ——

Others: A xaie, xaeie; Α2 Χλιε, Χλειε; Γ χαη, χαιη: Sf χαη, χλін Cpt. transl.: desert Crum: 745

➤ ID: D.22 Eg. form: de Eg. transl.: storm; wind TLA ID: 182480 Attestations:

• OK & FIP: 1

Vycichl: 324

• MK & SIP: 10

• NK & TIP: 13

Sahidic: ---Bohairic: —— Others: A xo Cpt. transl.: wind; tempest Crum: 753 Vycichl: 323

➤ ID: D.23 Eg. form: deb.t Eg. transl.: charcoal TLA ID: 182660 Attestations:

• OK & FIP: 4

• MK & SIP: 7

• NK & TIP: 11

Sahidic: xbbec, xbbc, XEBBEC, XEBBC, XEBC, хвс. хннвс. хнвс. **ΣΗΙΒЄС. ΣΔΙΒЄС.** αλειβές Bohairic: хєвс Others: A xbbec; F Cpt. transl.: coal Crum: 760

➤ ID: D.24 Eg. form: der Eg. transl.: to search; to research TLA ID: 854589 Attestations: • OK & FIP: 0

• MK & SIP: 23

Vycichl: 324

• NK & TIP: 42

Sahidic: xwp Bohairic: xep-Others: — Cpt. transl.: to examine; to study Crum: 781 Vycichl: 330

➤ ID: D.25 Eg. form: dph Eg. transl.: apple (Sem. loan word) TLA ID: 183730 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 4

Sahidic: xemnez, хмпер, хемпнр, хэпіх уэпіх унпэх xones, xones (V) Bohairic: хемфег, хффг (V) Others: A хмпнг, хипнг; DM хпог; F хімпез, хепез Cpt. transl.: apple Crum: 771

➤ ID: D.26 Eg. form: dme Eg. transl.: papyrus (scroll, sheet) TLA ID: 184040 Attestations:

Vycichl: 327 & 330

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 21

Sahidic: хооме, хоме Bohairic: хом Others: A xoyoyme, хоуме: А2 хоме: F хооме, хоме, хффи. хфмі. хооме, хоме: Sa хшме

Cpt. transl.: a sheet, roll of papyrus; written document;

Crum: 770 Vycichl: 327

➤ ID: D.27 Eg. form: dnjr Eg. transl.: dirt TLA ID: 184190 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 1

Sahidic: ---Bohairic: xhpi, xinipi Others: —-Cpt. transl.: filth Crum: 782 Vycichl: 331

➤ ID: D.28 Eg. form: dn.w Eg. transl.: a plant TLA ID: 184120 Attestations:

• OK & FIP: 6

• MK & SIP: 0

• NK & TIP: 0

Sahidic: xne, xnh, xhnh Bohairic: —— Others: —— Cpt. transl.: beet or green herbs Crum: 774 Vycichl: 327

➤ ID: D.29 Eg. form: dn.w Eg. transl.: threshing floor TLA ID: 184220 Attestations: • OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 6

Sahidic: xnooy, xnaay, 6ΝΟΟΥ Bohairic: 6Νωογ Others: F 6NWOY; Sf 6ηωος, (ρ) ανας Cpt. transl.: threshing-floor; grain heaped there Crum: 776

➤ ID: D.30 Eg. form: dnb Eg. transl.: to be crooked (med.) TLA ID: 184240 Attestations:

Vycichl: 329

• OK & FIP: 0

• MK & SIP: 1

• NK & TIP: 2

Sahidic: xbin Bohairic: ---Others: -Cpt. transl.: to blemish Crum: 760 Vycichl: 324

➤ ID: D.31 Eg. form: dnr Eg. transl.: switch; stick (Sem. loan word) TLA ID: 184350 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 2

Sahidic: —— Bohairic: xax Others: -Cpt. transl.: branch Crum: 765

Vycichl: 325

➤ ID: D.32 Eg. form: dry.t Eg. transl.: dwelling; chamber TLA ID: 184910 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 1

Eg. form: drw.t Eg. transl.: hall (?) TLA ID: 185030 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 1

Sahidic: xoe, xoie, xoei, χοι, χο, χω Bohairic: xw, xoı, xwı Others: A xai, xaie; F χο, χαι, χααι; Sf χο Cpt. transl.: wall Crum: 753 Vycichl: 323

➤ ID: D.33 Eg. form: dre Eg. transl.: to lay low; to overthrow (Sem. loan word) TLA ID: 184960 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 1

Sahidic: xwwpe, xwpe, COP Bohairic: xwp Others: A xoype, χογογρε; Α2 χραρε; Sa χογρε, χογογρε Cpt. transl.: to scatter; to disperse Crum: 782 Vycichl: 331

➤ ID: D.34 Eg. form: drdr Eg. transl.: strange; foreign

TLA ID: 185160 Attestations:

• OK & FIP: 0

• MK & SIP: 1

• NK & TIP: 9

Eg. form: drdr Eg. transl.: to be foreign; to behave hostilely TLA ID: 600474

Attestations:

• OK & FIP: 0

• MK & SIP: 2

• NK & TIP: 5

Eg. form: drdr Eg. transl.: stranger; foreigner TLA ID: 650046 Attestations:

• OK & FIP: 0

• MK & SIP: 2

• NK & TIP: 7

Sahidic: xaxe Bohairic: צאצו Others: A xaxe; A2 χαχε; Γ χαχι; Ο χαχε Cpt. transl.: enemy Crum: 799 Vycichl: 333

➤ ID: D.35 Eg. form: dhrt Eg. transl.: a vessel (Sem. loan word) TLA ID: 185310 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 2

Sahidic: አአልዖፐር Bohairic: —-Others: --Cpt. transl.: deep pit; vessel

Crum: 770 Vycichl: 326

➤ ID: D.36 Eg. form: dt Eg. transl.: olive tree; olives; olive oil (Sem. loan word) TLA ID: 185770 Attestations:

• OK & FIP: 0

• MK & SIP: 1

• NK & TIP: 3

Sahidic: xoeit, xaeit Bohairic: xwit

Others: A xagit; A2 xait; F xait; Ο θωητ; Sa xagit Cpt. transl.: olive tree, its fruit Crum: 790 Vycichl: 325

