# Writing the *wanax*: Spelling peculiarities of Linear B *wa-na-ka* and their possible implications<sup>\*</sup>

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To the memory of Pierre Carlier, ἄναξ of Greek kingship studies

References to the main argument presented herein have been included in public lectures at the Athens Minoan Seminar (28 January 2011) and the University of Texas at Austin (8 April 2011), as well as in a paper presented at the 11<sup>th</sup> International Cretological Congress held at Rethymno (27 October 2011) (Petrakis in press a). The very presence of this article in the present volume of *Minos* stems from the outstanding tolerance and patience of two people. On the one hand, my wife Alexandra Salichou heroically took over many of my homely responsibilities as I struggled to cope with time; I owe her the deepest gratitude for her understanding; on the other, Julián Víctor Méndez Dosuna has been an exceptionally patient editor throughout, in a way that considerably surpassed any of his obligations, especially as I was missing one deadline after the other. I should express my deep gratitude to the late Pierre Carlier, who read a very early rough draft in October 2005, provided much-needed encouragement and advised caution. This contribution could only be dedicated to his great scholarship. I am also indebted to Tom Palaima, who discussed aspects of this paper and enabled me to communicate parts of it to a wider audience during my visit at the Program of Aegean Scripts and Prehistory at the University of Texas at Austin (spring 2011). Dr Christos Boulotis (Academy of Athens) and Professor Lefteris Platon (University of Athens) also discussed aspects of this work in its earlier stages. I feel obliged to Professor José Melena for generously sharing forthcoming drafts of transcriptions that allowed me to update my manuscript with the latest readings, notes and classificatory proposals. Dr Lena Papazoglou and Dr. Vassilis Aravantinos are greatly thanked for facilitating autopsies of Linear B documents under their responsibility. I am genuinely grateful to Erik Hallager, Helena Tomas, Oliver Dickinson, Colin Macdonald, Diamantis Panagiotopoulos, Joseph Maran, Olga Krzyskowska, Serguey Sharypkin, Carlo Consani, Anna Michailidou, Ivo Hajnal, Yves Duhoux and José Luis García Ramón for opinion on specific matters, encouragement and communication of offprints that affected crucial or peripheral segments of this study. Julián Víctor Méndez Dosuna and an anonymous reader are thanked for many comments that improved the manuscript substantially. As always, responsibility for all mistakes in fact or interpretation included herein remains with the author.

Minos 39, 2016, pp. 61-158

# 1. INTRODUCTION

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(F)άναξ (stems \*(F)ανακτ- and \*(F)ανακ-) is used in Homer to describe both human and divine "lordship". This term (whose Nominative is almost unanimously identified with the sign-sequence *wa-na-ka* in Linear B) also identifies a key institution in Late Bronze Aegean palatial societies, a male power figure of unparalleled status. The title and its derivative adjective (*wa-na-ka-te-ro* \*Fανάκτερος) occur on Linear B documents from Pylos, Knossos, and Thebes and on ISJs produced in West Crete (TABLE 1). In post-Bronze Age times, besides its preservation in the literary tradition or as an epiclesis in religious contexts, its political usage is scarce.<sup>1</sup>

The aim of this paper is to discuss a remarkably consistent spelling "idiosyncrasy" that occurs in the oblique cases and derivatives of the Linear B sign-sequence *«wa-na-ka»* and to consider its possible implications for the origin and "history" of Fávač. For these purposes the present paper wishes to draw together and assess evidence from various sources. Although our primary focus will be on Linear B spelling as a metalinguistic praxis, linguistics and Aegean prehistory will also be integrated into the interpretative proposal.

# 2. Defining the problem

The spelling of certain types of the Linear B sign-sequence wa-na-ka Fáva $\xi$  seems not to conform to a specific "spelling rule" applied to the vast majority of Mycenaean sign-sequences<sup>2</sup> with regard to the rendering of certain consonant clusters with the aid of an orthographic vowel. According to this rule, established already by Ventris and Chadwick in their field-defining 1953 article,<sup>3</sup> a sequence of a stop (S) preceding *any* consonant (C) before a vowel V (/SCV/) would be graphically represented as

- <sup>2</sup> The fact that unaccented proclitics (e.g. *o-u-* or *o-/jo-* preceding verbal forms at Pylos) and enclitics (e.g. *-qe* or *-de* both directive and adversative), as well as prepositional constructs (e.g. *o-pi-e-de-i* on PY An 1281.2) are regularly not separated by word dividers, indicates Linear B sign-sequences are more appropriately considered as accentual units, rather than true lexemes *per se* (also Morpurgo-Davies 1985, 94). We should examine the omission of dividers within formulaic phrases (e.g. Knossian *pa-si-te-o-i* or Pylian *we-te-i-we-te-i*) as a separate phenomenon.
- <sup>3</sup> Ventris and Chadwick 1953, 91 §5: "All stop consonants which precede another consonant are written with the vowel of the succeeding syllable".

<sup>&</sup>lt;sup>1</sup> For the religious use of ἄναξ, ἄνασσα and ἄνακες see Hemberg 1955; for ἄραναξ on the Geronthrai inscription see Wachter 2000; for the Hesychian gloss βάννας · βασιλεὺς παρὰ Ἰταλιώταις. οἱ δὲ μέγιστος ἄρχων see Willi 2002; for the use of ράναξ for the brothers and sons of 1<sup>st</sup> millennium BC Cypriot kings (who regularly use the title βασιλεὺς) cf. Collombier 1995, 747-850 (already Bowra 1934, 54-5, 59-60). For Phrygian ρανακτει cf. *infra* §7.1.

 $\langle$ SV'-CV>.  $\langle$ V'>, represented within the first of the resulting graphemes, is almost unanimously accepted as an *orthographic* vowel, which *usually* replicated the "true" vowel that occurred within each such cluster<sup>4</sup>. Although these are commonly referred to as "dummy" vowels<sup>5</sup>, I here use the term "Orthographic Copy Vowel" (hereafter OCV), in order to distinguish them from truly Arbitrary Orthographic Vowels (hereafter OAVs). In theory, OCVs can be either "progressive" ("forwardlooking" or "anticipatory", replicating the value of the *succeeding* phonological vowel) or "regressive" ("backward-looking" or "preservatory", replicating the value of the *preceding* phonological vowel) (but cf. also *infra* §4.1).

Such graphic renderings, like evidence for Linear B spelling practices *in toto*, have been subjected to differing interpretations. One approach, known as "syllable-dependent"<sup>6</sup>, argues that spelling praxis largely reflects *emic* LBA perceptions of syllable structure and division. According to this viewpoint, the overwhelming majority of the OCVs would have been understood as "tautosyllabic" in the sense that they would facilitate the graphic rendering of a consonant cluster that occupies the onset position within a syllable. In order to explain discrepancies between *extant* distribution of orthographic vowels and *expected* syllable division, the distribution of orthographic vowels has often been considered as reflecting *emic* syllablication, i.e. as the latter was *perceived* by the literate agent ("scribe" or "tablet-writer")<sup>7</sup>.

Certain radically different ideas, generated out of an overall dissatisfaction with the inconsistency of the "syllable-dependent" viewpoint (particularly with regard to

- <sup>4</sup> This replication is purely orthographic. "True" or *phonological* (as opposed to *orthographic*) vowels refer here to the vocalic components of Linear B phonographic signs (syllabograms) that represented actually articulated syllabic nuclei. Such vowels are almost unanimously considered to be non-phonological, purely graphic conventions (but cf. Sharypkin 2008 for a somewhat different approach).
- <sup>5</sup> Also referred to as "dead" (cf. Meissner 2007; 2008), "borrowed" (cf. Samspon 1985) or "empty" vowels (Woodard 1997). Cf. the analogous "voyelle morte" (Viredaz 1983), "tote' Vokal" (Bartoněk 2003, 110-1) or "stumme' Vokal" (Risch 1983, 375).
- <sup>6</sup> As in Woodard 1997, *passim*. Examples of this approach are found in Householder 1964; Beekes 1971; Sampson 1985, 66-76; Ruijgh 1985, 123-126; Morpurgo-Davies 1987; Miller 1994, 13-26; Guion 1996; Consani 2003; 2008.
- <sup>7</sup> Such *emic* syllable division would not directly reflect phonetic reality (as a modern linguist would identify it), but also with its perception *-however distorted-* by the "tablet-writers" (cf. Morpurgo-Davies 1987, 94-5). Considering the orthographic vowels in *re-<u>po-to</u>* as "tautosyllabic" (i.e. implying a le|ptos division instead of lep|tos) only indicates that the replication of the true vowel took place within *a* speech unit *as perceived by the tablet-writers*. Whether such "perceived" syllables (just like "perceived" lexemes are indicated by the consistent non-use of word dividers, *supra* n. 2) should be considered as evidence for anything beyond a mere "*orthographic* syllabification" –as opposed to a phonetic/phonological one– is a problem beyond the scope of the present study (cf. Ruijgh 1985, 123-126; Morpurgo-Davies 1987; Miller 1994, 17, n. 4).

/s/+Stop sequences),<sup>8</sup> can be collectively named "hierarchical",<sup>9</sup> as they argue that spelling praxis respects an implicit order of hierarchically arranged phonemes and/ or graphemes loosely based upon sonority, such as Viredaz's *escalier* of consonantal graphemes<sup>10</sup> or Woodard's "hierarchy of orthographic strength".<sup>11</sup> These concepts have been criticised as largely *ad hoc*, lacking empirical or strong phonetic basis and merely descriptive rather than interpretative,<sup>12</sup> although the same criticism can be directed to the "*emic* syllabification" hypotheses.<sup>13</sup> In fact, these viewpoints are not as irreconcilable as might be suggested by the occasional polarity of opinions:<sup>14</sup> we may still we hypothesise that concepts such as Woodard's aforementioned "hierarchy of orthographic strength", which is, in fact, a very effective descriptive device for the spelling of most Linear B sign-sequences, actually *pre*scribed the limitations of (and therefore crucially shaped or affected) *emic* syllable perception and division in LBA Greek.

