

On the Vocalization of Semitic Words in Late Bronze Age Egyptian transcriptions: New Evidence from Papyrus Anastasi I.

Introduction

My study of Northwest-Semitic languages and linguistics has always been intertwined with my interest for the interactions between Egypt and the Levant. Prof. Cathcart was aware of that, and at the end of my first year as his student he offered me a copy of Albright's "The Vocalization of the Egyptian Syllabic Orthography". That gift was very welcome, as the syllabic orthography, also called group writing –a special hieroglyphic orthography used by the Egyptians to transcribe foreign words and toponyms, especially Semitic ones– had always been something I wanted to work on. I finally had the time to do so over the past two years, and my efforts resulted in a new interpretative model providing a new explanation of how the syllabic orthography notates vowels.¹ In the present paper I use my system to offer new readings for a selection of words of Northwest-Semitic origins attested in Papyrus Anastasi I, which dates to the New Kingdom/Late Bronze Age. A few preliminary observations about these words and the sociolinguistic context of their use are provided in the conclusions.

1 Theoretical Framework

1.1 Terminology and Conventions

Through this article, the following terms and conventions are used:

- **Recipient Language** : the language in which a foreign word is attested.
- **Donor Language** : the source language of a foreign word attested in a recipient language.
- **Transliterations** : transliterations are indicated with < >. In this article both Semitic and Egyptian words are transliterated according to a unified system based on the conventions adopted in Semitic linguistics. The transliteration conventions for Egyptian, therefore, are modified as follow: Egyptological <ḏ> is transliterated as <ḏ>, to avoid confusion with Semitic <ḏ>. Egyptological <ṯ> is transliterated as <c>, to avoid confusion with Semitic <ṯ>. Egyptological <j>/<i> in group writing is transcribed as <?>, to avoid confusion with Ugaritic <i> and to stress the fact that this sign is used to transcribe the Semitic aliph without any specific vowel being associated with it. Both Egyptian and Semitic ayin are transliterated as <ʕ>, while the Semitic glottal stop is transliterated as <ʔ>. Markers of back vowels in Egyptian group writing are transliterated as <U>.² Markers of non-back vowels in Egyptian group writing are transliterated as <A>.³
- **Phonemes and phonemic transcriptions** : phonemic transcriptions, i.e. transcriptions of the phonemes underlying a given word, are indicated with / /. Phonemes are transcribed according to the International Phonetic Alphabet (IPA).
- **Phones and phonetic transcriptions** : phonetic transcriptions, i.e. transcriptions of the phones representing the actual pronunciation of a given word, are indicated with []. Phones are also transcribed according to the IPA.

1.2 Phonetic vs Phonemic Realities

The difference between phonemic and phonetic domains is often overlooked, in Egyptological and Semitic linguistic studies. This is however a crucial distinction for the present paper, because both these domains play an active role in lexical borrowings and language interactions in general. The concept can be briefly illustrated as follow: let us image the case of a recipient language called Lang-A and a donor language called Lang-B. In primarily oral societies, the presence of a loanword from Lang-B in Lang-A would imply that speakers of Lang-A heard a Lang-B word, adopted it, and propagated it within their own Lang-A speaking community. Now, what the Lang-A speakers would have heard would have been a *phonetic* realization of the word as uttered by a Lang-B speaker. By contrast, what they would have been propagating within their own speaking community would have been a more or less accurate reinterpretation of such word filtered and influenced by the *phonemic* inventory and *phonemic* oppositions characterising their own Lang-A language.

This implies that a phonemic feature that characterizes a word in the donor language may be lost when the word enters a recipient language in which such feature is not phonemic and therefore is not perceived as distinctive. Similarly, it can also happen that features that are just phonetic and therefore not distinctive in the donor language, may be perceived as distinctive and treated as such by the speakers of the recipient language. Therefore, when foreign words are analysed, both the phonemic and the phonetic levels, in both donor and recipient languages, may have to be taken into account.

1.3 Code-switching vs Loanwords

As pointed out by Haspelmath,⁴ the presence of foreign words in a given language can be the result of two distinct phenomena.

First, in contexts where some degree of bilingualism is present, foreign words can manifest themselves as instances of code-switching. Code-switching occurs when a speaker of a given language A uses words, expressions, or sentences taken from a language B, being aware of their foreign origin, or even *specifically because of* their foreign nature – for instance for reasons of prestige.⁵ Foreign words used in this way are also referred to as *foreignisms*.

Foreign words can also manifest themselves as *loanwords*. Loanwords are words of foreign origin that have been fully integrated into the mental lexicon of a given linguistic community. As Haspelmath explains:⁶ “From the point of view of an entire language (not that of a single speaker), a loanword is a word that can conventionally be used as part of the language. In particular, it can be used in situations where no code-switching occurs, e.g. in the speech of monolinguals”. Speakers are often unaware of the foreign origins of the loanwords in their language, or if they are aware of it,⁷ such foreign origins carry little relevance for the actual use of the word.

Loanwords often derive from *foreignisms* that have been fully assimilated into the lexicon of the recipient language and are usually fully integrated into its morphology. Morphological elements carried over from the donor language are treated as part of the word itself and survive only as lexicalized fossils with no active morphological role in the recipient language.⁸ Loanwords and foreignisms often coexist within a same language.

The distinction between loanwords and foreignisms is important, because it implies different types of sociolinguistic interactions. In practice, however, to differentiate loanwords and foreignisms is not always easy, as many factors can blur the picture. This problem is even greater, obviously, in the case of ancient languages, for which only written records are available.

A systematic analysis of the Egyptian data, however, led me to identify various indicators that can be used to determine if a word was perceived as a loanword or a foreignism. These indicators can be divided into two categories: some of them can be considered as strong and in some cases even unambiguous evidence that a word is either a loanword or a foreignism; others, instead, hint at

either of such possibilities, but cannot be considered as unambiguous evidence – they are potential clues, rather than conclusive proofs.

1. Strong or unambiguous evidence:

A. of loanwords

- i. Attestation in a different, earlier phase of the recipient language.
- ii. Evidence of adaptations to Egyptian linguistic structures.
- iii. Evidence that the word underwent specifically Egyptian phonetic developments.