➤ ID: D.37
Eg. form: dd
Eg. transl.: to say; to
tell
TLA ID: 185810
Attestations:
• OK & FIP: 497
• MK & SIP: 962

• NK & TIP: 2834

Sahidic: xω
Bohairic: xω
Others: A xογ; A2 xω,
xογ, xοογε; F xω; O
xω
Cpt. transl.: to say; to
speak; to tell
Crum: 754
Vycichl: 323

L, ID: D.38
Eg. form: sdd
Eg. transl.: to
recount; to talk
TLA ID: 150940
Attestations:
OK & FIP: 1
MK & SIP: 10
NK & TIP: 65

Sahidic: waxe Bohairic: caxi Others: A wexe; A2 wexe, cexe; F wexi, cexi; Sa wexe Cpt. transl.: to speak Crum: 612 Vycichl: 278

➤ ID: D.39
Eg. form: ddf.t
Eg. transl.: snake;
worm (med.)
TLA ID: 186250
Attestations:
• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 24

Sahidic: хатце, хатве Bohairic: батці Others: A хетце; A2 хетце; F хетці; Sf хетві Cpt. transl.: reptile Crum: 792 Vycichl: 332

➤ ID: D.40
Eg. form: ddm.t
Eg. transl.: heaps
TLA ID: 186290
Attestations:
• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 7

Crum: 792

———— Sahidic: хатие Bohairic: —— Others: А хетие Cpt. transl.: heap of grain

Vycichl: 332
➤ ID: D.41
Eg. form: ddḥ
Eg. transl.: to shut up;
to imprison

TLA ID: 186320 Attestations: • OK & FIP: 0

• MK & SIP: 3 • NK & TIP: 28

Eg. form: ddh.w Eg. transl.: prison TLA ID: 186330 Attestations:

• OK & FIP: 0 • MK & SIP: 0

• NK & TIP: 4

Vycichl: 332

Sahidic: ——
Bohairic: ——
Others: O xraz
Cpt. transl.: meaning
unknown (Vyc.:
prison)
Crum: 792

 $d \rightarrow c = x$ and $t = \tau$

➤ ID: D.42
Eg. form: wdc
Eg. transl.: to
separate; to judge;
to appoint
TLA ID: 52360
Attestations:

• OK & FIP: 82

• MK & SIP: 22

• NK & TIP: 125

Sahidic: ογωτε, ογωωτε, ογαατε Bohairic: ογω† Others: A2 ογωτε, ογωωτε; F ογω†, ογωω† Cpt. transl.: to

separate; to send; to be different from Crum: 495

Crum: 495 Vycichl: 239

➤ ID: D.43

Eg. form: wdc

Eg. transl.: to

separate; to judge;

to appoint

TLA ID: 52360

Attestations:

• OK & FIP: 82

• MK & SIP: 22

• NK & TIP: 125

Sahidic: ογωχε, ογωωχε Bohairic: ογωχ, βωχ Others: —— Cpt. transl.: cut Crum: 511 Vycichl: 242

➤ ID: D.44
Eg. form: msdr
Eg. transl.: ear
TLA ID: 76230
Attestations:
• OK & FIP: 22

• MK & SIP: 45

• NK & TIP: 70

Sahidic: маахе Bohairic: маах Others: А меехе; F меехе, мехе, мих Cpt. transl.: ear Crum: 212 Vycichl: 132

➤ ID: D.45 Eg. form: msdr Eg. transl.: ear TLA ID: 76230 Attestations:

• OK & FIP: 22

• MK & SIP: 45

• NK & TIP: 70

Sahidic: —— Bohairic: —— Others: A2 мефте; Sa мефт

Cpt. transl.: ear Crum: 212 Vycichl: 132

➤ ID: D.46
Eg. form: md³
Eg. transl.: block (of pressed dates as a unit of measure)
TLA ID: 78430
Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 5

Sahidic: MAAXE, MAXE Bohairic: —— Others: —— Cpt. transl.: a measure of grain Crum: 213 Vycichl: 132

➤ ID: D.47
Eg. form: md₃
Eg. transl.: block (of pressed dates as a unit of measure)
TLA ID: 78430

Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 5

Sahidic: MAATCE, MATI
(Win 5, Ep 176)
Bohairic: ——
Others: ——
Cpt. transl.: a
measure of grain
Crum: 213
Vycichl: 132

➤ ID: D.48
Eg. form: dnh
Eg. transl.: wing
TLA ID: 184370
Attestations:
• OK & FIP: 42

• MK & SIP: 2

• NK & TIP: 21

Sahidic: Tnz, Tnaz, Tenaz Bohairic: TENZ Others: A TNZ; F THNZ, тнаг, тенаг, теген; Sf тниг Cpt. transl.: wing Crum: 421 Vycichl: 218-9

➤ ID: D.49 Eg. form: dnh Eg. transl.: wing TLA ID: 184370 Attestations:

• OK & FIP: 42

• MK & SIP: 2

• NK & TIP: 21

Sahidic: ชุมฉุว Bohairic: ธหลว Others: A אאבץ; A2 ανας; F αναζ, ανέζ, xenz; Sf xnz Cpt. transl.: forearm Crum: 777

Vycichl: 329

 $d \rightarrow t = \tau$

➤ ID: D.50 Eg. form: cd Eg. transl.: pieces of fat TLA ID: 41980 Attestations: • OK & FIP: 9

• MK & SIP: 127

• NK & TIP: 54

Sahidic: ωτ, ογωτ Bohairic: ωτ, ογωτ Others: A oyat; F at Cpt. transl.: fat Crum: 531 Vycichl: 251

➤ ID: D.51 Eg. form: w3d Eg. transl.: to be green; to be fresh; to flourish; to cause to flourish TLA ID: 43580

Attestations:

• OK & FIP: 42 • MK & SIP: 9

• NK & TIP: 89

Sahidic: oywt Bohairic: ογωτ Others: --Cpt. transl.: to be raw, fresh Crum: 493 Vycichl: 238

L ID: D.52 Eg. form: w3d Eg. transl.: to be green; to be fresh; to flourish; to cause to flourish TLA ID: 43580 Attestations:

• OK & FIP: 42

• MK & SIP: 9

• NK & TIP: 89

Sahidic: -oywt Bohairic: -вют Others: —-Cpt. transl.: Vyc.: fresh (skin) Crum: 582 Vycichl: 270