Beyond syllable-dependent and hierarchical approaches, Sharypkin has advocated a third theory in order to account for the Linear B spelling of SCV clusters.<sup>15</sup> He has provocatively proposed that what we usually consider as OCVs are not orthographic conventions, but in fact represent "super-short" vowels

- <sup>9</sup> As in Woodard 1997, *passim*. Cf. Woodard 1997, 58-111.
- <sup>10</sup> Viredaz 1983. Viredaz's Linear B *escalier* is k, q, z > p > t, d, s > m > n > w > r > y. Viredaz's rule is that a unit in a consonantal cluster is graphemically indicated only if it precedes another one in this sequence. Woodard 1997, 81-99 has conducted the most systematic and strict review of this interpretation.
- <sup>11</sup> Woodard 1994; 1997 (reviews by Threatte 1999; Weiss 1999). Woodard's "hierarchy" is a sequence of consonantal sound groups: *stop > fricative > nasal > glide > liquid*, where "within a word, any two successive consonants will be represented with plenary spelling [i.e. with the aid of orthographic vowels] if, and only if, the orthographic strength of the first is greater or equal to that of the second; otherwise, partial spelling [i.e. involving omission] will be used" (Woodard 1997, 65, 113).
- <sup>12</sup> "Terms such as sonority [...] are just labels for the rank ordering of segment types; they do not explain it" (Ohala and Kawasaki-Fukumori 1997, 344; cf. also Ohala 1992; Harris 2006). "[hierarchical approaches] all rely on *ad hoc*, unmotivated mechanisms [...] the escalier, the "folk-syllable" and "orthographic strength" [...] do not have typological parallels with other writing systems" (Guion 1996, 70, *à propos* Cypriot spelling rules; cf. also the critical comments on Viredaz by Morpurgo-Davies 1987, 94-96). However, it has been proposed that an approach to segmental sequences based on scales of phonotactic preferability may defend the explanatory usefulness of sonority (e.g. Orzechowska and Wiese 2011).
- <sup>13</sup> Proponents of sonority hierarchy as the underlying principle of Linear B spelling should overcome the difficulty that Linear B does not make distinctions that are meaningful in terms of sonority, such as between voiced and voiceless stops, or do not indicate vowel length.
- <sup>14</sup> It has been remarked that, since sonority hierarchy reflects syllabification constraints, it is thus closely associated with syllable perception and division (Gnanadesikan 2011, 404-406).
- <sup>15</sup> Sharypkin 1970, 3-5; 2008.

<sup>&</sup>lt;sup>8</sup> Cf. Woodard 1997, 19-57 for the most recent systematic and critical presentation of this approach and also Gnanadesikan 2011, 404-406 for some sound points in defence of "syllable-dependent" analyses.

or, rather, "vocoids",<sup>16</sup> perceived by the individuals that produced the Linear B documents. Such vocoids are argued to have been epenthetically inserted to divide consonant clusters in syllable onset position, and that their value originates in an "anticipatory effect", the preparation to articulate the *succeeding* syllabic nucleus.<sup>17</sup> According to this theory, such epenthesis would have occurred in an environment of adaptation of Greek forms by non-Greek speakers, which would use them to represent clusters alien to their familiar native patterns; this, in turn, is used as evidence that Linear B represents LBA Greek as perceived by the speakers of (a) Cretan Bronze Age language abounding in open syllables (i.e. syllables lacking a coda).<sup>18</sup> Although the historical implications of this interpretation are overtly plausible and probable, the fact that such supposed "vocoids" are conspicuous even in overtly "Minoan"<sup>19</sup> names (that could not have been thus misperceived), such as the TNs *a-mi-ni-so* /Amnisos/ or *ko-no-so* /Knōsos/ creates a major obstacle to this theory.<sup>20</sup>

The ubiquitous employment of OCVs in Linear B refers to the treatment of such /SCV/ clusters in either initial or medial position within a sign-sequence.<sup>21</sup> A

<sup>21</sup> This practice is retained when *two* stops are followed by a liquid before the vowel (the only such triconsonantal clusters actually attested in Linear B are /-ktr-/ and /-ptr-/ in medial position: e.g. *a-re-ku-tu-ru-wo*, *re-u-ko-to-ro*, *ra-pi-ti-ra*<sub>2</sub>).

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<sup>&</sup>lt;sup>16</sup> Sharypkin 2008, 742. Vocoids or *phonetic* (as opposed to phonological) vowels are sounds of vowellike (without indication of audible friction), that may *or may not* function as syllabic nuclei. Vocoids include phonological vowels, as well as certain liquids or glides (cf. Crystal 2008, 514, s.v. vocoid).

<sup>&</sup>lt;sup>17</sup> Sharypkin 2008, 744.

<sup>&</sup>lt;sup>18</sup> As Sharypkin eloquently puts it, Linear B spelling would represent "*Lingua Graeca in bocca Minoica*" (Sharypkin 2008, 751, original *italics*). Besides epenthesis, Sharypkin also considers the deletion of "codas" in Linear B spelling praxis. He draws indeed an interesting parallel to the rendering of English words by native Japanese speakers (Sharypkin 2008, 744). Japanese would render "Christmas" [krisməs] as [kurisumasu], "establishment" [əstæbliʃmənt] as [isutaburissjumeŋto] and "table" [tebəl] as [teburu] (epenthetic vowels are noted in **bold**). For the dominant Japanese preference for /u/ as an epenthetic vowel cf. Shinohara 1997; Dupoux *et al.* 1999; Kubozono 2002. No matter if one prefers to see vowel epenthesis in general as a mere articulatory effect (Hall 2003) or opts for a more representational approach (Rose and Demuth 2006), there is considerable evidence that "the choice of epenthetic vowel is determined by language-specific *phonological* factors" (Rose and Demuth 2006, 1136, *italics* added).

<sup>&</sup>lt;sup>19</sup> Throughout this work, the term "Minoan" will be used only conventionally –and without any (pseudo)ethnic connotations– as a convenient designation of the culture and language(s) of palatial Bronze Age Crete, particularly during the Neopalatial (or Second Palace) period.

<sup>&</sup>lt;sup>20</sup> The only compromise would be to accept that the original "Minoan" forms of these TNs actually included such vocoids; this, however, would be an unfounded speculation. Despite these problems, Sharypkin's ingenious approach should not be rejected. The possibility that certain Linear B spellings may feature vocoid epenthesis should be explored more, and his interpretation of deletion –of e.g. final consonants– as reflecting a non-Greek ("Minoan"?) perception of Greek forms is definitely worthy of close attention.

few examples will suffice (pertinent clusters are underlined; orthographic vowels are shown in **bold**):<sup>22</sup>

<u>Κνω</u> σός	/ <u>Knō</u> sos/	< <u>ko-no</u> -so> <sup>23</sup>
Άλε <u>κτρυ</u> γών	/Ale <u>ktru</u> wōn/	<i><a-re-<u>ku-tu-ru-wo&gt;</a-re-<u></i> <sup>24</sup>
Λεῦ <u>κτρον</u>	/Leu <u>ktron</u> /	< <i>re-u-<u>ko-to-ro</u></i> > <sup>25</sup>
Έ <u>κτωρ</u>	/He <u>ktōr</u> /	< <i>e-<u>ko-to</u>&gt;</i> <sup>26</sup>
λε <u>πτός</u>	/le <u>ptos</u> /	< <i>re-<u>po-to</u>&gt;</i> <sup>27</sup>

According to this practical spelling rule, we would have expected the Genitive and the Dative Singular types of Fáva $\xi$  (Fáva $\kappa\tau\sigma\zeta$ , \*Favá $\kappa\tau\epsilon\iota$ ) to be rendered as \**wa-na-ko-to* and *wa-na-ke-te* respectively. The *only* secure and uncontested derivative of this term in the extant Linear B corpus, the adjective \*Favá $\kappa\tau\epsilon\rho\sigma\zeta$ , should also have been rendered as \**wa-na-ke-te-ro*. However, these anticipated types scarcely or never occur.<sup>28</sup>

<sup>22</sup> It is crucial, when studying the spelling rules of any given writing system no longer in use, to work with types that are as unambiguous in their identification as possible. The following examples have been selected with this criterion in mind.

<sup>23</sup> TN attested in KN Ak(1) 626.1; 643.a; As 40.1; Fh 370.a; Lc(1) 548; 549; Le 641.4; Xe 6011.1; X 7564, as well as the allative type *ko-no-so-de* (KN C(1) 5753). Cf. also the derivative "ethnic" adjectives *ko-no-si-jo* and *ko-no-si-ja* (DMic I, 378, s.v. *ko-no-si-jo*).

<sup>24</sup> PN attested in PY An 654.8; Es 650.2. The form of the name is unmistakable and further confirmed by the Dative Singular type *a-re-ku-tu-ru-no-ne* (mistake for *a-re-ku-tu-ru<-wo>-ne*) on PY Es 649.1.

<sup>25</sup> TN attested in PY Ad 290; 308; 326; 668; 669; An 35.3; Ma 225.2a; Mn 456.2; Na 419.

<sup>26</sup> PN attested in PY Eb 913.A; En 74.7; Eo 247.2; Ep 212.3; 705.8. That this refers to Hektör is further confirmed by the existence of the derivative adjective *e-ko-to-ri-jo* /Hektori'os/ (PY Cn 45.3).
 <sup>27</sup> Ali et al. (PA 1 - 12225)

<sup>27</sup> Adjective attested in KN L 693.1 and PY Un 1322.5.