B. of foreignisms

- i. Attestation of the foreign word in foreign expressions.
- ii. Evidence that the word did not undergo any expected Egyptian phonetic developments.
- iii. Evidence of reanalysis of the word according to foreign morphological elements.

2. Potential clues:

A. of loanwords

- i. Spelling in normal orthography – the use of the normal orthography, instead of group writing, may suggest that the word was common and may have been perceived as part of the general lexicon. This criterion is not conclusive because the use of normal orthography may be due to other reasons.
- ii. Multiple attestations.

B. of foreignisms

- i. The word is a hapax, or it is attested only over a short period; this may suggest that the word was not commonly used, and was perceived as a foreignism, rather than as a true loanword. However, considering the scattered and fragmentary nature of our evidence, this criterion is obviously not conclusive.
- ii. The word is attested only in contexts related with foreign realities
- iii. Earliest instance of a word well attested in later periods – the earliest attestation may represent a phase in which the word was still perceived as a foreignism, while in later periods it may have become an assimilated loanword.

1.4 Egyptian Vowels

During the Late Bronze Age/New Kingdom, the vocalization of both Late Egyptian stressed and unstressed vowels underwent a series of major reorganizations.

These developments can be divided into three periods, namely:

Period 1: 18th – early 19th (Ramses II); i.e. from 1550 BC and before 1200 BC

Period 2: Late 19th (after Ramses II) – 20th; i.e. after 1200 BC and before 1000 BC

Period 3: 21st – 22nd; i.e. after 1000 BC and before 700 BC

As for unstressed vowels, they seem to have merged into the mid central /ə/, possibly already in Period 1.⁹

As for stressed vowels, the changes that characterized their evolution are summarized in the following two tables:

Table 1 – Short vowels

Late/Coptic	o = /o/	α = /a/	α = /a/	e = /e/	α/0/e/ɪ = a/0/e/ɪ	0 (+ –2× sonor.)
			/e/ > /a/	/e/ + –/?/*~?	/e/ + sibil.	/e/ + –sonor.
Period 3	/o/ = U	/a/ = A	/e/ = A			

	/a/ > /o/	/a/ + -/ʕ~X/ > a	/e/~u/ > /e/	
Period 2	/a/ = A		/e/ = A	/u/ = U
Period 1	/a/ = A		/e/ = A	/u/ = U
			i > e	
Middle Egyptian	/a/ = A		/i/ = A	/u/ = U

Table 2 – Long vowels

Late/Coptic	ı = /i: 1/	н = /e: 2/	ı = /y: / (> /i: 2/ ?)	н = /ø: / (> /e: 1/ ?)	(е) = (/e/)	ω = /o: /	ογ = /u: /
							+ -/ʔ/~N/-
Period 3	/i: 1/ = A	/i: / + /ʕ/~j/~others? > /e: / = A ; /u: / (?) > /e: / ? = A ? ; /u: / > /ø: / = U ; /u: / + /r/~X- > /y: / (> /i: 2/ ?) = A					/o: / = U
Period 2	/i: 1/ = A						/o: / = U
Period 1	/i: / = A						a: > o: /a: / = A
Middle Egyptian	/i: / = A		/u: / = U				/a: / = A

Notes:

* /ʔ/ < /ʔ/~t/~r/~j/~w/

A = Front Vowel : /a/, /a:/, /e/, /e:/, /i/, /i:/

U = Back Vowel : /o/, /o:/, /u/, /u:/

X = etymological pharyngeals

~ = "or"

-C = "followed by". E.g. /e/ + -/ʔ/ = /e/ followed by /ʔ/.

C- = "preceded by". E.g. /o:/ + /N/- = /o:/ preceded by /N/.

C without any - = "in proximity of". E.g. /i: / + /ʕ/~j/ = /i: / in proximity of /ʕ/~j/

The consonants of Late Egyptian do not present any development worth being discussed.¹⁰

1.5 Group Writing

The basic concepts of my new interpretation of the Egyptian group writing¹¹ can be summarized in five principles, namely:¹²

1. The system notated only two vowel classes:

U = Back Vowel = /o(:)/ , /u(:)/

A or 0 = non-Back Vowel = /a(:)/ , /e(:)/ , /i(:)/ or no vowel

2. The system presents only two vowel markers, corresponding to the two vowel classes:

U = <w> ^ⲙ or biliteral signs of form *consonant* + w , e.g. ^ⲙ r+w = r + U

A or 0 = <3> ^ⲙ or biliteral signs of form *consonant* + 3 , e.g. ^ⲙ s+3 = s + A or 0

3. The position where the vowel marker w = U is written does not necessarily indicates where the corresponding back vowel should be read. In particular, groups with a structure ccu = cc + U (where c = any consonant) should be read as <cUc>, e.g. ^ⲙ represents kp + w = kp + U and should

be read *kUp*. By contrast, groups with a $cw = c + U$ structure can be read either as <cU> or as <Uc>, e.g. 𐤊𐤍 represents $r + w = r + U$ and can be read either as *rU* or as *Ur*.

Although this property may appear surprising, it is attested in other writing systems. A similar phenomenon exists even in English: for instance the graphic sequence <le> can be read both as /lə/ or /əl/, cf. e.g. <flavourless> vs <able>.

4. The sign $\text{𐤊} = \langle \text{v} \rangle$ is a diacritic modifying the value of the consonant/group to which it is associated. For instance:

$\text{𐤊} = \langle \text{h} \rangle \rightarrow$ Sahidic Coptic ⲕ but $\text{𐤊} = \langle \text{h}^y \rangle = \langle \text{h}_2 \rangle \rightarrow$ Sahidic Coptic ⲕⲓ .

5. There are three special cases:

- $\text{𐤊} = \langle \text{dU} \rangle / \langle \text{Ud} \rangle$ instead of expected <dA> / <Ad>
- The groups 𐤊𐤍 and 𐤊𐤎 transcribe exclusively word-final or pre-consonantal /n/ and /r/, i.e. /n/ and /r/ not followed by any vowel.
- The sequence /ka(:)/ is transcribed as <kU> in all the three periods – perhaps because it was (allophonically?) realized as [ko(:)]?