Լ ID: D.53 Eg. form: w3d.t Eg. transl.: greens; vegetables TLA ID: 43700

Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 13

Sahidic: oyote, ογοοτε Bohairic: ογο†, во† Others: F ογαα†; Sa ογλτε Cpt. transl.: greens; herbs Crum: 493

➤ ID: D.54 Eg. form: wnd.wt Eg. transl.: hold (of a ship); cavity TLA ID: 47220 Attestations:

Vycichl: 238

• OK & FIP: 3

• MK & SIP: 1

• NK & TIP: 0

Sahidic: oyent, oynt, ογοντ, ογοντογ Bohairic: оуєнт Others: A OYENT Cpt. transl.: deep; hollow place; hold of ship Crum: 484 Vycichl: 235

➤ ID: D.55 Eg. form: wd Eg. transl.: stela TLA ID: 51990 Attestations: • OK & FIP: 1

• MK & SIP: 17 • NK & TIP: 148

Sahidic: оүосіт Bohairic: oyo† Others: ---Cpt. transl.: pillar Crum: 493 Vycichl: 231

➤ ID: D.56 Eg. form: wd3 Eg. transl.: to proceed; to go in procession TLA ID: 52130 Attestations:

• OK & FIP: 2

• MK & SIP: 38

• NK & TIP: 91

Sahidic: oyeite, ογεετε, ογιτε, вітє Bohairic: ογειτ Others: A ογιτε; F ογειτι Cpt. transl.: waste away; dry up Crum: 495 Vycichl: 238

➤ ID: D.57 Eg. form: wdb Eg. transl.: to turn back; to fold over; to revert TLA ID: 52620 Attestations:

• OK & FIP: 17

• MK & SIP: 11

• NK & TIP: 24

Sahidic: оүштв, ογωτα Bohairic: оүштев Others: A ογτβε; A2 ογωτβ, ογωτη; F ογωτε, ογωτα, ογωτεβ; Ο ογωτβ, ρτωγο

Cpt. transl.: to change (place); to be changed Crum: 496 Vycichl: 239

➤ ID: D.58 Eg. form: wdh Eg. transl.: to bear fruit (?); to ripen (?)

TLA ID: 52750 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 1

Sahidic: ογτλ2 Bohairic: ογτας Others: Α εταζ; Α2 ογταζ, εταζ; F оүтер Cpt. transl.: fruit Crum: 498 Vycichl: 239

➤ ID: D.59 Eg. form: psd Eg. transl.: nine TLA ID: 62450 Attestations:

• OK & FIP: 1

• MK & SIP: 0

• NK & TIP: 0

Sahidic: Yıc, YıT Bohairic: үт

Others: A Yıc Cpt. transl.: nine Crum: 273 Vycichl: 248

➤ ID: D.60 Eg. form: pd.t Eg. transl.: bow TLA ID: 63270 Attestations:

• OK & FIP: 7

• MK & SIP: 7

• NK & TIP: 36

Sahidic: пітє Bohairic: φιϯ Others: A nite Cpt. transl.: bow Crum: 276 Vycichl: 165

➤ ID: D.61 Eg. form: mnd Eg. transl.: chest (of a man or woman) TLA ID: 71720 Attestations:

• OK & FIP: 57

• MK & SIP: 14

• NK & TIP: 23

Sahidic: —— Bohairic: миот Others: --Cpt. transl.: breast Crum: 176 Vycichl: 117

➤ ID: D.62 Eg. form: msdj Eg. transl.: to hate; to dislike TLA ID: 76210 Attestations:

• OK & FIP: 24

• MK & SIP: 21

• NK & TIP: 53

Sahidic: мостє Bohairic: мост Others: А масте; A2 масте; F масф Cpt. transl.: to hate Crum: 187 Vycichl: 122

➤ ID: D.63 Eg. form: mdw Eg. transl.: ten TLA ID: 78340 Attestations:

• OK & FIP: 3

• MK & SIP: 9

• NK & TIP: 3

Sahidic: мнт, мнтє Bohairic: мнт. мнт Others: Амнт; A2 мнт Cpt. transl.: ten Crum: 187 Vycichl: 124

➤ ID: D.64 Eg. form: md Eg. transl.: to be deep TLA ID: 78360 Attestations: • OK & FIP: 0

• MK & SIP: 2

NK & TIP: 8

Sahidic: мтю, ємтю, мто Bohairic: —— Others: Во (Vyc.) ємою (once); L (Vyc.) Cpt. transl.: depth (of

the sea) Crum: 193 Vycichl: 124

➤ ID: D.65 Eg. form: nd Eg. transl.: thread TLA ID: 90960 Attestations: • OK & FIP: 0 • MK & SIP: 0

• NK & TIP: 5

Sahidic: NAT, NET Bohairic: אאד Others: So (Vyc.) инт Cpt. transl.: loom Crum: 229 Vycichl: 145

➤ ID: D.66 Eg. form: nd Eg. transl.: to grind; to crush TLA ID: 90880 Attestations: • OK & FIP: 3 • MK & SIP: 194 • NK & TIP: 73

Sahidic: Nort Bohairic: Noyt Others: A μογτ; F ноүт Cpt. transl.: to grind; to pound

Crum: 229 Vycichl: 145 ➤ ID: D.67 Eg. form: ndm Eg. transl.: to be sweet; to be pleasant TLA ID: 500020 Attestations:

• OK & FIP: 20

• MK & SIP: 63

• NK & TIP: 123

Sahidic: Noyтм Bohairic: ноутем Others: A NOYTME; F ноүтм Cpt. transl.: to be sweet; to be pleasant Crum: 231 Vycichl: 147

➤ ID: D.68 Eg. form: rwd Eg. transl.: to be firm; to prosper; to succeed TLA ID: 93780 Attestations:

• OK & FIP: 102 • MK & SIP: 18

• NK & TIP: 96

Sahidic: оүрот Bohairic: єроуот Others: A oypat; A2 оүрат; F оүрат, ελογατ, λογατ; Sf ογρατ Cpt. transl.: to be glad,

eager, ready Crum: 490 Vycichl: 237

➤ ID: D.69 Eg. form: hd Eg. transl.: silver TLA ID: 112330 Attestations:

• OK & FIP: 11 • MK & SIP: 19

• NK & TIP: 113

Sahidic: ¿at, ¿ate, **2**λλΤ6 Bohairic: אבך Others: А zeт; A2 zeт; F 2нт, 2€т; Sa 2нт, Cpt. transl.: silver Crum: 713 Vycichl: 314

➤ ID: D.70 Eg. form: hdj Eg. transl.: to injure; to destroy; to be lacking TLA ID: 112660 Attestations: • OK & FIP: 2

• MK & SIP: 22 • NK & TIP: 115

Sahidic: 200те Bohairic: zwt Others: —

Cpt. transl.: to rub; to

bruise Crum: 722 Vycichl: 315

➤ ID: D.71 Eg. form: snd Eg. transl.: to fear; to be afraid TLA ID: 138730 Attestations: • OK & FIP: 24

• MK & SIP: 16

• NK & TIP: 129

Eg. form: snd Eg. transl.: fear; dreadfulness TLA ID: 138740 Attestations:

• OK & FIP: 33 • MK & SIP: 45

• NK & TIP: 134

Sahidic: CNAT Bohairic: —— Others: -Cpt. transl.: to fear Crum: 346 Vycichl: 191

➤ ID: D.72 Eg. form: shd Eg. transl.: light TLA ID: 141260 Attestations:

• OK & FIP: 0

• MK & SIP: 0 • NK & TIP: 1

Sahidic: съгте Bohairic: ca2ተ Others: F cez† Cpt. transl.: to kindle fire; to heat Crum: 387 Vycichl: 206

➤ ID: D.73 Eg. form: sdm Eg. transl.: eye-paint TLA ID: 149840

Attestations:

- OK & FIP: 0
- MK & SIP: 4
- NK & TIP: 7

Sahidic: стнм Bohairic: стнм, сөнм Others: -Cpt. transl.: stibium; antimony; kohl

Crum: 364 Vycichl: 199

➤ ID: D.74

Eg. form: sdm Eg. transl.: to hear; to

listen

TLA ID: 150560 Attestations:

- OK & FIP: 139
- MK & SIP: 234
- NK & TIP: 680

Sahidic: сфтм Bohairic: сфтем Others: A сотиє; A2 сфтм, сфтме; F сштем

Cpt. transl.: to hear Crum: 363 Vycichl: 199

➤ ID: D.75

Eg. form: sdr

Eg. transl.: to lie; to sleep; spend the night

TLA ID: 150740 Attestations:

- OK & FIP: 81
- MK & SIP: 110
- NK & TIP: 195

Sahidic: ωτο, **x**το for (τ)ωτο Bohairic: ωτο Others: A хто for $(\tau)\omega\tau o$; A2 xto for

(τ)ωτο Cpt. transl.: to lay down

Crum: 792

Vycichl: 332

➤ ID: D.76 Eg. form: sd.t Eg. transl.: fire; flame

TLA ID: 150140 Attestations:

- OK & FIP: 198
- MK & SIP: 15
- NK & TIP: 153

Sahidic: cate, caate, сотє Bohairic: caተ Others: A cate, cete, сеете; А2 сете; F са†; Ο сете, саті Cpt. transl.: fire

➤ ID: D.77 Eg. form: šnd.wt Eg. transl.: king's kilt; kilt (gen.) TLA ID: 156540

Attestations: OK & FIP: 4

Crum: 360

Vycichl: 197

- MK & SIP: 3
- NK & TIP: 5

Sahidic: ωντω Bohairic: ωεντω Others: 0 ωντω Cpt. transl.: sheet; robe of linen Crum: 573 Vycichl: 266

➤ ID: D.78 Eg. form: šnd.t Eg. transl.: acacia TLA ID: 156510 Attestations:

• OK & FIP: 0 • MK & SIP: 55

• NK & TIP: 23

Sahidic: ωοντε Bohairic: ωοντ Others: A ωλητε; A2 ωαντε; F ωαντε; Sf ωантє

Cpt. transl.: thorn tree Crum: 573

Vycichl: 267

➤ ID: D.79

Eg. form: šd.t Eg. transl.: bread

dough TLA ID: 158970

Attestations:

- OK & FIP: 7
- MK & SIP: 5
- NK & TIP: 0

Sahidic: ωωτε Bohairic: ωω† Others: A ωωτε; Ο ωωτε Cpt. transl.: flour; dough

Crum: 595 Vycichl: 272 ➤ ID: D.80 Eg. form: dw

Eg. transl.: mountain TLA ID: 182830

Attestations:

- OK & FIP: 11
- MK & SIP: 9
- NK & TIP: 275

Sahidic: τοογ, τοογε Bohairic: τωογ Others: A ταγ; A2 ταγ; F ταγ; 0 τοογ; Sf tay Cpt. transl.: mountain Crum: 440

➤ ID: D.81

Eg. form: db3

Vycichl: 223

Eg. transl.: to replace; to reimburse; to repay

TLA ID: 854590

- Attestations: • OK & FIP: 60
- MK & SIP: 21
- NK & TIP: 82

Sahidic: тоове, тове Bohairic: тов, топ, топ

Others: A TOYOYBE, τογβε; Α2 τωβε; Γ тааве, тааві

Cpt. transl.: to repay: to requite Crum: 398

Vycichl: 211

➤ ID: D.82

Eg. form: db3.w Eg. transl.: a wooden hox

TLA ID: 450152 Attestations:

- OK & FIP: 5
- MK & SIP: 1
- NK & TIP: 2

Sahidic: тыве, тинве, тнве, теві Bohairic: тыві (V)

Others: А тєвє; Sa

тыве, тннве, тнве; Sf taibe, thhbe, тнвє

Cpt. transl.: chest; coffin; pouch

Crum: 397 Vycichl: 212

➤ ID: D.83

Eg. form: dbe Eg. transl.: finger TLA ID: 183430 Attestations:

• OK & FIP: 85

• MK & SIP: 69

• NK & TIP: 129

Sahidic: тннве, тнве, теве, †ве Bohairic: тнв Others: A2 тннвє; F тннве, тееве Cpt. transl.: finger Crum: 397

➤ ID: D.84 Eg. form: dbe Eg. transl.: ten thousand

Vycichl: 210

TLA ID: 183450 Attestations:

- OK & FIP: 7
- MK & SIP: 2

• NK & TIP: 15

Sahidic: тва Bohairic: өва Others: А тва; A2 тва; F твє Cpt. transl.: ten thousand Crum: 399

➤ ID: D.85 Eg. form: dbe Eg. transl.: to seal TLA ID: 183460 Attestations:

• OK & FIP: 0

Vycichl: 210

• MK & SIP: 0

• NK & TIP: 9

Sahidic: тоове Bohairic: τωΒ, τωπ Others: A тоүве; F TOBI

Cpt. transl.: to seal Crum: 398 Vycichl: 211

L, ID: D.86

Eg. form: dbc.wt Eg. transl.: seal; seal impression TLA ID: 183530 Attestations:

• OK & FIP: 18

• MK & SIP: 2

• NK & TIP: 0

Sahidic: тввє

Bohairic: теві Others: -Cpt. transl.: seal; obole Crum: 398, 397 (B) Vycichl: 211

➤ ID: D.87 Eg. form: db.t Eg. transl.: brick; sheet; ingot TLA ID: 183120 Attestations: • OK & FIP: 11 • MK & SIP: 9

• NK & TIP: 48

Sahidic: тоове, тове Bohairic: тове Others: A тюві; Sf тааві, таві Cpt. transl.: brick Crum: 398 Vycichl: 210

➤ ID: D.88 Eg. form: dmd Eg. transl.: to (re)assemble; to be (re)assemled TLA ID: 179420 Attestations: • OK & FIP: 54

• MK & SIP: 16 • NK & TIP: 131

Bohairic: тюмт Others: A тюмт: A2 томт. типт: F тюмет Cpt. transl.: to meet; to befall

Sahidic: томт, тимт

Crum: 416 Vycichl: 215

L ID: D.89 Eg. form: dmd Eg. transl.: total TLA ID: 179430 Attestations: • OK & FIP: 31 • MK & SIP: 1 • NK & TIP: 26

Eg. form: dmd Eg. transl.: total TLA ID: 179440 Attestations: • OK & FIP: 0

• MK & SIP: 1

• NK & TIP: 13

Sahidic: ---

Bohairic: ---Others: L (Vyc.) тмет Cpt. transl.: totality Crum: not in crum Vycichl: 216

➤ ID: D.90 Eg. form: dnf Eg. transl.: an animal TLA ID: 184280 Attestations: • OK & FIP: 1

• NK & TIP: 0 Sahidic: —— Bohairic: τελqι Others: —— Cpt. transl.: kind of lizard

Crum: 411

Vycichl: 214

MK & SIP: 0

➤ ID: D.91 Eg. form: dr.w Eg. transl.: end; limit; boundary TLA ID: 184990 Attestations: • OK & FIP: 47 • MK & SIP: 15

• NK & TIP: 68

Sahidic: тнр= Bohairic: THP= Others: A THP=; A2 тнр=; F тнр=, тнλ=; 0 тнр=, тєр= Cpt. transl.: all; whole; every Crum: 424 Vycichl: 219

➤ ID: D.92 Eg. form: dr.t Eg. transl.: kite; falcon TLA ID: 184660 Attestations: • OK & FIP: 33

• MK & SIP: 4 • NK & TIP: 22

Sahidic: тре, трн Bohairic: φρε Others: -Cpt. transl.: kite Crum: 429 Vycichl: 220

➤ ID: D.93 Eg. form: dr.t Eg. transl.: hand TLA ID: 184630

Attestations:

• OK & FIP: 67

• MK & SIP: 50

• NK & TIP: 425

Sahidic: Tope, Tope Bohairic: τωρι Others: A Twpe; F τωρι, τωρει, τωλι, τολι, τορι; Sf τωρι, τορει, τωλε Cpt. transl.: hand

Crum: 425 Vycichl: 219

➤ ID: D.94 Eg. form: dhtj Eg. transl.: lead TLA ID: 185320 Attestations:

• OK & FIP: 0 • MK & SIP: 4

• NK & TIP: 4

Vycichl: 226

Sahidic: тагт, тагтг, Τλθ Bohairic: דאדצ, דאצד Others: Α ταζτ; Α2 тагт; F тегт Cpt. transl.: lead Crum: 462

 $\underline{\mathbf{t}} \rightarrow \mathbf{c} = \mathbf{x}$

➤ ID: T.01 Eg. form: htn Eg. transl.: a vegetable (lettuce? garlic?) (Sem. loan word) TLA ID: 121920 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 2

Sahidic: ωχην Bohairic: фын Others: DM אגעא Cpt. transl.: garlic Crum: 615 Vycichl: 278

➤ ID: T.02 Eg. form: stnj Eg. transl.: to distinguish; to crown TLA ID: 854556 Attestations: • OK & FIP: 2 • MK & SIP: 14 • NK & TIP: 37

Sahidic: woxne, waxne Bohairic: собы Others: A warne; A2 ωαχνε; F ωαχνι; Sf ωλχνε Cpt. transl.: to take counsel: to consider Crum: 615 Vycichl: 278

➤ ID: T.03 Eg. form: t3j Eg. transl.: to take; to sieze; to don (clothing) TLA ID: 174260 Attestations: • OK & FIP: 0