<sup>28</sup> At this point, it seems appropriate to refer to those types that will *not* be considered in this study (and have been omitted from TABLE 1), as they were considered not securely relevant:

- (I) PROBLEMATIC READINGS: ]na-ko-to (KN V(3) 488.1) which might theoretically be restored as wa-] na-ko-to (DMic I, 463 s.v. ]na-ko-to (RN V(3) 488.1) which might theoretically be restored as wa-] na-ko-to (DMic I, 463 s.v. ]na-ko-to (n.1 with references) but is almost certainly a PN in (rubric?) Nominative (less likely a Dative) of the 2<sup>nd</sup> declension. Any reconstruction of wa-[ (not impossibly wa-na[, but most likely wa-jo[ or wa-du[ ) on KN V(3) 503.1 is, of course, highly dubious. The reading ]wa that occurs on GLA Z 1 (Iakovidis 1983, 101, pl.98γ; 1989; 1998, 51-2, 152-3) is uncertain as far as the identification of the sign and its position (solitary abbreviation or at the end of sign-sequence?) are concerned: ]-wa, ]du or ]-pu would be equally possible, if not actually preferable (many PNs or TNs end in -wa). Lastly, wa-na[ on PY Fr 1234 can be reconstructed (on the strength of parallels with other Fr documents) either as wa-na[-ka-te or wa-na[-so-i and therefore can be of little use (for doubts on wa-na-so-i as related to rávaξ at all cf. infra iii in this footnote).
- (II) TYPES OF UNCERTAIN IDENTIFICATION: Three types interpretable (with varying degrees of plausibility) as related to ἄναξ (without initial digamma F-) can be considered (cf. *DMic* I, 62, s.vv. *a-na-ka, a-na-ka-te* and *a-na-ki-ti*): *a-na-ki-ti* (KN Dv 1471.B) is most likely, as its position within a considerably formulaic group of records betrays, the (rubric?) Nominative of an *i*-stem PN. An interpretation of this type as a Dative Sing. ἄνακτι (cf. Puhvel 1956, 218) is therefore practically untenable. *a-na-ka* (KN Nc 4480) might, admittedly, have been the Nominative Singular of such a stem (cf. *wa-na-ka* elsewhere). In the current state of our knowledge, however, its interpretation as the Nominative Singular of a

Apart from two instances on documents from different sites (Pylos: PY Fr 1215.1; Thebes: TH X 105.2), where the type *wa-na-ke-te* (Dative Singular) occurs (FIGURE 1; TABLE 1), all other safe occurrences of the aforementioned types are written as *wa-na-ka-to* (Genitive Singular), *wa-na-ka-te* (Dative Singular) and *wa-na-ka-te-rol -ra* (TABLE 1).<sup>29</sup> These types consistently feature an orthographic vowel <-a-> in *-ka*- where the anticipated vocalic component of the respective phonograms would seem to suggest an OCV: <-*k*o-> or <-*k*e->.

- (III) UNCERTAIN DERIVATIVES: Two Pylian types can be considered here (*DMic* II, 403-4, s.vv. *wa-na-se-wi-jo, wa-na-so-i* with references). The adjective *wa-na-se-wi-jal-jo* (PY Ta 711.2, .3; Fr 1215.1 and Fr 1221) may be understood as the derivative adjective of a hypothetical \**wa-na-se-u* (\*Favaσσεώς?), although how the latter can be associated with Fávaσσα (feminine form of Fávaξ) or the verb \*Faváσσε/λεν is debatable. *wa-na-so-i* (PY Fr 1222; 1227; 1228; 1235.1, .2; 1251; variant *wa-no-so-i* on PY Fr 1219.2) and. *wa-na-so-i* has been famously interpreted by Palmer as a Dative Dual \*Faváσσσω "to the two Mistresses (Goddesses)". It is preferable to follow an alternative interpretation of the term as indicating a Locative or Dative of place of a TN, with a possible but hardly necessary etymological connection to *wa-na-so-i* is forthcoming.
- (IV) PROBABLE COMPOUNDS: Two Pylian compound PNs do seem to include Fάναξ or the derivative verb \*Fανάσσω. However, as these do not greatly enhance the information on *wa-na-ka* spellings, they have not been considered here. *pe-re-ku-wa-na-ka* (PY Va 15 *recto .2*; *verso*) has been interpreted variously as a PN, a compound title or a modification of the noun *wa-na-ka* as *pe-re-ku*, the latter either \*πρέσg<sup>w</sup>υ- > πρέσβυ- or πέλεκυ- (*DMic* II, 105, s.v.). Chadwick (1992, 167-8) has strongly suggested that the two "components" should be transcribed and understood separately (the divider was presumably just omitted) as *pe-re-ku wa-na-ka* (*recto .2*) and *pe-re-ku | wa-na-ka* (*verso*). Yet, a proper understanding of this most puzzling Pylian document remains elusive. *wa-na-ka* (PY Vn 851.7), perhaps the Dative Singular of a compound PN in -αξ (< -ακ-ς) with *wa-na-ka* or one of its derivatives as its first component (*DMic* II, 403, s.v.).
- <sup>29</sup> The document references in *DMic* (I, 331, s.v. ]*ka-te*; II, 400-2 s.vv. *wa-na*[; *wa-na-ka*; *wa-na-ka*[; *wa-na-ka-te-ro*) should now be updated with three further findings: (1) the Dative Singular *wa-na-ke-te* -previously considered a Pylian hapax- on TH X 105.2 (Aravantinos, Godart and Sacconi 2001, 105, 308-9; now to be reclassified as Xp: J. L. Melena pers. com.), (2) wa (abbreviated form of *wa-na-ka-te-ro*) on Pylian sealing PY Wr 1480.α (Shelmerdine and Bennet 1995, 123-132, esp. 130-131; Pini 1997 ed., 21 [no. 37C], 78-79, pls. 15-16), (3) wa following PN *ze-ta-ro* on almost intact inscribed stirrup-jar KH Z 43 (Andreadaki-Vlazaki and Hallager 2007, 17-20, fig. 8; Preve 2008; Hallager 2011a, 419, 421, 424 pl. 276).

<sup>1&</sup>lt;sup>st</sup> declension PN (in *-as*) might be preferable, as other extant Nc records by the same format and Hand (133) seem to feature (rubric?) Nominatives of PNs and not titles cf. §9.3. The Dative Singular *a-na-ka-te* (PY Un 219.7 by Hand 15) is most intriguing, as it could indeed be a digamma-less variant of *wa-na-ka-te*. The reading of the initial *a-* is not absolutely certain but most compatible with the preserved *vestigia* (autopsy by the author, July 2008), and other evident Dative types secure its grammatical identification. Most importantly, *a-na-ka-te* occurs on Un 219 alongside other theonyms (*.2: pa-de-we* twice; *.5: a-ti-mi-te; .7: po-ti-ni-ja*[; .8: *e-ma-a\_*), probable cult-titles (perhaps .3: *ka-ru-ke; .5: da-ko-ro-i; .6: di-pte-ra-po-ro*) and titles (.10: *ra-wa-ke-ta*) in a religious context parallel to that for *wa-na-ka-te* in the Pylian Fr documents. However, although there is reasonable evidence supporting the conclusion that *a-na-ka-te* is *wa-na-ka-te* without initial digamma, for the sake of consistency this type will not be considered within the frame of the present study.

SITE	Document	HAND/STYLUS ASSIGNMENT	FIND-PLACE	TYPE AITTESTED	IDENTIFICATION	CHRONOLOGY	COMMENTS
Knossos	KN F(1) 51 verso .1	124-D	RCT	wa	Acrophonic abbreviation	LM II-IIIA1?	Abbreviates Dat. Sg. type (cf. di-ue in verso .2)
Knossos	KN Vc(1) 73	124-s	RCT	wa-na-ka	Nom. Sg.	LM II-IIIA1?	Title rather than PN
Knossos	KN Vd 136	124-s	RCT	wa-na-ka	Nom. Sg.	LM II-IIIA1?	Title rather than PN
Knossos	KN Lc(1) 525.A 103	103	West Magazine XI	"wa-na-ka-te-ra"	"wa-na-ka-te-ra" Deriv. adj. Nom. Pl. neut.	LM IIIA2-IIIB Early	Modifies TELA+ <i>TE</i> to be produced by <i>se-ta-i-ja</i> workers (cf. KN Le 654.4)
Knossos	KN Le 654.4	103	West Magazine XV	"wa"	Acrophonic abbreviation	LM IIIA2-IIIB Early	Abbreviates <i>wa-na-ka-te-na</i> . Modifies textiles also cited as <i>se-te-i-ja</i> (cf. KN Lc(1) 525.A)
Knossos	KN Ga(1) 675	135	North End of Long Corridor (from West Magazine IX to XII)	wa-na-ka-te	Dat. Sg.	LM IIIA2-IIIB Early	Indicates recipient of coriander seeds
Knossos	KN X 976.1b	225	North Entrance Passage: Area of Bull Relief	wa-na-ka-te-ro	Deriv. adj. Nom. Pl. masc.?	LM IIIA2-IIIB Early	Modifies <i>po-pu-re-jo</i> [ or commodity (textile ?) on the lost right half of the document
Pylos	PY Un 2.1	S2 H1	AC: Room 8	wa-na-ka-te	Dat. Sg.	end of LH IIIB/ incipient IIIC?	Heading line of feasting document
Pylos	PY En 74.3	S74 H1	AC: Room 8	wa-na-ka-te-ro	Deriv. adj. Nom. Sg. masc.	end of LH IIIB/ incipient IIIC?	Modifies <i>pe-ki-ta</i> (a <i>ka-na-pe-u</i> ), cf. PY Eo 276.2
Pylos	PY En 74.23	S74 H1	AC: Room 8	wa-na-ka-te-ro	Deriv. adj. Nom. So. masc.	end of LH IIIB/ incipient IIIC?	Modifies <i>pe-ki-tu</i> (a <i>ka-ma-pe-u</i> ), cf. PY Eo 160.3

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The West Cretan provenance of TH Z 839 is considered secure (cf. most recently Haskell *et al.* 2011, Table 27). For the chronology of the relevant Linear B documents see Driessen 2008 (also Driessen 1990a for the "Room of the Chariot Tablets"; Hallager 2011a for Khania).