The following examples illustrate these five principles (C = Coptic, NWS = Northwest-Semitic):

𐤊𐤍𐤏𐤓𐤏	ʕA . ršA . nA/0	$\rightarrow \text{ʕAršAnA/0} = *ʕvršīn(v)$ - “lentils” - C: /āršīn/
𐤊𐤎𐤏𐤓𐤏	sA . rpU . tA/0	$\rightarrow \text{sArpUtA/0} = *svrpot(v)$ - “lotus” - C: /sārpot/
𐤊𐤎𐤏𐤓𐤏𐤓𐤏	$\text{mA . rk0 . Ub . tA/0}$	$\rightarrow \text{mArkUbtA/0} = *mvrkobt(v)$ - “chariot” - C: /bərkiowt/
𐤊𐤎𐤏𐤓𐤏	kUp . nA/0	$\text{kUpnA/0} = *kupl(v)$
𐤊𐤎𐤏𐤓𐤏	kU . b0 . nA/0	$\rightarrow \text{kUbnA/0} = *kubl(v)$ - “Byblos” - Akk: /gubla/
𐤊𐤎𐤏𐤓𐤏	kUp . nA/0	$\text{kUpnA/0} = *kupl(v)$
𐤊𐤎𐤏𐤓𐤏	$\text{h}_20 . \text{Urd}$	$\rightarrow \text{h}_2\text{Urd} = *h_2\text{ord}$ - “veil” - C: /šort/
𐤊𐤎𐤏𐤓𐤏	m0 . Urh	$\rightarrow \text{mUrh} = *murh$ - “spear” - NWS: /rumh/~murh/

2 The Evidence: the Letter of Hori and Papyrus Anastasi I

The Letter of Hori is a Late Egyptian satirical literary composition used for the training of scribes.¹³ Papyrus Anastasi I preserves the best and most complete copy of the Letter of Hori, while various passages are attested on four other papyri and at least 76 ostraca.¹⁴

The text is written in the form of a letter in which the author, a scribe called Hori, replies to an incompetent colleague by discussing various topics relevant to the activity and education of a scribe, such as the organization of the supplies for a military expedition, the preparations for the erection of a statue, or the geography of the Levant. The didactic purpose of the Letter of Hori is evident both by its content and by its numerous copies clearly reflecting the activity of students of scribal schools.

The Letter of Hori was likely composed during the reign of Ramses II, ca. 1279–1213 BCE, while Papyrus Anastasi I was probably copied during the reign of Merenptah, ca. 1213–1203 BCE.¹⁵

The version of the Letter of Hori preserved in Papyrus Anastasi I presents dozens of words of Semitic origin, as well as multiple Semitic Levantine toponyms.

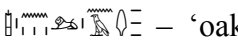

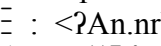
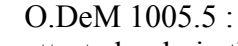
2.1 Semitic Words in Papyrus Anastasi I – Organization of the Corpus


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



- ID (nr. in Hoch¹⁶) – spelling in Papyrus Anastasi I (p.An.I) – ‘meaning’ – location in p.An.I
 - i. analysis of the spelling: ‘. ’ = group divider; ‘: ’ = classifiers
 - ii. other manuscripts of the Letter of Hori – NA = not attested in any other manuscript
 - iii. attestations in other texts
 - iv. related Semitic forms – Am = Amorite; Amarna = Cananite glossae in the Amarna letters; Akk = Akkadian; Arb = Arabic; BA = Biblical Aramaic; BH = Biblical Hebrew; Imp Arm = Imperial Aramaic; Ph = Phoenician; Pu = Punic; Syr = Syriac; TA = Talmidic Aramaic; Ugr = Ugaritic
The Semitic forms discussed in iv. are based on Hoch, *Semitic Words*.
 - v. Loanword / Foreignism indicators from §1.3 above

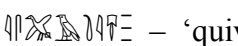

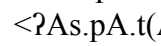
2.2 Semitic Words in Papyrus Anastasi I – the Corpus


For reasons of space, I present and discuss here only a very small selection of nine words. I plan to discuss other words in future publications.


- 1 (H. 11) –  – ‘oaks’ – p.An.I 19.3
 - i.  :  : <?An.nrU.n(A)> → ?A(n)lUn(A) = /*?V(n)lun/ ~ /*?V(n)lōnV/
 - ii. O.DeM 1005.5 :  <?An.nrU.y(A)>
 - iii. attested only in the Letter of Hori
 - iv. Akk <allānu> ; BH <?allōn> ; Syr <ilānā> ; TA <?ilānā?> ; Ugr <āl̄n> ~ <al-la-ni> — ‘oak’, ‘tree’
 - v. Probably foreignism – 1.B.iii ; 2.B.i ; 2.B.ii

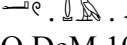
The Egyptian form is contextually plural, as confirmed by the sign .



I think that the variation in the final group  <nA> (p.An.I 13.3) ~  <yA> (O.DeM 1005.5) is likely due to a misunderstanding of the Egyptian scribe of O.DeM 1005.5:¹⁷ he may have wrongly interpreted the original final  <nA> as a Semitic plural ending (common in Semitic words spelled in group writing – see below nr. 5) and he may have replaced it with another common plural suffix, namely  <y>.¹⁸ This is an intriguing mistake, because the fact that the final  <nA> could be misunderstood as a Semitic plural ending indicates that the word was not fully assimilated into the Egyptian lexicon and that the scribe was aware of its Semitic origins. It is therefore likely that this word was perceived as a foreignism, rather than as an assimilated loanword. This implies that the vocalization represented in the Egyptian form can be safely assumed to reflect the contemporary vocalization of its Semitic prototype, which therefore must have belonged to a language that underwent the shift /ā/ > /ō/.

- 2 (H. 34) –  – ‘quiver’ – p.An.I 25.8
 - i.  :  : <?As.pA.t(A)> → ?AspAt(A) = /*?AspAt(A)/
 - ii. NA
 - iii. Attested in multiple texts at least since the reign of Amenhotep II in the Eighteenth Dynasty.¹⁹
 - iv. Akk <išpatu> ; BH <?ašpāh> ; Ugr <ūtpt> — ‘quiver’
 - v. Probably loanword – 1.A.i ; 2.A.i ; 2.A.ii

The wide range of attestations suggests that this word is a loanword borrowed during or before the Eighteenth Dynasty, that is a long time before the composition of the Letter of Hori. The use of the group  suggests that the first syllable was characterized by a non-back vowel, and therefore was akin to that of the Akkadian or Hebrew forms, rather than to that of the Ugaritic one.