• NK & TIP: 214 Sahidic: x1, xe1, x1e1 Bohairic: 61 Others: A x1; A2 x1; F

• MK & SIP: 13

xi: Sf xe Cpt. transl.: to take Crum: 747 Vycichl: 322

➤ ID: T.04 Eg. form: t3.yt

Eg. transl.: tweezer(s) Crum: 778 Eg. form: tnf.yt Bohairic: бфрем Others: A хфриє; A2 TLA ID: 174320 Vycichl: 330 Eg. transl.: sack; bag Attestations: TLA ID: 175950 хфри, хфрие; Sf • OK & FIP: 0 ➤ ID: T.08 Attestations: $xm\lambda M$ Cpt. transl.: to make • MK & SIP: 0 Eg. form: tnj • OK & FIP: 0 • NK & TIP: 1 Eg. transl.: to • MK & SIP: 0 sign; to beckon observe; to watch • NK & TIP: 3 Crum: 785 Sahidic: exw, axw carefully Vycichl: 331 TLA ID: 175790 Bohairic: εσογ, εωρογ Sahidic: xnoq, xenoq, ➤ ID: T.15 Others: — Attestations: хенов Eg. form: trh Cpt. transl.: tongs; OK & FIP: 0 Bohairic: 6NOQ, • MK & SIP: 0 Eg. transl.: to mock; pincers ωμνος, ωνογα Crum: 65 • NK & TIP: 4 Others: Sf xnaq to deride; to be Vycichl: 50 Cpt. transl.: basket; offensive (Sem. loan word) Sahidic: xnoy, xinoy, crate ➤ ID: T.05 XNO Crum: 777 TLA ID: 176410 Eg. form: t3w Bohairic: биоү Vycichl: 329 Attestations: Eg. transl.: to rob; to Others: A xnoy; A2 • OK & FIP: 0 steal ανού; Ε ανού, αενα; ➤ ID: T.12 • MK & SIP: 0 TLA ID: 174470 О хиоү Eg. form: tnm • NK & TIP: 4 Attestations: Cpt. transl.: to ask; to Eg. transl.: big vessel; • OK & FIP: 0 question; to vat (?) Sahidic: *אאצ • MK & SIP: 2 require TLA ID: 175960 Bohairic: —-• NK & TIP: 25 Crum: 774 Attestations: Others: ---Vycichl: 327 • OK & FIP: 0 Cpt. transl.: to be Sahidic: Σιογε • MK & SIP: 0 smallest, least ➤ ID: T.09 • NK & TIP: 2 Crum: 769 Bohairic: 6ιογι Others: A αιογε; A2 Eg. form: tnj Vycichl: 326 Eg. transl.: to be **Σιογε**; F Σιογι Sahidic: ኔአው써, ኔአውʁ, Cpt. transl.: to steal feeble (?) ➤ ID: T.16 ጀλመር Crum: 793 TLA ID: 175780 Bohairic: —— Eg. form: th3 Vycichl: 332 Attestations: Others: ---• OK & FIP: 0 Cpt. transl.: brazier TLA ID: 176450 L ID: T.06 • MK & SIP: 0 Crum: 768 Attestations: Eg. form: jt3 • NK & TIP: 2 Vycichl: 326 • OK & FIP: 0 Eg. transl.: thief • MK & SIP: 0 TLA ID: 33540 ➤ ID: T.13 Sahidic: xnay, xnaay, • NK & TIP: 1 Attestations: Eg. form: trp • OK & FIP: 1 Eg. transl.: to stumble Bohairic: 6NAY, 6NAY? Sahidic: xoyze • MK & SIP: 4 TLA ID: 176360 Others: A xno Bohairic: 60Y1 • NK & TIP: 13 Cpt. transl.: to delay Attestations: Others: ---Crum: 776 • OK & FIP: 0 Sahidic: wx Vycichl: 328 • MK & SIP: 0 to halt Bohairic: —— • NK & TIP: 2 Crum: 797 Others: F wx ➤ ID: T.10 Vycichl: 333 Cpt. transl.: thief Sahidic: xwpn Eg. form: tnf Crum: 539 Eg. transl.: to Bohairic: ---➤ ID: T.17 Vycichl: 252 measure; to Others: Sa xwpn Eg. form: thi appraise Cpt. transl.: to ➤ ID: T.07 TLA ID: 175920 stumble; to trip TLA ID: 176510 Eg. form: t3b Attestations: Crum: 786 Attestations: Eg. transl.: a vessel • OK & FIP: 0 Vycichl: 331 • OK & FIP: 0 TLA ID: 174560 • MK & SIP: 0 • MK & SIP: 0 ➤ ID: T.14 Attestations: • NK & TIP: 2 • NK & TIP: 1 • OK & FIP: 0 Eg. form: trm • MK & SIP: 2 Sahidic: xաnq, wաnq Eg. transl.: to wink; to

Sahidic: хфрм

hlink

TLA ID: 176380

Attestations:

• OK & FIP: 0

• MK & SIP: 1

• NK & TIP: 5

Eg. transl.: lame one Cpt. transl.: to limp; Eg. transl.: to touch Sahidic: xwz Bohairic: —-Others: — Cpt. transl.: to touch Crum: 797 Vycichl: 333 ➤ ID: T.18 Eg. form: th.w

Bohairic: ---

Others: A2 xwnq

happen; to befall

Cpt. transl.: to

Crum: 776

➤ ID: T.11

Vycichl: 329

• NK & TIP: 13

Sahidic: xon

Bohairic: ---

χλП

Others: A2 χλπ; Sa

Cpt. transl.: dish; bowl

Eg. transl.: joy TLA ID: 176530 Attestations:

- OK & FIP: 0
- MK & SIP: 0
- NK & TIP: 3

Sahidic: -Bohairic: *6w2 Others: — Cpt. transl.: to be exalted Crum: 839 Vycichl: 349

- ➤ ID: T.19 Eg. form: tt Eg. transl.: sparrow TLA ID: 177580 Attestations:
- OK & FIP: 0
- MK & SIP: 0
- NK & TIP: 3

Sahidic: xax Bohairic: 62x Others: A xex; F xex Cpt. transl.: sparrow Crum: 798 Vycichl: 333

$\underline{t} \rightarrow t = \tau$

➤ ID: T.20 Eg. form: 3tp Eg. transl.: to load (a ship) TLA ID: 340 Attestations: • OK & FIP: 1

Sahidic: wtn Bohairic: фвт Others: A2 ωτπ Cpt. transl.: to be laden; to load Crum: 532 Vycichl: 251

• MK & SIP: 22

• NK & TIP: 68

➤ ID: T.21 Eg. form: jrt.t Eg. transl.: milk TLA ID: 854491 Attestations: • OK & FIP: 37

• MK & SIP: 81 • NK & TIP: 75

Sahidic: ерште Bohairic: ερω† Others: A epwte; F ερω†, αρω†; Sf αρωτε Cpt. transl.: milk Crum: 58 Vycichl: 46

➤ ID: T.22 Eg. form: wstn Eg. transl.: to stride unhindered TLA ID: 50030 Attestations: • OK & FIP: 0

• MK & SIP: 6

• NK & TIP: 38

Sahidic: оүости, ΟΥΆCΤΝ Bohairic: оүосөен Others: F оүосөен Cpt. transl.: to become: to make broad Crum: 492 Vycichl: 238