TABLE 1. Occurrences of *wa-na-ka* púvač and its derivative adjective *wa-na-ka-te-ro* \*pavártspoç in the extant Linear B corpus. Uncertain cases have been omitted (see n. 28). Hand/Stylus assignments follow KT5 (Knossos), Palaima 1988 (Pylos) and Aravantinos et al. 2005 (Thebes).

SITE	Document	HAND/STYLUS ASSIGNMENT	FIND-PLACE	TYPE AITTESTED	IDENTIFICATION	CHRONOLOGY	COMMENTS
Pylos	PY Eo 160.3	H41	AC: Room 8, "Chasm"	wa-na-ka-te-ro	Deriv. adj. Nom. Sg. masc.	end of LH IIIB/ incipient IIIC?	Modifies ] <i>pe-ki-ia</i> (a <i>ka-na-pe-u</i> ), cf. PY En 74.23
Pylos	PY Eo 276.2	H41	AC: Room 8	wa-na-ka-te-ro	Deriv. adj. Nom. Sg. masc.	end of LH IIIB/ incipient IIIC?	Modifies <i>pe-ki-ta</i> (a <i>ka-na-pe-u</i> ), cf. PY En 74.3
Pylos	PY Er 312.1	H24	AC: Room 8	wa-na-ka-te-ro	Deriv. adj. Nom. Sg. neut.	end of LH IIIB/ incipient IIIC?	Modifies <i>te-me-no</i>
Pylos	PY Na 334	S106 H1	AC: Room 8	wa-]na-ka	Nom. Sg.	end of LH IIIB/ incipient IIIC?	Disjoined from PY Na 1052 (Bennett 1992, 123). <i>wa-]na-ka</i> subject of <i>e-ke</i> .
Pylos	PY Eo 371.A	H41	AC: Room 8	wa-na-ka-te- ro<-jo>	Deriv. adj. Gen. Sg. masc.	end of LH IIIB/ incipient IIIC?	<i>uut-na-ka-ta-nc-jo&gt;</i> is a safe reconstruction as the type modifies the certain Genitive <i>ka-na-me-uo</i> , but d. <i>pi-ri-tu-uo</i> (<-no> or a rubric? Nominative), cf. PY En 467.5 (with <i>pi-ri-tu-uo-no</i> )
Pylos	PY En 609.5	S74 H1	AC: Room 8	wa-na-ka-te-ro	Deriv. adj. Nom. Sg. masc.	end of LH IIIB/ incipient IIIC?	Modifies <i>a-tu-ko</i> (an <i>e-te-do-mo</i> ), cf. PY Eo 211.2, Eb 903.A?
Pylos	PY La 622 verso .1	S622 H13	Room 6 ("megaron") wa-na-ka-to	wa-na-ka-to	Gen. Sg.	LH IIIA or early IIIB?	Comparatively earlier date of PY La 622 alongside other documents found in the "megaron" of the Pylian complex is argued by Melena 2000-2001, 366-8 and Skelton 2009.
Pylos	PY Ta 711.1	S641 H2	AC: Room 7	wa-na-ka	Nom. Sg.	end of LH IIIB/ incipient IIIC?	In temporal clause in the heading line of entire Ta set. <i>wa-na-ka</i> subject of <i>te-ke</i>
Pylos	PY Eb 903.A	H41	AC: Room 2, 8, "Chasm"	wa-na-]ka-te-ro	Deriv. adj. Nom. Sg. masc.	end of LH IIIB/ incipient IIIC?	Modifies <i>a-tu-ko</i> (an <i>e-te-do-mo</i> )? Cf. PY Eo 211.2, En 609.5
Pylos	PY Na 1013[+]1356.A	S106 H1	AC: Room 8, "Chasm"	wa-na-ka[		end of LH IIIB/ incipient IIIC?	Quasi-join by Melena 2000-2001, 369. Perhaps [ , e-ke] restorable, cf. PY Na 334
Pylos	PY Fr 1215.1	S1219 Cii	AC: Room 23	wa-na-ke-te	Dat. Sg.	end of LH IIIB/ incipient IIIC?	Recipient of perfumed oil
Pylos	PY Fr 1220.2	S1202 H2	AC: Room 23	wa-na-ka-te	Dat. Sg.	end of LH IIIB/ incipient IIIC?	Recipient of perfumed oil
Pylos	PY Fr 1227	S1202 H2	AC: Room 23	wa-na-ka-te	Dat. Sg.	end of LH IIIB/ incipient IIIC?	Recipient of perfumed oil

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SITE	DOCUMENT	HAND/STYLUS ASSIGNMENT	FIND-PLACE	TYPE ATTESTED	IDENTIFICATION	CHRONOLOGY	Comments
Pylos	PY Fr 1235.1	S1202 H2	AC: Room 23	wa-na-ka-te	Dat. Sg.	end of LH IIIB/ incipient IIIC?	Recipient of perfumed oil
Pylos	PY Mb 1402	Ci	SW Area: Trenches 6, 8, 10	]-ka-te	Dat. Sg.	end of LH IIIB/ incipient IIIC?	] <i>na-ka-te</i> just possible. If so, <i>uua-]na-ka-te</i> could be an almost certain restoration.
Pylos	PY Un 1426.2	S1426 Ci	SW Area: Trench 31	wa-]na-ka-te	Dat. Sg.	end of LH IIIB/ incipient IIIC?	Probably on heading line (cf. PY Un 2.1)
Pylos	PY Wr 1480.α	1	Uncertain (area of NE Building?)	wa	Acrophonic abbreviation	end of LH IIIB/ incipient IIIC?	Abbreviates $ua-na-ka-te-ro$ ; modifies $do-ka-ma$ $(\gamma)$ and $pa-ta-jo$ $(\beta)$ .
Thebes	TH Of 36.1	303	Odos Epameinondou wa-na-ka[	wa-na-ka[	Deriv. adj. Nom. end of LH IIIB Pl. femin.	end of LH IIIB	Modifies <i>a-ke-ti-ta</i> <sub>2</sub>
Thebes Kadmeia	TH X 105.2		Odos Pelopidou	wa-na-ke-te	Dat. Sg.	end of LH IIIB	Probably on heading line (cf. PY Un 2.1)
Thebes Kadmeia	TH Z 839	521?	"House of Kadmos" wa-na-ka-te-ro Corridor ∆	wa-na-ka-te-ro	Deriv. adj. Nom. LM IIIB Early? Sg. masc.?	LM IIIB Early?	Modifies PN (ka-u-nu), product or context of transaction. ISJ produced in West Crete (assignment compatible with its mention of "ethnic" o-du-ru-ur-jo < West Cretan TN *o-du-ru)
Tiryns Lower Town	TI Z 29		PQu LI-53	wa-na-ka[	Deriv. adj. Uncertain case	adj. LM IIIB Early? e	Modifies PN (not preserved), product or context of transaction. ISJ probably produced in West Crete (it mentions the "ethnic" $si$ - $m$ - $lri$ / $jr$ / $jo$ < West Cretan TN $si$ - $m$ - $ro$ , cf. TH Z 839), but not analysed yet
Khania: GSE site	KH Z 16	1	Area between Buildings 1 and 2, Upper deposit	wa	Acrophonic abbreviation	LM IIIB Early	Probably abbreviates <i>wa-wa-ka-te-w</i> ; uncertain nuance. Untypical: single sign incised on stirrup disk. ISJ locally produced?
Khania: GSE site	KH Z 43	I	Building 2 (Room B), below latest floor in 35/Pit F	wa	Acrophonic abbreviation	LM IIIB Early	Abbreviates <i>wu-nu-ku-tu-tw</i> ; modifies PN ( <i>ze-tu-v</i> ), product or context of transaction. ISJ locally produced (macroscopic fabric examination)
Eleusis	EL Z 1.2	519?	LH floor under Lesser Propylaea	wa	Acrophonic abbreviation	LM IIIB Early? (deposited in IIIC?)	Abbreviates <i>wa-na-ka-te-te</i> , modifies PN ( <i>da-pu<sub>2</sub>-na-20</i> ), product or context of transaction. Uncertain provenance on Crete

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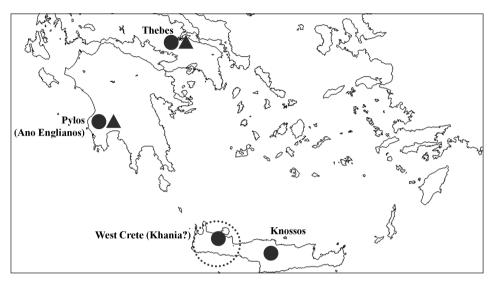


FIGURE 1. Geographical distribution of *wa-na-ka* spellings. ▲ indicates 'canonical' spellings conforming to the general rule (*wa-na-ka* and *wa-na-ke-te*). ● indicates 'idiosyncratic' spellings (*wa-na-ka-to, wa-na-ka-te* and *wa-na-ka-te-ral -ro*). These are respectively classified as Groups I and II in §6. For details on the extant types and documents see TABLE 1. Map prepared and annotated by the author.