• 3 (H. 108) –  – ‘helper’ – p.An.I 5.6; 16.2

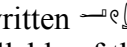
i.  : <ʕUJA.r> → ʕUJA.r = /*ʕujir/


ii. O.DeM 1006.4 :  <ʕUJA.r>; H.O. 44.1 v 4 :  <ʕUJA.ry(A)>

iii. Attested in the letter of Hori and later.

iv. Am <ʕādirum> ; Amarna (EA 250:47 – from Balu-UR.SAG, probably ruler of Rehov²⁰) <ú-ʕi-ri> (pl.) ; BH <ʕôzēr> ; Ph <ʕzrm> (pl.) — ‘helper’ (active participle).


v. Either loanword or foreignism (later loanword) – 2.B.iii (later 1.A.i ; 1.A.iii ; 2.A.ii)

This word is written  in p.An.I 5.6.


The second syllable of this Egyptian word presents a non-back vowel both in the Letter of Hori and in all the other attestations, which are all slightly later. This word is attested only in Period 2, and therefore, in principle, such non-back vowel could have been either an /i/ or an /a/. The Semitic parallels, however, favour an /i/. Note that in Egyptian this vowel was likely short, because the syllable was closed as indicated by the use of the group .

The form attested in p.An.I and in O.DeM 1006.4 presents a back vowel in the first syllable. By contrast, many of the other slightly later attestations present a non-back vowel.²¹ This variation can be explained if we assume that the stress fell on the second syllable of the word, and that the first syllable was atone. In such a case, the spellings recording a back vowel would correspond to a full pronunciation /*ʕujir/,²² while those recording a non-back vowel in the first syllable would correspond to a secondary pronunciation /*ʕəjir/, in which the first unstressed vowel was reduced to /ə/. This interpretation perfectly agrees with the idea that Egyptian unstressed vowels were undergoing a process of reduction and were merging into an undifferentiated /ə/ exactly in this period.²³ This interpretation nicely agrees also with the Semitic evidence: the Egyptian form derives from a Northwest-Semitic active participle of a dialect affected by the Canaanite shift. Now, in Biblical Hebrew such participles are stressed on the second syllable; the Egyptian word could thus derive from a Bronze Age Canaanite dialect that displayed the same stress pattern.

The forms with /ə/ should probably be interpreted as assimilated loanwords, as they were affected by the specifically Egyptian development atone /u/ > /ə/. In the case of the forms with /u/, however, the situation is more ambiguous. A first possibility is that this word was already perceived as an assimilated loanword. In this case, the presence of the /u/ may just indicate that the process of reduction of unstressed vowels within Egyptian had not occurred yet. Alternatively, it is also possible that the forms with /u/ represent a phase in which this word was still perceived as a foreign, non-Egyptian word by the Egyptian speakers using it. In these case, the development /u/ > /ə/ would reflect the progressive transition of this word from being a foreignism, to being an assimilated loanword. Although both these interpretations are possible, considering the fact that the Letter of Hori provides the earliest attestation of this word, and considering that other Semitic words attested in the text can be shown to be foreignisms, rather than loanwords, I am inclined to prefer the second scenario.

• 4 (H. 190) –  – ‘maher-envoy’ – p.An.I 18.4; 18.6; 19.7; 20.6; 21.3-4; 21.6; 21.8; 23.1; 23.2; 23.5-6; 25.5; 26.9-27.1; 27.7; 27.9; 28.7

i.  : <mA.hA.r> → mA.hA.r = /*mA.hAr/, possibly /*mahir/ or /*məhīr/

ii. O.DeM 1629.x+4 :  <mA.hA.r>

iii. Attested in the letter of Hori and later.

- iv. BH <māhîr> ‘skilled’ ; Imp Arm <mhyr> ‘skilled’ ; Pu <mhr> (in personal names) ‘warrior’ ; Syr <māhîrā> ; Ugr <mhr> ‘soldier’
- v. Either loanword or foreignism – 2.A.ii ; 2.B.iii

In p.An.I the word is also written with the classifiers ; ; ; . A specific study would be needed to ascertain if these differences are semantically meaningful, but such a study is obviously beyond the scope of this paper. The Egyptian word was a technical term referring to a kind of ‘specialized’ or ‘skilled’ scribe or envoy.²⁴ This concept fits well with the meaning of the Semitic forms, especially the Hebrew and Aramaic ones, and has a very good parallel in the Biblical expression <sôpēr māhîr> = ‘skilled scribe’ (Ps. 45:2; Ezra 7:6). The Egyptian spelling indicates that the word was characterized by two non-back vowels, which matches the Semitic evidence. If the Egyptian word originated from a Canaanite dialect akin to Hebrew, then the second of such non-back vowels was probably a stressed /i/. This vowel was likely short in Egyptian, because the use of the group indicates that the corresponding syllable was closed. As for the first vowel, it may have been an unstressed /a/ or an unstressed /ə/, for the same reasons discussed above (nr. 3).

- 5 (H. 245) – – ‘youth-regiment’ – p.An.I 17.3-4; 27.1
 - i. : <nA.ʕA.rU.n(A)> → nAʕArUn(A) = /*nAʕArūnA/ ~ /*nAʕArun/
 - or: : <nA.ʕA.Ur.n(A)> → nAʕUr(A)n(A) = /*nAʕūrAn(A)/
 - ii. NA
 - iii. Attested only during the reigns of Seti I and Ramses II, and in p.An.I.
 - iv. Akk <nīru> ; BH <nəʕārîm> Ugr <nʕrm> — ‘young men’, ‘soldiers’, ‘servants’. See also BH <nəʕûrîm> ‘youth’.
 - v. Probably foreignism – 2.B.i ; 2.B.ii

The word is spelled in p.An.I 27.1.

In principle, this word could be both a loanword (borrowed at the time of Seti I or before) or a foreignism. However, the very short temporal span of the attestations –between the reign of Seti I and that of Ramses II– and the fact that this type of troops appears only in Levantine settings –and likely have local Levantine origins–, may suggest that this term should rather be interpreted as a foreignism, namely as a non-assimilated Northwest-Semitic technical term used by the Egyptians in the specific context of Levantine warfare.²⁵

The Egyptian word is attested only in p.An.I and during the reigns of Seti I and Ramses II, which belong to Period I. A back vowel is notated in all attestations. Since the word is attested in Period I, this vowel must have been either /u/ or /ū/, because this were the only back vowels available in the Egyptian phonemic inventory at the time (see above).