➤ ID: T.23 Eg. form: fntj Eg. transl.: snake; worm; maggot TLA ID: 63890 Attestations:

• OK & FIP: 8

• MK & SIP: 1

• NK & TIP: 26

Sahidic: qnт, вnт, цент, очент Bohairic: цент Others: A UNT; F BENT, внит; Sf вент Cpt. transl.: worm Crum: 623 Vycichl: 280

➤ ID: T.24 Eg. form: m3tr.t Eg. transl.: a plant TLA ID: 67670 Attestations:

• OK & FIP: 1

• MK & SIP: 0

• NK & TIP: 1

Sahidic: мгт Bohairic: міт, єміт Others: —— Cpt. transl.: parsely or celery Crum: 188 Vycichl: 124

➤ ID: T.25 Eg. form: mtn Eg. transl.: road; path TLA ID: 77960 Attestations: • OK & FIP: 1

• MK & SIP: 23

• NK & TIP: 58

Eg. form: mj.t Eg. transl.: path; road TLA ID: 67910 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 22

Sahidic: моєїт Bohairic: молт Others: А масіт; A2 маєїт; F маїт; Sa маєіт Cpt. transl.: road; path Crum: 188 Vycichl: 109

➤ ID: T.26 Eg. form: ntr Eg. transl.: god TLA ID: 90260 Attestations: • OK & FIP: 1435 • MK & SIP: 488

• NK & TIP: 2452

Sahidic: Νογτε Bohairic: พองา Others: A NOYTE, νογντε; Α2 νογτε; 0 ноутє Cpt. transl.: god Crum: 230 Vycichl: 145

➤ ID: T.27 Eg. form: hats Eg. transl.: a jar TLA ID: 97740 Attestations: • OK & FIP: 23

• MK & SIP: 0 • NK & TIP: 0

Vycichl: 317

Sahidic: 20TC, 2ATC Bohairic: —— Others: ---Cpt. transl.: vessel or measure Crum: 727

➤ ID: T.28 Eg. form: hts Eg. transl.: desert jerboa (?) TLA ID: 112120 Attestations: • OK & FIP: 1

• MK & SIP: 0

• NK & TIP: 0

Sahidic: ---Bohairic: ---Others: В^о (Vyc.) гнтс Cpt. transl.: jerboa Crum: not in Crum Vycichl: 316

➤ ID: T.29 Eg. form: ht.t Eg. transl.: hyena TLA ID: 112040 Attestations: • OK & FIP: 14

• MK & SIP: 0 • NK & TIP: 1

Sahidic: 201TE, 20E1TE Bohairic: zwit Others: F zeit; Sa **ЭТІА**5 Cpt. transl.: hyena Crum: 720 Vycichl: 293

➤ ID: T.30 Eg. form: z₃t.w Eg. transl.: ground; floor; earth TLA ID: 127650 Attestations: • OK & FIP: 0

MK & SIP: 25NK & TIP: 75

Sahidic: еснт Bohairic: еснт Others: A еснт; A2 еснт; F еснт Cpt. transl.: ground; so bottom; lowest part Crum: 60 Vycichl: 47

➤ ID: T.31
Eg. form: sntj
Eg. transl.: to found
TLA ID: 138620
Attestations:
• OK & FIP: 3

• MK & SIP: 2 • NK & TIP: 28

Sahidic: cont, coont Bohairic: cont Others: A cont, coont; A2 cont, coont; F cont Cpt. transl.: to be created Crum: 345 Vycichl: 192

L, ID: T.32
Eg. form: snt.t
Eg. transl.:
foundation; plan
(for a building)
TLA ID: 138580
Attestations:
• OK & FIP: 0

• MK & SIP: 1

• NK & TIP: 6

Sahidic: cnte, cinti Bohairic: cen† Others: A cnte; A2 cnte; F chn† Cpt. transl.: foundation Crum: 345 Vycichl: 191

➤ ID: T.33
Eg. form: sntr
Eg. transl.: incense
TLA ID: 138670
Attestations:
• OK & FIP: 337

• OK & FIP: 337 • MK & SIP: 194 • NK & TIP: 155

Sahidic: conte Bohairic: con† Others: F cante; Sa cante Cpt. transl.: resin Crum: 346 Vycichl: 192

➤ ID: T.34
Eg. form: st₃
Eg. transl.: to drag; to stretch; to pull
TLA ID: 854555
Attestations:
• OK & FIP: 43

• MK & SIP: 21 • NK & TIP: 110

Sahidic: cort
Bohairic: ——
Others: A cort
Cpt. transl.: to return;
to repeat; to
streach; to reach
Crum: 360

➤ ID: T.35
Eg. form: st₃.t
Eg. transl.: aroura
TLA ID: 148840
Attestations:
• OK & FIP: 5

Vycichl: 198

• MK & SIP: 3 • NK & TIP: 20

Sahidic: cort
Bohairic: ——
Others: ——
Cpt. transl.: a
measure of land
Crum: 360
Vycichl: 198

➤ ID: T.36
Eg. form: stj
Eg. transl.: to throw;
to scatter; to sow
TLA ID: 854553
Attestations:
• OK & FIP: 65

• MK & SIP: 27 • NK & TIP: 92

Sahidic: crre
Bohairic: cr†
Others: A crre; A2
crre; F cr†, cn†
Cpt. transl.: to throw;
to sow
Crum: 360
Vycichl: 198

➤ ID: T.37
Eg. form: stj
Eg. transl.: fragrance;
stench
TLA ID: 148990
Attestations:
• OK & FIP: 103

• MK & SIP: 23 • NK & TIP: 67

Sahidic: ctoi Bohairic: ceoi Others: A ctai; A2 ctae; F ctai; Sf

Cpt. transl.: smell Crum: 362 Vycichl: 199

➤ ID: T.38
Eg. form: šntj
Eg. transl.: a snake
TLA ID: 156390
Attestations:
• OK & FIP: 6

• MK & SIP: 0

• NK & TIP: 0

➤ ID: T.39
Eg. form: tɜw
Eg. transl.: air; wind;
breath
TLA ID: 174480
Attestations:
• OK & FIP: 43

• OK & FIP: 43 • MK & SIP: 63

• NK & TIP: 334

Sahidic: тнү, тноү
Bohairic: өноү
Others: А тноү; А2
тнү; DM теү, деү; F
тноү; О тноү
Cpt. transl.: wind
Crum: 439
Vycichl: 223