The most remarkable feature of these spellings is their truly amazing consistency throughout their considerable distribution:

Such types have been recorded on tablets found in the Southwestern Peloponnese (from the palatial complex at Ano Englianos commonly known as the "Palace of Nestor" at Pylos), Boeotia (from at least two different contexts within the Kadmeia citadel at Thebes), North Central Crete (from Knossos) and West Crete (the production region of TH Z 839 which bears *wa-na-ka-te-ro*)<sup>30</sup> (TABLE 1; FIGURE 1). On the basis of data presented on TABLE 1, we may observe that the "idiosyncratic" spellings were used by at least thirteen different "scribes": Hands 103, 135 and 225 at Knossos, Hands 1 (S2, S74 and S106), 2 (S1202), 13 (S622), 24, 41, S1426 (assigned to Class i) and

<sup>&</sup>lt;sup>30</sup> TI Z 29 also bears *wa-na-ka*[which should –on the basis of analogy with TH Z 839– be reconstructed as *wa-na-ka*[-*te-ro*. If the preceding type ]-*ri-jo* is reconstructed as *si-ra*]-*ri-jo* (an "ethnic" derivative adjective from West Cretan TN *si-ra-ro*), it is quite likely that this ISJ was produced in West Crete. However, until the time of writing, there have been no analyses of TI Z 29 to confirm this conclusion. There is, however, a single certain case where the provenance of the ISJ does not agree with the geographic indication on its inscription: MY Z 202 yields ]*e-ra* (which, if complete, could be a Central Cretan TN well-attested at Knossos), but was made of West Cretan clay (Haskell 2004, 156; 2005, 212; Haskell *et al.* 2011, 102-3, 120-121). This caveat notwithstanding, the West Cretan provenance of TI Z 29 does remain most likely.

one more unidentifiable Class i "scribe" at Pylos, Hand 303 at Thebes, and the two different "scribes" responsible for TH Z 839 and TI Z 29 from West Crete.<sup>31</sup>

Pertinent documents mostly date to LM/LH IIIB, spanning almost the entire 13<sup>th</sup> century BC (TABLE 1).<sup>32</sup> PY La 622, where *wa-na-ka-to* occurs, along with the other Linear B documents found in Pylos Room 6 (the so-called "Megaron") debris, have been interpreted as inserted in the building material. This would imply a *terminus ante quem* for these documents at the beginning of LH IIIB (when the Main Building of the Englianos complex was probably constructed), a fact that might agree with their archaic epigraphic and pinacological features.<sup>33</sup>

We may reasonably infer that these spellings were practiced at least from the close of the 14<sup>th</sup> century BC and throughout the 13<sup>th</sup> century BC in various south Aegean literate administrative centres. This pattern makes it quite difficult to argue that such an orthographic idiosyncrasy can be considered as "erroneous" or "irregular".

# 3. OVERVIEW OF PAST OPINION ON THE *wa-na-ka* SPELLINGS

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*wa-na-ka* entered the Mycenological bibliography already with Ventris and Chadwick's first publication of the decipherment, where the type was already identified as the Nominative Fάναξ, with *wa-na-ka-te* and *wa-na-ka-te-ro* already recognised as the Dative Singular \*Fανάκτει and the derivative adjectival type \*Fανάκτερος respectively.<sup>34</sup> There have been quite variable and highly sporadic attempts to account for these idiosyncratic spellings. Here we shall briefly present, with minimal critique, a selection of those most influential to the discussion in an attempt to group similar treatments of the problem together.

- <sup>31</sup> See TABLE 1 for references to the pertinent documents. "Hands" that have produced only the Nominative *wa-na-ka* are not counted (see §6). The number may rise to fifteen if the Styli assigned to Hand 1 are interpreted as different "Hands" (cf. Palaima 2011, 41). This comment is mentioned as a mere theoretical possibility that does not intend to cast dount on the hitherto accepted Pylian palaeographic identifications. Knossian "Hands" 103 and 135 are classified as "Progressistes" by Driessen (2000, 151-153). The identification of "scribes" on ISJs by Sacconi (2012) is tentative, but it is quite certain that the two ISJs that feature the full "idiosyncratic" spelling *wa-na-ka-te-ro* (TH Z 839 and TI Z 29) were produced by different "Hands".
- <sup>32</sup> It is beyond the scope of the present paper to discuss the chronology of Cretan Linear B documents. A good assessment may be found in Driessen 2008, 70-73. I here accept that the bulk of the Linear B documents from Knossos is to be dated at the end of LM IIIA2 or in LM IIIB Early and that ISJs are a contemporary phenomenon, with the earliest securely dated ISJ being MY Z 718 from the LH IIIA2 destruction layer of the Petsas House at Mycenae. No commitment is here made on the "Unity of the Archives" hypothesis. The earlier date suggested for the Knossos RCT deposit by Driessen is discussed *infra* §9.3.

<sup>&</sup>lt;sup>33</sup> Melena 2000-2001, 366-368; Skelton 2009.

<sup>&</sup>lt;sup>34</sup> Ventris and Chadwick 1953, 91 (§5.6, .10), 96-97 (vocabulary nos. 117, 186).

3.1. A most popular tendency has been to advance the *ad hoc* explanation of these types as resulting from what has been called "an orthographic paradigmatic leveling". Certain scholars have attempted to explain types *wa-na-ka-to*, *wa-na-ka-te* and *wa-na-ka-te-ro* as influenced by the spelling of the Nominative *wa-na-ka*. That such paradigmatic spelling is responsible for these types has been supported by Ventris and Chadwick,<sup>35</sup> Vilborg,<sup>36</sup> Palmer,<sup>37</sup> Householder,<sup>38</sup> Ruijgh,<sup>39</sup> Hooker<sup>40</sup> and Bartoněk.<sup>41</sup>

Woodard also hesitantly adopts the same idea and further notes that the signsequence *«wa-na-ka-»* may have been "formalized and generalized as the spelling of a phonetic sequence [wanak-]".<sup>42</sup> This idea, however, actually presupposes the

- <sup>36</sup> Obviously following Ventris and Chadwick: "Some peculiar use of empty vowels is found with the cluster *-kt-*. The preceding vowel is taken in *wa-na-ka-te-ro* = *wanakteros* (probably analogy with *wa-na-ka*), cf. *sa-pa-ka-te-ri-ja=Sphakteria*? Note also *ru-ki-to* for *Luktos* (from the regularly written ethnic *ru-ki-ti-jo=Luktios*?)" (Vilborg 1960, 36).
- <sup>37</sup> "Analogy tends to fix the stem of a noun in the spelling of the nominative: thus  $F^{\dot{\alpha}\nu\alpha\xi} = wanaka$ ,  $F^{\alpha\nu\dot{\alpha}\kappa\tau\epsilon\imath} = wanakate$ " (Palmer 1963, 27). Cf. also "the form may be due to the scribal tendency to keep the stem form constant: a good example is *wanakate*, *wanakatero* = *wanaktei*, *wanakteros*. The written stem form is simply that of wanax, which is written according to the rules *wanaka*, just as *wonoqo* = *Wonoq<sup>w</sup>s*" (Palmer 1980, 65).
- <sup>38</sup> "The forms with *ka* in the cases and derivative of *wanaks* may be interpreted as simple paradigmatic stability rather than syllable-final *k*; i.e the spelling of a stem in the nominative is maintained throughout" (Householder 1964, 75). Householder considered Nominative spellings *wa-na-ka* and  $a_3$ -*ti-jo-qo* as indications that consonant sequences [-*ks*] and [-*k<sup>w</sup>s*] would be written as -*ka* and -*qo* respectively and independent of the value of the preceding vowel (Householder 1964; cf. also the insightful discussion in Meissner 2007, 106-110 = 2008, 515-519). Cf. *infra* §4.1.
- <sup>39</sup> "La graphie irrégulière wa-na-ka-te, wa-na-ka-te-ro s'explique sous l'influence du nominatif wa-na-ka" (Ruijgh 1967, 381 §353; cf. Ruijgh 1985, 123, n.61). However, he recently noted that "Il est difficile d'expliquer pourquoi les graphies analogiques wa-na-ka-to et wa-na-ka-te d'après nom. wa-na-ka" (Ruijgh 1999, 521 §1). Ruijgh has also proposed to recognise <wa-na-ka> as a conventional rendering of the Nominative Singular /wanaks/ and recognize wa-na-ka-te-ro as \*/wanaks-teros/, i.e. with the contrastive suffix -te-ro mechanically added to the Nominative Singular type (Ruijgh 1992, 548, n. 29). This, however, would not be sufficient to explain the types wa-na-ka-to and wa-na-ka-te.
- <sup>40</sup> "*wa-na-ka-to* and *wa-na-ka-te* exhibit anomalous spellings. [...] It is likely that the scribes modelled the whole declension of the word on the nominative *wa-na-ka*; and the same explanation probably holds good for the spelling of the adjective *wa-na-ka-te-ro*" (Hooker 1980, 58-59, §116).
- <sup>41</sup> Bartoněk (2003, 110 commenting on the spelling *wa-na-ka-te-ro*).
- <sup>42</sup> Woodard 1997, 126.

<sup>&</sup>lt;sup>35</sup> "Analogy may sometimes cause a spelling to be levelled for a number of related forms (*wa-na-KA-te-ro* \*<sub>F</sub>ανάκτερος "royal" on the model of *wa-na-ka* nom., \**wa-na-ka-ta* acc.; *ru-KI-to* Λύκτος on the model of the ethnic *ru-ki-ti-jo*) (Ventris and Chadwick 1953, 91 §5.10). In their subsequent account of spelling rules, Ventris and Chadwick somewhat retreated from this idea by noting simply that "a few irregularities are found with *-kt-: wa-na-ka-te-ro = wanakteros, ru-ki-to = Lyktos* (but *ru-ki-ti-jo* is regular)" (Ventris and Chadwick 1956, 46; retained in Ventris and Chadwick 1973).