The group can be read both as <rU> and as <Ur>, and therefore, in principle, the whole word can be read either as <nAʕ(A)rUn(A)> or as <nAʕUr(A)n(A)>. Hoch,²⁶ who always reads = <rU>, chooses the first option and interprets the back vowel as the case ending of a nominative plural *naʕarūna = “young men”, akin to Biblical Hebrew <nəʕārîm> and Ugaritic <nʕrm>, plurals of <naʕar> and <nʕr> respectively. This is definitely a possibility. Another possibility is to interpret = <Ur>, and therefore to read the whole word as <nAʕUr(A)n(A)> = /*nAʕūrAn(A)/. In this case, the Egyptian form could be compared to the Biblical Hebrew *plurale tantum* <nəʕûrîm> ‘youth’, possibly reanalysed as ‘the youth’ > ‘young people considered as a group’. In this respect, it is interesting to observe that the Egyptian word presents a Semitic plural suffix and it is written with the classifier of plurality , but at the same time is clearly grammatically singular.²⁷ This suggests that in Egyptian the word was perceived as a collective, possibly meaning the “young-men-regiment”, the “youth-regiment”, or the like.

The spelling of the consonant of the Northwest-Semitic plural ending also needs attention. Both spellings with <m> and <n> are attested in words of Semitic origin recorded in Egyptian sources. Hoch²⁸ affirmed that the first was common in early Eighteenth Dynasty texts while the latter was the norm in later ones, but this information would need to be further verified. Papyrus Anastasi I belongs to this second category. The spellings with $\overline{\text{𓆎}}$ = /n(A)/, like in the present word, have usually been interpreted as an indicator that the underlying dialect was characterized by nunation. However, I think that this dialectal explanation is unconvincing. First, all the Northwest-Semitic plural suffixes attested in the Amarna letters are written with <m>, not <n>.²⁹ Similarly, Ugaritic was clearly characterized by mimation. Moreover, the Northwest-Semitic languages that display nunation in the Iron Age, namely Aramaic, Moabite, Deir Alla, and the Phoenician dialect of Arslan Tash,³⁰ are either or both peripheral and outside the Late Bronze Age Egyptian sphere of influence.³¹

If the Egyptian words with $\overline{\text{𓆎}}$ = /n(A)/, which are dominant in the post-Eighteenth Dynasty Egyptian sources, would really derive from dialects with nunation, then it would mean that the Egyptians did not borrow them from the dominant coastal dialects with which they were in close contact (as the very existence of the Amarna letters shows), but rather they borrowed them from some obscure dialect that either was peripheral or substandard and therefore never surfaced in the contemporary sources, or that was located beyond the geographical limits of the Egyptian sphere of influence.

I find this scenario very unlikely and unsatisfactory. In my opinion, the solution to this puzzle has to be searched in the interference between phonemic and phonetic (and possibly graphemic) realities in the context of the Egyptian–Northwest-Semitic linguistic interactions. In particular, the Northwest-Semitic native speakers may have *phonemically* perceived this nasal consonant as /m/ (as the spelling with <m> in the Amarna letters suggests), but they may have *phonetically* realized it as somehow closer to [n].

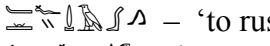

This is how the Egyptians would have perceived it, thus transcribing it with the group $\overline{\text{𓆎}}$ = /n(A)/. The phonetic delabialisation of final /m/ resulting into an allophonic realization [n], which in some case may acquire phonemic status as /n/, is a cross-linguistically common phenomenon.³² It is therefore possible that something similar occurred in Late Bronze Age Northwest-Semitic languages as well, and in fact there is evidence both in the Bible³³ and in Phoenician inscriptions³⁴ that final nasal consonants in Hebrew and Phoenician may have had a somehow ambiguous phonetic status oscillating between [m] and [n].³⁵


It is possible that in the costal dialects such realization [n] for final /m/ was already present during the Late Bronze Age, as suggested by the Egyptian transcriptions, but remained just an allophonic and subphonemic variation in all later periods. However, in order to confirm this hypothesis, a general reassessment of the Egyptian evidence would be needed. As said, plural endings are present in quite a few Semitic words and toponyms attested in Egyptian texts, and as Hoch³⁶ suggested, there may be some underlying diachronic patters that could be significant and could help to better understand the phenomenon. Such a study, however, is clearly beyond the aims of this paper.


Going back to the word $\overline{\text{𓆎}}\overline{\text{𓆎}}\overline{\text{𓆎}}\overline{\text{𓆎}}\overline{\text{𓆎}}$, if the final group $\overline{\text{𓆎}}$ = /n(A)/ is due just to a phonetic phenomenon, then this word could be derived from a costal dialect.

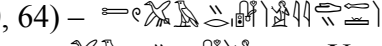
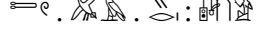
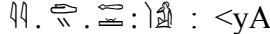
- 6 (H. 285) – $\overline{\text{𓆎}}\overline{\text{𓆎}}\overline{\text{𓆎}}\overline{\text{𓆎}}\overline{\text{𓆎}}$ misspell for $\overline{\text{𓆎}}\overline{\text{𓆎}}\overline{\text{𓆎}}\overline{\text{𓆎}}$ – ‘peak of mountain’ – p.An.I 21.5
 - i. $\overline{\text{𓆎}}\overline{\text{𓆎}}\overline{\text{𓆎}}\overline{\text{𓆎}}\overline{\text{𓆎}}$: <rU.Uš.š(A)> → rUšš(A) = /*rušš(A)/
 - ii. NA
 - iii. The word is attested, as a lexical item, only in p.An.I. However, the same Semitic morpheme can be recognized also in various toponyms attested already in sources of the reign of Thutmose III.
 - iv. Amarna (EA 264:18) <ru-šu-nu> ; Arb <raʔs> ; BH <rošš> ; Ph <rʔš> ; TA <rêšāʔ> ; Ugr <rīš> — ‘head’, ‘summit’
 - v. Probably foreignism – 2.B.i ; 2.B.ii

As rightly pointed out by Hoch,³⁷ the spelling attested in p.An.I presents a mistake: the second and third group should be inverted. The Egyptian spelling notates a back vowel in the first syllable. Since this syllable was likely closed (it is so in the relevant Semitic forms), the Egyptian vowel was likely a short /u/, because this was the only back vowel compatible at the time with an Egyptian stressed closed syllable. A vowel /u/ rather than /ō/ excludes the possibility that such back vowel was the result of an Egyptian internal development (namely /ā/ > /ō/ between Period 1 and Period 2), and therefore it indicates that the Egyptian form originated from a Northwest-Semitic dialect that underwent the Canaanite vocalic shift. This Egyptian word is attested only in p.An.I,³⁸ and may have been a foreignism, rather than a true loanword.