➤ ID: T.40
Eg. form: tb
Eg. transl.: crate (for fowl)
TLA ID: 175070
Attestations:

• OK & FIP: 4

• MK & SIP: 0

• NK & TIP: 1

Sahidic: тап (? Vyc.) Bohairic: өнві, өєві (Vyc.) Others: —— Cpt. transl.: crate; box Crum: not in Crum Vycichl: 212

➤ ID: T.41

Eg. form: tbw

Eg. transl.: sole;
sandal(s)

TLA ID: 175120

Attestations:
• OK & FIP: 5

• MK & SIP: 0

• NK & TIP: 16

Eg. form: tbw.t
Eg. transl.: sole (of
the foot); sandal
TLA ID: 175160
Attestations:

• OK & FIP: 32

• MK & SIP: 14

• NK & TIP: 64

Sahidic: τοογε Bohairic: Θωογι Others: Α τοογε Cpt. transl.: shoe Crum: 443 Vycichl: 224

➤ ID: T.42
Eg. form: tnj
Eg. transl.: where?
whence? whither?
TLA ID: 175740
Attestations:
• OK & FIP: 33
• MK & SIP: 2

• NK & TIP: 56

Sahidic: των Bohairic: θων Others: Α το, τω, τον; A2 το, τον; F τον; Sf τω, τον Cpt. transl.: where Crum: 417 Vycichl: 217

➤ ID: T.43
Eg. form: tnw
Eg. transl.: each;
every
TLA ID: 175840
Attestations:
• OK & FIP: 0
• MK & SIP: 6
• NK & TIP: 38

Sahidic: TN-, TP-, TE-Bohairic: тем-, тем-, те-Others: F τε-, τ-Cpt. transl.: every Crum: 297 Vycichl: 216

➤ ID: T.44 Eg. form: trwrw Eg. transl.: to delight TLA ID: 176330 Attestations: • OK & FIP: 2

• MK & SIP: 0

• NK & TIP: 0

Sahidic: τεληλ, τλλ Bohairic: Θεληλ Others: Α τεληλ; A2 τεληλ, ταληλ; F

τεληλ Cpt. transl.: to rejoice Crum: 410

➤ ID: T.45 Eg. form: tr.t Eg. transl.: willow

TLA ID: 176250 Attestations:

Vycichl: 213

• OK & FIP: 2 • MK & SIP: 4

• NK & TIP: 7

Sahidic: Twpe Bohairic: ewpi Others: ---Cpt. transl.: willow Crum: 424 Vycichl: 220

➤ ID: T.46 Eg. form: ttf Eg. transl.: a vessel, used as a measure for beer TLA ID: 177510 Attestations:

• OK & FIP: 0

• MK & SIP: 0

• NK & TIP: 2

Sahidic: тнтц Bohairic: — Others: ---Cpt. transl.: meaning unknown Crum: 439 Vycichl: 223

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➤ ID: T.47 Eg. form: m3wt Eg. transl.: to think (up) TLA ID: 67590 Attestations: • OK & FIP: 0

• MK & SIP: 0 • NK & TIP: 11

Sahidic: месус, меус, MEEY Bohairic: мєүі Others: A мееуе, меуе, μεογε; Α2 μεεγε, меүе; F мноүі, инноүі, меєуєі; О MEYI Cpt. transl.: to think

➤ ID: T.48 Eg. form: rmt Eg. transl.: human being; man TLA ID: 94530 Attestations:

Crum: 199

Vycichl: 127

• OK & FIP: 184

• MK & SIP: 106

• NK & TIP: 791

Sahidic: роме Bohairic: ромі Others: A рюмє; A2 раме; F рамі, хамі, хомі; О рамє Cpt. transl.: man; human being Crum: 294

➤ ID: T.49 Eg. form: zbt Eg. transl.: to laugh TLA ID: 132270

Attestations: • OK & FIP: 6

Vycichl: 172

• MK & SIP: 1

• NK & TIP: 19

Sahidic: cobe Bohairic: сові Others: А савь; F савы Cpt. transl.: to laugh; to play Crum: 320

➤ ID: T.50 Eg. form: zft

Vycichl: 184

Eg. transl.: to slaughter; to make a sacrifice TLA ID: 133940

Attestations: • OK & FIP: 21

• MK & SIP: 9

• NK & TIP: 27

Sahidic: снде, снве Bohairic: снq1 Others: A chqe; A2 снце; F снве, снві Cpt. transl.: sword; knife

Crum: 379 Vycichl: 204 $\underline{\mathbf{t}} + \mathbf{z} \to \mathbf{c} = \mathbf{x}$

➤ ID: T.51 Eg. form: <u>t(3)</u>z.w Eg. transl.: commander TLA ID: 177110 Attestations: • OK & FIP: 1

• MK & SIP: 16 • NK & TIP: 14

Sahidic: xoic, xoeic Bohairic: — Others: A xaeic; A2 αλεις, αλις; Ε αλεις, χαις; Sf χοις, χοεις

Cpt. transl.: lord Crum: 787 Vycichl: 324

➤ ID: T.52 Eg. form: t3z Eg. transl.: to tie; to join to TLA ID: 176800 Attestations:

• OK & FIP: 63 • MK & SIP: 34

• NK & TIP: 125

Sahidic: xwc Bohairic: 6wc Others: ---Cpt. transl.: to become: to be hard, solid

Crum: 788 Vycichl: 332

L ID: T.53 Eg. form: $\underline{t}_3z(.t)$ Eg. transl.: vertebra; spine TLA ID: 176810

Attestations: • OK & FIP: 7

• MK & SIP: 33 • NK & TIP: 13

Sahidic: xıce Bohairic: 6101 Others: F x1c1 Cpt. transl.: back

Crum: 790 Vycichl: 332

➤ ID: T.54 Eg. form: tzj Eg. transl.: to raise; to rise; to levy TLA ID: 854581 Attestations: • OK & FIP: 230

• MK & SIP: 26 • NK & TIP: 262

Sahidic: xice
Bohairic: 6ici
Others: A xice; A2
xice; F xici
Cpt. transl.: to
become, be high
Crum: 788

Vycichl: 331