–problematic– interpretation of these types as the result of "regressive spelling" (cf. *infra* \$3.4, 4.1).<sup>43</sup>

3.2. Luria published the first study especially concerned with the declension and peculiarity of *wa-na-ka*.<sup>44</sup> Luria had dealt with the problem before, considering *wa-na-ka* a heteroclite, but also noting the possibility of the types belonging to a participle \*/wanakants/,<sup>45</sup> eventually favouring the latter suggestion.<sup>46</sup> In this way, the problematic spellings were "resolved" by revising the identification of the type rendered: *wa-na-ka* would render \*/wanakants/, Present Participle of a hypothetical demoninative verb \*/wanakami/, Genitive *wa-na-ka-to* and Dative *wa-na-ka-te* being \*/wanakantos/ and \*/wanakantei/ respectively. Thus, syllabogram *<-ka->* would no longer represent any orthographic vowel at all. Luria further suggested *wa-na-kete* (at the time still hapax graphomenon) as the only type that could belong to a noun Fάναξ. Luria's hypotheses have been adopted by Wundsam.<sup>47</sup> Critical points on Luria's proposal will be provided *infra* (§4).

3.3. Panagl, in a special study of the problem,<sup>48</sup> while essentially adopting the analogical formation of the idiosyncratic spellings under the influence of the Nominative (*supra* §3.1) and explicitly rejecting Luria's proposal (§3.2), put forward, with considerable caution, the provocative suggestion that the stop cluster */-kt-/* was treated as perceived in a somewhat "quasi-alphabetic" (or rather quasi-segmental) manner, which compelled a graphemic rendering as *<-ka-t->*, also hypothesising some influence from the *preceding* syllable nucleus (for the latter cf. *infra* §3.4).<sup>49</sup>

- <sup>43</sup> We may, however, applaud the caution exhibited by Woodard in his phrasing of the problem: "Perhaps it would be more likely for *wa-na-ka* to have been formalized and generalized as the spelling of a phonetic sequence [wanak-] if the phonetic template for the empty vowel of <-ka-> were encoded within the formalized spelling, as would be the case if *wa-na-ka* is the product of regressive spelling, *but not if the vocalic component of* <-ka-> *were only an arbitrary empty vowel used in word-final spellings*" (Woodard 1997, 126, *italics* added). The present study prefers the interpretation of <-*ka*-> as marking an OAV (cf. *infra* §4.1).
- <sup>44</sup> Luria 1962 (cf. also Luria 1964, 47).
- <sup>45</sup> Luria 1957, 332 (cf. also Luria 1962, 161, n. 1).
- <sup>46</sup> Luria 1962.

- <sup>47</sup> Wundsam 1968, 17-19.
- <sup>48</sup> Panagl 1971.
- <sup>49</sup> "Dem Verfasser dieser Seiten sich zu seinem Thema noch eine Idee auf, die er hier wenigstens vermutungsweise und gleichsam hinter vorgehaltener Hand aussprechen möchte, wobei er sich der verbleibenden Ungewissheit stets bewusst ist. Könnte der von uns angenommene Reflex der Stammbildung in der Graphie im Falle *wanaka*, *wanakato* usw. nicht vielleicht als Spur eines Ansatzes (wir hätten es gerne noch vorsichtiger formuliert!) in Richtung auf eine Buchstabenschrift aufgefasst werden, in dem Sinne nämlich, dass hier das –in der Vokalhaltigkeit von der vorhergehenden Silbe beeinflußte– Silbenzeichen *ka*, indem es vom Verbindung */kt/* als Quasi-Buchstabenzeichen fungiert" (Panagl 1971, 133). The idea of a "Buchstabenschrift" is somehow met in Perpillou's provocative comment: "Vers une évolution alphabétique auraient pu conduire des graphies où

3.4. It has been proposed that *wa-na-ka-to*, *wa-na-ka-te* and *wa-na-ka-te-ro* feature orthographic vowels replicating the value of *preceding* rather than *following* "true" (phonological) vowels. Such interpretations are also found sporadically in the literature.<sup>50</sup> This idea originates in Ventris and Chadwick's original spelling rule about final stop clusters,<sup>51</sup> which explained the spelling of the Nominative *wa-na-ka* as an example of such seemingly "regressive" spelling practice: the rendering of final cluster /-ks/ can be theoretically seen as based on the copy of the preceding "true" vowel indicated by *<-na->*. This "regressive spelling" could also explain the spellings of the oblique cases and derivatives.<sup>52</sup> In theory, such spelling practice would utilise OCVs that would be either tautosyllabic or heterosyllabic.<sup>53</sup>

<sup>52</sup> I.e. *«wa-na-ka»*, *«wa-na-ka-to»*, *«wa-na-ka-to»* and *«wa-na-ka-te-ro»* with *«-ka»* containing an OCV consistently replicating */-a-/* in *«-na-»*. Evidence for and against such an interpretation is discussed *infra* (§4.1).

un syllabogramme ne conserve qu'une valeur consonantique, comme *qo-o* pour  $/g^{w-ons}/$ , comme l'équivalence à l'initiale des groupes de *-te-we-* et *-tu-we-*, *-do-wo-* et *-du-wo-*, *-to-wo-* et *-tu-wo-*, de *wa-na-ka-te-* et *wa-na-ke-te-*, ou comme la notation de l'occlusive non syllabique de *wa-na-ka* (nom.)" (Perpillou 1977, 245).

<sup>&</sup>lt;sup>50</sup> E.g. "So werden Konsonantengruppen, wenn der erste Konsonant nicht weggelassen wird, normalerweise mit einem "stummen" Vokal geschrieben, der sich nach dem vorangehenden oder nachfolgenden Vokal richtet. Doch ist die Schreibung nicht immer einheitlich. Zwar ist *wa-na-ka-te /wanaktei/* in PY und KN normal [...] aber PY Fr 1215 steht *wa-na-ke-te*, dies von einem andern Schreiber [...] als die übrigen Belege aus PY" (Risch 1983, 374-375); "The dummy vowel typically matches the next following real vowel [...] dummy vowels in final syllables, which are relatively uncommon, copy the preceding vowel, as *wa-na-ka (wanaks)*, "lord". This detail is sporadically carried over into longer forms, as in *wa-na-ka-te-ro*, rather than *\*wa-na-ke-te-ro*" (Sihler 1995, 23, §27.1). Cf. also Parker 1995-1996, 242. Woodard (1997, 126) also plays with this possibility.

<sup>&</sup>lt;sup>51</sup> "ξ, ψ and κ<sup>w</sup>ς are spelt *ka-sa-, ke-se-, pa-sa-, pe-se-,* etc., except when final, where they appear to shed the *-s* and take the vowel of the preceding syllable (*wa-na-ka* Fάναξ; *ai-ti-jo-qo* = Aiθίοψ)" (Ventris and Chadwick 1953, 91 §5.6; repeated in Ventris and Chadwick 1956, 46).

<sup>53</sup> According to Parker, "[d]er Nominativ von /uanaks/, "König", wird wa-na-ka geschrieben, d.h. hinter dem /k/ wird der Vokal der vorangehenden Silbe gesetzt [...] In den obliquen Kasus -die zu einem Stamm uanakt- gebildet werden- wird weiterhin das Zeichen ka gesetzt" (Parker 1995-1996, 242, *italics* added). However, the syllabic divisions he proposes to account for these spellings imply that the consonant cluster is indeed split between two syllables, with the suggested OCV being actually tautosyllabic: wa-na-ka-to is suggested to correspond to  $F\alpha|v\alpha\kappa|\tau\alpha\zeta$ , wa-na-ka-te to \*Fa/vak/te1 and wa-na-ka-te-ro to \*Fa/vak/tepos vs. wa-na-ke-te \*Fa/va/kte1. Consani (2008, 156, n. 22) notes the spelling wa-na-ka-te -inter alia- as an example of Linear B "regressive spelling including an OCV replicating the vowel of the preceding syllabic nucleus (i.e. truly heterosyllabic). Beekes, in his attempt to explain the writing of consonant clusters as occurring in "overlapping" syllable-boundaries, has noted that "[i]n auslaut all consonants stand of necessity at the end of the syllable, so that they are not written. Only forms like wanaka /wanaks/ could provide a problem. If this is not simply a sign (ka) added to make the form more transparent, one could think [...] of a syllabification wa nak ks, which finds some support in writings as κύλιξς" (Beekes 1971, 350).

Such an interpretation is not incompatible with the idea that the idiosyncratic *wa-na-k***a**- spellings are due to influence from the Nominative (\$3.1).<sup>54</sup>

Of course, this practical spelling rule –although seemingly able to account for spellings such as *wa-na-ka* for Fáva $\xi$  or *to-ra-ka* for  $\theta$ áp $\overline{\alpha}\xi$ , or  $a_3$ -*ti-j***o**-q**o** for Ai $\theta$ ío $\psi$ – cannot explain a spelling such *o-nu-ka* for  $\delta$ vo $\xi$ .<sup>55</sup> It may be preferable to view the spelling *wa-na-ka* as featuring an OAV (cf. further discussion in §4.1).<sup>56</sup>

3.5. The observation has been put forward that certain idiosyncratic wa-naka- spellings occur across morpheme-boundaries. The problem of how exactly the existence of a morpheme-boundary within a cluster of stops would interfere with the division of syllables as perceived by the "scribes"<sup>57</sup> and, one might argue, also the graphemic rendering of pertinent consonant clusters, cannot be tackled generically and must rely on a detailed scrutiny of each individual case where an "unexpected" spelling may be identified. Woodard has noted that the type wa-na-ka-te-ro, "with its irregular spelling of a consonant cluster which is divided by a highly transparent morpheme-boundary ([-k+t-]), is reminiscent of those instances in which fricative + nasal clusters that are divided by a transparent morpheme-boundary exhibit exceptional spelling".58 This observation would be, of course, valid if wa-na-kate-ro is understood as \*Favak tepoc with the binary/contrastive suffix -teros, as is admittedly unanimously accepted,<sup>59</sup> but would not be acceptable for a segmentation \* Fανακτ| ερος, with a suffix -eros (cf. φοβ-ερός).<sup>60</sup> From another point of view, even if indeed the idiosyncratic spelling of *wa-na-ka*|-te-ro occurs across such a morphemeboundary, types such as wa-na-ka-to and wa-na-ka-te cannot be explained in the