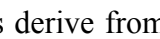
- 7 (H. 310) –  – ‘to rush’ – p.An.I 19.6
 - i.  : <ḥU.fʿA.J(A)> → ḥUfʿA.J(A) = /*ḥōfA.J(A)/ ~ /*ḥūfA.J(A)/
 - ii. NA
 - iii. Attested in the letter of Hori and later, in texts dating to the Nineteenth and Twentieth Dynasties.
 - iv. Arb √ḥ-f-z ‘to urge, ‘to incite’ ; BH √ḥ-p-z ‘to be in trepidation’, ‘to hurry’
 - v. Either loanword or foreignism (later loanword) – 2.B.iii (later 1.A.ii ; 2.A.i ; 2.A.ii)

In later texts this word is usually written in standard orthography, not in group writing. The use of  = <fʿA> is difficult to explain: the use of the Egyptian <f> = /f/ may suggest that the Semitic consonant was spirantized in the donor language. If so, however, this would be by far the earliest attestation of such a phenomenon. In principle, this would not be impossible,³⁹ but it would require more than this single attestation to be convincingly substantiated. A general reassessment of all possible instances of spirantization in Egyptian sources would thus be needed to properly assess this issue.

The grammatical context of the Letter of Hori suggests that this word should be analysed as an infinitive,⁴⁰ and the Egyptian spelling indicates a vocalization with a back vowel in the first syllable and a non-back vowel in the second one. This vocalization, associated with what seems to be an infinitive, can be interpreted in two ways. On the one hand, it may reflect the vocalization of a Canaanite *quttal/quttāl* infinitive.⁴¹ In this case, the use of  = <fʿA> may perhaps somehow reflect the germination of the second consonant, rather than its spirantisation. On the other hand, this vocalic pattern may also correspond to the vocalization of contemporary regular strong Egyptian infinitives.⁴² In this case it would be tempting to interpret this form as a loanword of Semitic origins, which was fully integrated into the Egyptian verbal morphology. In this case, the use of <f> could just be the result of a purely Egyptian phenomenon of phonological adaptation. The use of the standard orthography in other attestations may support this latter interpretation.

- 8a-b (H. 540, 64) –  – ‘excellent scribe’ – p.An.I 17.7–8
 - i.a  : <cU.pA.r> → cUpAr = /*cupir/
 - ii.a NA
 - iii.a The word is attested twice in p.An.I, once in this expression and once in a Levantine toponym. The same Semitic word appears also in a Twentieth Dynasty text as a personal name or nickname.⁴³
 - iv.a BH <sôpr> ‘scribe’ ; Ph <spr> ; Ugr <spr> ; Imp Arm <spr?> ; TA <sapērā?> — ‘scribe’
 - v.a Probably foreignism – 1.B.i ; 2.B.1
 - i.b  : <yA.Ud.ʕ(A)> → yUdʕ(A) = /*yudiʕ/ ~ /*yudiʕA/
 - ii.b NA

- iii.b The word is attested, as a lexical item, only in p.An.I. However, the same Semitic morpheme may appear also in at least two Semitic personal names attested in Egyptian sources.⁴⁴
- iv.b Am <yādiṣum> ; BA <yādaṣ> ; BH <yôdēaṣ> — ‘knowing’
- v.b Probably foreignism – 1.B.i ; 2.B.1

This expression is composed of two coordinated Semitic words; it is likely, therefore, that we are dealing here with two foreignisms. This interpretation is supported by the fact that both this expression and the words composing it are attested only in the Letter of Hori. In both words, the Egyptian spellings can be interpreted as implying a back vowel in the first syllable and a front vowel in the second one. These vocalizations match those of the corresponding Canaanite forms. Since historically both these forms derive from participles like  – ‘helper’ (nr. 3), it is fair to assume that the stress fell on the second syllable, which in turn implies that the Egyptian forms were vocalized with an unstressed /u/ in the first syllable, and a stressed /i/ or /ī/ in the second one.


3 General Observations and Conclusions


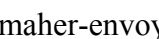
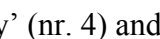

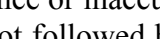
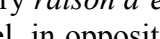

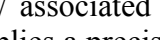
A corpus of nine words is not enough to perform any in-depth sociolinguistic analysis, or to obtain any overreaching conclusion. Nevertheless, the analysis of these words did result in a series of observations and considerations that are worthy of attention and that, hopefully, will be further investigated in the future.

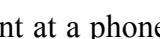

They are summarized and briefly discussed here below.

3.1 Features of the Donor Language(s)

All the words discussed here can be derived from a donor language that underwent the Canaanite Shift (nrs 1, 3, 6, 8a, 8b and perhaps 5). This observation agrees with the current opinion that the Canaanite Shift took place some time before the Nineteenth Dynasty, because the Letter of Hori was likely composed during the reign of Ramses II, and Papyrus Anastasi I was probably copied during the reign of Merenptah.


The evolution of the vocalization of the word  – ‘helper’ (nr. 3) in Late Egyptian suggests that its stress was on the second syllable, as it is the case in Hebrew. If this stress pattern was inherited from the donor language –and I do not see any reason to doubt it–, then this would indicate that it was present in Canaanite at least since the 13th Century BCE. Obviously, a single attestation is not enough to draw any definitive conclusion, but the analysis of other Semitic words in Egyptian may provide additional evidence to support this suggestion.

The use of the group  in  – ‘helper’ (nr. 3),  – ‘maher-envoy’ (nr. 4) and  – ‘scribe’ (nr. 8a) indicates that in Egyptian these words ended in a closed syllable, and therefore in a consonant. This is not a phenomenon due to Egyptian phonetic developments, because at least one of these words (nr. 8) is a clear foreignism, not a loanword. It can also be excluded that these forms are the result of Egyptian negligence or inaccuracy: the very *raison d'être* of the group  is specifically to transcribe a /r/ which is not followed by any vowel, in opposition to the groups  and , which are used to transcribe /r/ associated with a back or a non-back vowel respectively. The use of the group , therefore, implies a precise will to notate a consonant that was not followed by any vowel. This observation is noteworthy because it suggests that at the time no case ending was present anymore in the Semitic donor language, or at least that the Egyptians did not perceive any. This contrasts with what observed in Ugaritic, and may hint at an early, specifically Canaanite development.

Finally, the use of the group  in  – ‘youth battalion’ (nr. 5) could hint at a phonetic realization [n] of the Canaanite plural ending /m/. This development would likely result from a delabialization of the consonant. Since according to Hoch’s data⁴⁵ this seems to be the only context

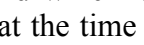
in which a Semitic /m/ would be transcribed with an Egyptian <n>, it is possible that this phonetic development affected only /m/ in final position, which in turn may imply that in the Northwest-Semitic donor language(s) the final /m/ was not followed by any vowel. Such a development would have various cross-linguistic parallels, and would agree with what just observed about the case endings.

3.2 Observations about the Recipient Language

The word  – ‘to rush’ (nr. 7) may represent an example of a borrowed verb whose vocalization was integrated and adapted to the Egyptian verbal paradigms, at least in some of its forms. If this idea were to be confirmed, it would be interesting to consider this phenomenon from a comparative linguistic perspective, because the strategy of adapting borrowed verbs through their reduction to a consonantal root has often been considered a peculiarity of Semitic languages – the Egyptian material would thus provide evidence of the same phenomenon in a different, although related, linguistic group.

By contrast, the fact that participles were not adapted to the Egyptian verbal morphology may suggest a certain degree of lexicalization already in the donor language – which would not be surprising considering the specialized meanings of these words. It would be interesting to verify if this applies to all participles borrowed into Egyptian, or if there was any meaningful distinction.

3.3 General Sociolinguistic Observations

The analysis of these words shows that both foreignisms and loanwords appear in P.An.I. Moreover, at least one word which is first attested in the Letter Hori and which may have been perceived as a foreignism at the time ( – ‘helper’, nr. 3), may have evolved into a real loanword in later periods. This situation clearly implies a complex linguistic reality involving different types of sociolinguistic interactions. A detailed study of these interactions, however, is clearly beyond the aims and scope of this paper, as it would require a reassessment of all the loanwords and foreignisms attested in the Letter of Hori and, possibly, in other texts.

Nevertheless, there is at least one sociolinguistic observation that can already be made: the fact that many of these words⁴⁶ can be identified as foreignisms, and the fact that they appear in a clearly didactic text, suggest the intriguing possibility that these words were intended to be part of a sort of specialized training meant for scribes whose future professional activities would have involved interactions with the Northwest-Semitic Levantine reality.⁴⁷ The Letter of Hori may thus be the earliest example of a “textbook” to teach elements of a Northwest-Semitic language to non-Semitic speakers.

I think that this is a perfect conclusion for this paper, because it means that the Letter of Hori can be seen as the creation of an Ancient Egyptian teacher who wished to transmit to his pupils, among other things, his knowledge and probably his passion for a Northwest-Semitic language, in the same way as Prof. Cathcart did with me and many other lucky students.

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¹ Marwan Kilani, *Vocalization in Group Writing: a New Proposal*. (Lingua Aegyptia Studia Monographica, Hamburg Forthcoming).

² See below and Kilani, *Vocalization*.

³ See below and Kilani, *Vocalization*.

⁴ Martin Haspelmath, 'Lexical Borrowing: Concepts and Issues', in Martin Haspelmath and Uri Tadmor (eds), *Loanwords in the World's Languages: A Comparative Handbook* (Berlin 2009), 35–54, 40.

⁵ In a modern Levantine context, a perfect example of code-switching is represented by Lebanese speakers switching between Lebanese Arabic, French, and English within a same discussion, or even within a same sentence. Code-switching between Arabic and English, or Arabic and French is common also in other Arab countries – see e.g. Abdel-

Rahman Abu-Melhim, 'The Phenomenon of Arabic-English Code-Switching on Television Programs', *European Journal of Social Sciences* 35:4 (2012), 452–7; Eman Saleh Akeel, 'Investigating Code Switching between Arabic/English Bilingual Speakers', *English Linguistics Research* 5:2 (2016), 57–64.

⁶ Haspelmath, 'Lexical Borrowing', 40.

⁷ E.g. because evident from specific spelling conventions – see e.g. the use of katakana to write foreign words in Japanese.

⁸ See for instance English words of French origin such as '(to) unite', where the '-ite' element is a fossilized trace of a participle ending in the donor language.

⁹ Antonio Loprieno, *Ancient Egyptian: A Linguistic Introduction* (Cambridge 1995), 39, 48.

¹⁰ For a description of the consonantal system of Late Egyptian, see Loprieno, *Ancient Egyptian*, 32–5, 38 and James P. Allen, *The Ancient Egyptian Language: An Historical Study* (Cambridge 2013), 37–56.

¹¹ This term is, in my opinion, more accurate than "syllabic orthography".

¹² For a detailed discussion of the system, see Kilani, *Vocalization*.

¹³ Hans-Werner Fischer-Elfert, *Die satirische Streitschrift des Papyrus Anastasi I.: Übersetzung und Kommentar*. (Wiesbaden 1986); Hans-Werner Fischer-Elfert, *Die satirische Streitschrift des Papyrus Anastasi I.: Textzusammenstellung*, 2nd edn. (Wiesbaden 1992).

¹⁴ Fischer-Elfert, *Papyrus Anastasi I.: Textzusammenstellung*, 1–6.

¹⁵ Fischer-Elfert, *Papyrus Anastasi I.: Übersetzung und Kommentar*, 261–7.

¹⁶ James E. Hoch, *Semitic Words in Egyptian Texts of the New Kingdom and Third Intermediate Period*. (Princeton 1994).