- <sup>55</sup> A first reaction against such "regressive" spelling in Linear B was provided by Householder (1964, 74-75). Remarkably, Householder did not use the evidence from *o-nu-ka*, which would have strengthened his point (cf. *infra* §4.1). He simply states "if we had a form *\*ka-ru-ku* for *kārūks* "herald", the case would be much stronger. As it is, we may argue that [...] any final *-ks* would be written *-ka* and any *-qs -qo* no matter what vowel preceded" (Householder 1964, 75). Householder's revised "rule" is occasionally reprised (cf. Hajnal 1995, 23-24, §4.4).
- <sup>56</sup> Cf. Householder 1964, 74-75; most recently on the problem, cf. Meissner 2007, 106-110; 2008, 515-519.
- <sup>57</sup> The notion of the "scribe" must be applied very conventionally to the LBA Aegean, as the status of the individuals who actually produced the inscribed administrative documents is still debated. Palaima (2003a, 176-177) has preferred the rather more neutral term "tablet-writers". Throughout this study the use of "scribe" (in inverted commas) wishes to convey exactly this uncertainty.
- <sup>58</sup> Woodard 1997, 132, endnote 46 (original *italics*).
- <sup>59</sup> DMic II, 401-402, s.v. wa-na-ka-te-ro with references; add also Witwer 1970, 69-70.
- <sup>60</sup> The reconstruction of the original stem of Fάναζ (\*Fανακτ- or \*Fανακ-) is also involved in this discussion (cf. most recently Willms 2010, 235-245). This will be discussed *infra*, but, for now, it is sufficient to mention that the types *«wa-na-ka-to»* and *«wa-na-ka-te»* \*Fανάκτει, at least, indisputably display \*Fανακτ-.

<sup>&</sup>lt;sup>54</sup> Woodard 1997, 126 attempted to reconcile the two views.

same way. Consani similarly suggested that the idiosyncratic *wa-na-k***a**- spellings "are perfectly explained [...] by the need to graphically mark the morphemic boundaries [...] as we can see in /wanak|tV-/" and explained that this reflects a tendency "to *graphically* split [...] segments which are, *from a phonological point of view*, in onset position" where "unexpected regressive graphic sequences" can occur.<sup>61</sup>

Assuming that *wa-na-ka*- was *emically perceived* as separate from *-to* and *-te* (the latter graphemes necessary for the representation of the vocalic nucleus that marked the suffices */-os/* and */-ei/* respectively) undermines the very notion of a "morpheme boundary": distanced from any "morphemic" reality, the segmentation becomes purely orthographic, as Consani almost admits. Since such a morphemic division of *wa-na-ka-to*, *wa-na-ka-te* and *wa-na-ka-te-ro* would be practically unparalleled amongst attested Linear B spellings of 3<sup>rd</sup> declension nouns, the scarcity of such "graphic morpheme markers" should therefore be equally explained.<sup>62</sup> However, a further question should be explicitly asked with regard to the "need to graphically mark the morphemic boundaries" supposedly felt by certain Linear B "scribes": how likely it is that users of a writing system that basically omitted the division of the accentual units that sign-groups actually represent<sup>63</sup> would be interested in graphically marking morpheme boundaries?

3.6. Sharypkin considers the spellings *wa-na-ka-to* and *wa-na-ka-te* to be "aberrant from the "normal" Mycenaean mode of spelling, as first attempts to write Greek words phonologically, i.e., denoting each phoneme independently of its position in a syllable".<sup>64</sup> In his view, such "idiosyncratic" spellings are exceptions to his interpretation of orthographic vowels as epenthetic vocoids,<sup>65</sup> and he is inclined to accept the "paradigmatic levelling" explanation for them (cf. §3.1).<sup>66</sup>

We may mention that the explanations presented above are not mutually incompatible: the hypothesis of "regressive" spelling that would attempt to explain the spelling of the Nominative (§3.4 and *infra* 4.1, 4.3) can be reconciled with the paradigmatic orthographic levelling theory (§3.1). Only Luria's proposal (§3.2) seems to be entirely impossible to compromise with other interpretations, as it actually denies the existence of any orthographic vowel in the *wa-na-ka-* spellings at all. Certain aspects of these interpretations will be tackled again critically in the following sections.

65 Sharypkin 2008 (cf. supra §2).

<sup>&</sup>lt;sup>61</sup> Consani 2008, 156 (cf. Consani 2003, 84, 112).

<sup>&</sup>lt;sup>62</sup> Other "examples" of such spellings mentioned by Consani 2008, 156 (e.g. sa-pa-ka-te-ri-ja, a-ra-romo-to-me-na) will be adequately discussed infra §5.

<sup>&</sup>lt;sup>63</sup> See *supra* n. 2.

<sup>&</sup>lt;sup>64</sup> Sharypkin 2008, 751.

<sup>&</sup>lt;sup>66</sup> Sharypkin *per litteras electronicas*.

# 4. The identification of the *wa-na-k***a**- sign sequences

4.1. We may begin this section with one question: How incontestable our interpretation of *wa-na-ka* as the Nominative Fáva $\xi$  is? This question might at first seem redundant. However, in theory, a Nominative *wa-na-ka*<sup>67</sup> could indeed render Luria's hypothetical participle \*/wanakants/ (§3.2). We shall also attempt to deal with the possibility that *wa-na-ka* can be used as evidence for the aforementioned "regressive spelling" (§3.4).

As mentioned above (§3.4), Ventris and Chadwick attempted to interpret types such as *wa-na-ka* and *a<sub>3</sub>-ti-jo-qo* as evidence for "regressive" spelling in Linear B, a viewpoint effectively attacked by Householder, who first argued explicitly for an OAV in these cases.<sup>68</sup> Householder's view was strengthened even more with the publication of a tablet fragment from Tiryns that yielded twice the type *to-ra-ka*  $\theta \omega \rho \bar{\alpha} \xi$  (\* $\theta \omega \rho \bar{\alpha} \kappa$ - $\varsigma$ ) (TI Si 5.1, .2).<sup>69</sup> Accompanied by the unmistakable and ultimately pictographic "corselet" sematogram \**163* ARM*or* (already known from the Pylian Sh series, in turn associated with Nominative Plural *to-ra-ke*), the identification of *to-raka* with  $\theta \omega \rho \bar{\alpha} \xi$  has ever since been justifiably considered incontestable.<sup>70</sup> The editors of TI Si 5 had every good reason to consider *to-ra-ka* as parallel in spelling to *wana-ka* for <code>f</code>άναξ and *o-nu-ka* for ὄνυξ < ὄνυκ-ς.<sup>71</sup> Carlier used the occurrence of the spelling *to-ra-ka* as an argument against more "complicated hypotheses" (implicitly referring to Luria's proposal), explicitly noting that *wa-na-ka* was demonstrably reconcilable with a widespread Linear B spelling practice.<sup>72</sup>

Besides *wa-na-k***a**, *to-ra-k***a** and *o-nu-k***a**,<sup>73</sup> further possible examples of the same spelling practice might be more contestable for varying reasons:

<sup>&</sup>lt;sup>67</sup> The syntax of the temporal clause in PY Ta 711.1 (the heading of the entire Ta series) secures the identification of *wa-na-ka* as Nominative Sing., since it clearly is the subject of the verb *te-ke*: ... *o-te*, *wa-na-ka*, *te-ke*, *au-ke-wa*, *da-mo-ko-ro* "when the *wanax* appointed *au-ke-wa* as *da-mo-ko-ro*".

<sup>&</sup>lt;sup>68</sup> Ventris and Chadwick 1953, 91; Ventris and Chadwick 1956, 46; Householder 1964, 74-75.

<sup>&</sup>lt;sup>69</sup> Naumann, Godart and Olivier 1977.

<sup>&</sup>lt;sup>70</sup> ]to-ra-ke Nom. Pl. θώρακες is attested on label PY Wa 731, associated with the Sh elongated tablets where ARM were recorded. to[-ra]-ko, apparently Gen. Sing. θώρακος is discernible on the recto originalis .1 of PY Sh 734 (recording ARM on recto); to-ra-ke occurs again –albeit without any accompanying sematogram– on PY Sh 736. The similarity of ARM to the bronze corselet found in the so-called "Cuirass Tomb" (chamber tomb 12) at Dendra in the Argolid is unmistakable (Åström et al. 1977, 28-44, pls. XII-XIII; Vandenabeele and Olivier 1979, 36-39, pls. XVII-XIX).

<sup>&</sup>lt;sup>71</sup> Naumann, Godart and Olivier 1977, 232.

<sup>&</sup>lt;sup>72</sup> "Dès lors que la forme *to-ra-ka* pour θώραξ est attestée à Tirynthe, toutes les hypothèses compliqués formulées à propos de *wa-na-ka* doivent être totalement rejetées: *wa-na-ka* est la transcription *normale* de μάναξ" (Carlier 1984, 44, n. 229).