¹⁷ For another, in my opinion less likely, interpretation see Fischer-Elfert, *Papyrus Anastasi I.: Übersetzung und Kommentar*, 158.

¹⁸ The origin of this plural ending is not fully clear: it may be a truly Egyptian suffix, a transcription of another common Semitic plural ending, or both (see Hoch, *Semitic Words*, 447).

¹⁹ See Hoch, *Semitic Words*, 40. The attestation mentioned by Hoch in the annals is actually a guess by Sethe in a extremely fragmentary passage, and therefore is not reliable.

²⁰ Richard S. Hess, *Amarna Personal Names* (Winona Lake 1993), 51; Yuval Goren, Israel Finkelstein, Nadav Na'aman and Michal Artzy, *Inscribed in Clay: Provenance Study of the Amarna Tablets and Other Ancient Near Eastern Texts*. (Tel Aviv 2004), 249–50.

²¹ For a complete list, see Hoch, *Semitic Words*, 88–9.

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- ²² /u/ short because unstressed: in Egyptian long vowels were probably only possible in stressed syllables – see Loprieno, *Ancient Egyptian*, 37, 40.
- ²³ Loprieno, *Ancient Egyptian*, 39.
- ²⁴ Fischer-Elfert, *Papyrus Anastasi I.: Übersetzung und Kommentar*, 161, 244–6 with refs.
- ²⁵ Fischer-Elfert, *Papyrus Anastasi I.: Übersetzung und Kommentar*, 149–51. Perhaps somehow like the modern term ‘mujahedeen’, which is used in English to refer specifically to local fighters in a Middle Eastern context.
- ²⁶ Hoch, *Semitic Words*, 182.
- ²⁷ As shown by the occasional use of the singular article 𐤀 = <p3> (e.g. in K.A. Kitchen, *Ramesside Inscriptions: Historical and Biographical* (Oxford 1975–1990), vol. II 131:2, 131:5; 132:6; 132:8).
- ²⁸ Hoch, *Semitic Words*, 449.
- ²⁹ Anson F. Rainey, *Canaanite in the Amarna Tablets: A Linguistic Analysis of the Mixed Dialect Used by Scribes from Canaan*. (Leiden; New York; Köln 1996), 142.
- ³⁰ Hoch, *Semitic Words*, 481; see also W. Randall Garr, *Dialect Geography of Syria-Palestine, 1000-586 B.C.E.* (Philadelphia 1985), 91.
- ³¹ On mimation and nunation in general see Werner Diem, ‘Gedanken zur Frage der Mimation und Nunation in den Semitischen Sprachen’, *Zeitschrift Der Deutschen Morgenländischen Gesellschaft* 125:2 (1975), 239–58; Rainer Voigt, ‘Zur Nominal- und Verbalnasalisierung im Semitischen’, *Wiener Zeitschrift Für Die Kunde Des Morgenlandes* (1997) 87, 207–30; Holger Gzella, ‘Mimation’, in Geoffrey Khan (ed.), *Encyclopedia of Hebrew Language and Linguistics* (Leiden; Boston 2013), vol. 2, 643–4, 644
- ³² See for instance the development of the neuter nominative ending /-m/ > /-n/ in Greek, Hittite, Germanic, Armenian, Old Prussian, Phrygian, and many Celtic languages (Mate Kapović, *The Indo-European languages*, 2nd edn. (Abingdon; New York 2017), 31 and passim), or the phonetic realization as [n] of final /m/ in modern Spanish (Fernando Martínez-Gil and Sonia Colina, *Optimality-Theoretic Studies in Spanish Phonology* (Amsterdam; Philadelphia 2007), 86).
- ³³ E.g. <middin> ‘carpets’ in Judg. 5:10 (Gzella, ‘Mimation’, 644).
- ³⁴ Both <m> for /n/, e.g. <bm> for /bn/ ‘son’ in CIS 112b, 840, 2960; <?dm> for /?dn/ ‘lord’ in CIS 1296 as well as <n> for /m/, e.g. <n?sp> for /m?sp/ ‘assembly’ (A. van den Branden, *Grammaire phénicienne* (Beirut 1969), 8).
- ³⁵ For a brief overview with references see Ursula A Schattner-Rieser, ‘L’Araméen des manuscrits de la Mer Morte et analyse phonétique et grammaticale diachroniques et comparées’. Unpublished PhD Thesis, École pratique des hautes études (Paris 1998), 54–5.

³⁶ Hoch, *Semitic Words*, 449.

³⁷ Hoch, *Semitic Words*, 290; see also Fischer-Elfert, *Papyrus Anastasi I.: Textzusammenstellung*, 133.

³⁸ The same Semitic element, however, can be recognized also in a few Levantine toponyms recorded in Egyptian topographical lists starting from the reign of Thutmose III (Hoch, *Semitic Words*, 209–10). These foreign toponyms, however, were obviously not part of the ordinary Egyptian lexicon.

³⁹ The available evidence suggests that at least in Phoenician spirantization was already active in the 5th century BCE. Since this is a *terminus ante quem*, in principle it is possible that the phenomenon existed also in earlier periods, at least in some contexts or dialects (Yoshi Muchiki, ‘Spirantization in Fifth-Century B.C. North-West Semitic’, *JNES* 53:2 (1994), 125–30).

⁴⁰ Friedrich Junge, *Late Egyptian Grammar: An Introduction*, 2nd edn. (Oxford 2005), 95–6; see also Fischer-Elfert, *Papyrus Anastasi I.: Übersetzung und Kommentar*, 167.

⁴¹ Rainey, *Canaanite*, 377–9.

⁴² Loprieno, *Ancient Egyptian*, 88–9.

⁴³ Hoch, *Semitic Words*, 364.

⁴⁴ Hoch, *Semitic Words*, 58.

⁴⁵ Hoch, *Semitic Words*, 435.

⁴⁶ And many others attested in P.An.I and not discussed here.

⁴⁷ Such as scribes involved in trade or military expeditions in the Levant, or in the local Egyptian imperial administration. The Semitic words learnt through Papyrus Anastasi I were obviously not enough to hold a conversation in Canaanite, but they may have been meant to provide a basic selection of “useful words and useful phrases” to be used on the ground, in the Levant, somehow like the lists of words distributed still today by modern armies to soldiers deployed in foreign countries.