<sup>&</sup>lt;sup>73</sup> For doubts on *o-nu-ka* cf. below. *a-pu-ka* (Nom. Sing. on PY Aq 218.15) cannot be included in this list. As the context of its single occurrence suggests, this term should be considered as an ethnic adjective, most plausibly a variant form of *a-pu<sub>2</sub>-ka* (PY An 656.20). The latter is definitely an ethnic in -ανες as

- (i) We have the possible reading ka-ru-ka for PN \*Kãρυξ (cf. Dor./Aeol. κãρυξ, Ion. κῆρυξ (< -κ-ς) "herald") on KH Z 1, a sherd from the shoulder of an ISJ found at the Khania GSE site. However, the identification of the second and third signs are not absolutely secure and this piece of evidence should be used with caution<sup>74</sup>.
- (ii) The Pylian PN *to-ro-wi-ka* (PY An 5.3), while most likely \*T<sup>(h)</sup>ρο<sub>F</sub>ιξ (/-ks/) has also been interpreted as \*T<sup>(h)</sup>ρο<sub>F</sub>ιχāς and \*T<sup>(h)</sup>ρο<sub>F</sub>ι(σ)κāς (1<sup>st</sup> declension). But there is strong evidence to favour the athematic identification: *to-ro-wi-ko* (PY Cn 655.2) is almost unanimously interpreted as a Genitive Singular. If this is accepted, its declension is definitely athematic (Nom. /-iks/; Gen. /-ikos/)<sup>75</sup> (cf. *infra* for *to-ro-wi*).
- (iii) The Pylian PN *pu-ru-da-ka* (PY Ep 539.9) has so far resisted any reliable identification<sup>76</sup>. Since it is a hapax graphomenon, we can only speculate as to its declension, but /-aks/ (Gen. -akos/) remain possible.

<sup>76</sup> DMic II, 167, s.v. pu-[.]-da-ka with references. A reading pu-\*22-da-ka had been reported by Sutton (1970, 189), but has been suggested as pu-ru-da-ka in the draft of the forthcoming definitive edition

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suggested by Nom. Pl. *a-pu<sub>2</sub>-ka-ne* (PY An 656.13; 657.13; the prosopographic associations between the Aq "diptych" and the An *o-ka* tablets are well established) and therefore the Nom. Sing. should be -ανς > -ας. If so, *a-pu/pu<sub>2</sub>-ka*, therefore, bears no orthographic vowel. Despite the similarity in form, Nom. Pl. *a-pu-ke* (PY Ub 1315.3 and .4; apparently ἄμπνκες < ἄμπνξ, -κος "girdle", cf. *a-na-pu-ka* "without *a.*" on PY Ub 1315.3; *a-pu-ko-wo-ko* "workers of *a.*" on PY Ab 210.B; Ad 671.B; Dat. Pl. *a-pu-ki-si*[ on PY Xa 1342.2), is irrelevant here (cf. also *DMic* I, 89-91, s.vv. *a-pu-ka*, *a-pu-ke*, *a-pu-ki-si*, *si*, *a-pu-ko-wo-ko*, *a-pu<sub>2</sub>-ka* with references). Although we may conjecture how the Nom. Sing. ἅμπνξ would be spelled (and *a-pu-ka* is the strongest candidate), this would formally be a matter of speculation.

<sup>&</sup>lt;sup>74</sup> Melena (1979) has argued that the sign-sequence on KH Z 1, originally identified as ka-sa-[, should in fact be read as ka-ru-ka[. Cf. Hallager 1974, 64-65, pl.V, where other possible readings are also given, such as ka-ru-ka[. Cf. Hallager 1974, 64-65, pl.V, where other possible readings are also given, such as  $ka-ru-\mu[$ ,  $ka-ru-\mu[$ ,  $ka-sa-\mu[$ ,  $ka-sa-\mu[$ , and  $ka-ru-\mu[$  (cf. also *DMic* I, 326, s.vv. ka-ru-[ and ka- $<math>ru-\mu[$ ]). Melena (1979, 1369) explicitly argued that this reading would be a further example of "the use of a dummy *a* in rendering some final syllabograms by the Mycenaean writers". Unfortunately, both -sa- and -ru- being possible readings). Although Sacconi (1974, 179) identifies the second sign as -ru-, Palaima (1979; responding to Melena 1979) left the matter open, favouring Hallager's original preference for -sa-. The third sign is more certain: although -u[ remains a possibility (the vestigium is not sufficiently complete), -ka[ should be favoured. Such cautionary notes notwithstanding, the recent final publication of KH Z 1 favoured ka-ru-ka[ (Hallager 2011a, 415, 427, pl. 270 top; note the distance between the third sign and the square bracket, indicating the editor's confidence that the sign-sequence is complete (which is again uncertain). Dat. Sing. ka-ru-ke, known from PY Fn 187.3, .5, .16, .21 and Un 219.3, indicates most probably a religious official as recipient of the recorded commodities (*DMic* I, 327 s.v.). The use of the title as a PN cannot be verified or excluded and, of course, the form of the Dative cannot indicate the spelling of the Nominative which is of interest here.

<sup>&</sup>lt;sup>75</sup> DMic II, 367-8, s.vv. to-ro-wi, to-ro-wi-ka, to-ro-wi-ko with further references; add Woodard 1997, 86; Nakassis 2006, 191, 562-563. The identification of to-ro-wi-ko as a Genitive (cf. Ventris and Chadwick 1956, 96) is based on the observation that other PNs in adjacent lines of PY Cn 655 (.1: ge-re-wa-o; .3 ke-ro-wo-jo; .4 ra-pa-sa-ko-jo) are definitely Genitives (perhaps also .7: ti-re-wo).

- (iv) The Pylian term *ra-ka* (Un 592.5) seems to modify commodity sematogram \*154 (that occurs again on On 300). Its identification as  $\dot{\rho}\bar{\alpha}\xi$  (Gen.  $\dot{\rho}\alpha\gamma\dot{\sigma}\zeta$ ) "berry" (used in later Greek particularly for grapes)<sup>77</sup> is attractive (e.g. would fit the context of the *KAPO* entry in Un 592.2), but does not make sense if \*154 is to be identified as a skin or hide (alternatively, we may postulate that *ra-ka* is related to  $\dot{\rho}\dot{\alpha}\kappa\sigma\zeta$  "tattered" *vel sim.*).
- (v) The Knossian PN \*56-du-nu-ka (KN Da 1132.b; Dv 1191.B)<sup>78</sup> is a similarly obscure name, although /-uks/ (Gen. /-ukos/) would be perfectly possible.
- (vi) The Knossian PN *ku-ru-ka* (KN Vc(2) 5510) might conceivably be identified as ending in *l-ks/*, although its identification as a 1<sup>st</sup> declension Nominative Sing. in *l-* $\bar{\alpha}$ c/ is generally favoured.<sup>79</sup>
- (vii) The technical term *to-mi-ka* (KN L(9) 761; 764; 7400; 8025 and almost certainly 8035; possibly X 9777.1) had been interpreted as θῶμιγξ "cord, string".<sup>80</sup> Although a rubric Nominative Singular can never be excluded, its association with plural numbers of TELA supports its interpretation as Nominative Plural of a neuter adjectival form.<sup>81</sup>

Therefore, although certain types are surrounded by more or less uncertainty, we may confidently note that there is no certain Nominative Singular in /-ks/ that has not employed the final <-a> orthographic vowel for its graphemic rendering in Linear B.

At this point, we should refer to another very interesting spelling pattern that is shared by *to-ra-ka*, *o-nu-ka* and *to-ro-wi-ka*: the occurrence of spellings where none of the final consonants (/-ks/) of the Nominative are graphically indicated:

(i) *to-ra* as a variant of Nominative Sing. *to-ra-ka* (KN Sk 8100.Bb; perhaps *to-*] *ra* on Sk 789.B)

of the Pylos inscriptions (so in Nakassis 2006, 454, 528). Unlike its ubiquitous sematographic homomorph \*107 CAP "goat", phonographic \*22 remains, so far, predominantly Cretan, occurring at Knossos and on Cretan-produced ISJs (it also occurs in Thebes on eight occurrences of the sign-sequence *ko-ru-*\*22-*je*).

<sup>&</sup>lt;sup>77</sup> DMic II, 216, s.v. ra-ka; DÉLGn, 932 and EDG II, 1274-5, s.v. pαξ.

<sup>&</sup>lt;sup>78</sup> DMic II, 470, s.v. Just like \*22, it has been suggested that \*56 rendered a "Minoan" consonantal sound (Melena 1987, 216-218).

<sup>&</sup>lt;sup>79</sup> *DMic* I, 408, s.v.

<sup>&</sup>lt;sup>80</sup> Ventris and Chadwick 1956, 410.

<sup>&</sup>lt;sup>81</sup> In fact favoured by Aura Jorro (*DMic* II, 361, s.v.). An interesting proposal sees *to-mi-ka* as \*τόρμισκα, a formation parallel to *to-pe-za* \*τόρπεδya (Heubeck 1972, 63; cf. the Hesychian gloss τρίμισκον· iμάτιον).

- (ii) *o-nu* as a variant of Nominative Sing. *o-nu-ka* (KN Od(1) 681.a)
- (iii) *to-ro-wi* as a variant of Nominative Sing. *to-ro-wi-ka* (PY Cn 131.6; Jn 601.2)

Besides the incontestable *to-ral to-ra-ka* variation,<sup>82</sup> alternative explanations of these spellings can be advanced. It is theoretically conceivable to view *to-ro-wi* as an *i*-stem PN (*-is*) but the Genitive *to-ro-wi-ko* (PY Cn 655.2) is a rather conclusive indication that they both belong to a  $3^{rd}$  declension PN (Nom. /-iks/; Gen. /-ikos/): both types indicate "shepherds" in the same series of documents, associated with the same TN (*ma-ro*).<sup>83</sup> We are left to wonder whether *to-ro-wi-ka* on PY An 5.3 could be an altogether different PN; however, Nakassis' analysis on the recurrence of Pylian PNs has allowed us to place the prosopographic identification of the smith/"shepherd" *to-ro-wi* with *to-ro-wi-ka* in a more or less consistent pattern.<sup>84</sup> Attempts to interpret the evidence differently are based on almost desperate skepticism.<sup>85</sup>

*o-nu*, on the other hand, has been identified as the Nominative Singular of a hypothetical  $3^{rd}$  declension neuter noun, possibly  $* \check{o}vv(\chi)$ .<sup>86</sup> In theory, the highly elliptical syntax of the documents would allow for such an interpretation of *o-nu*. As Killen has observed,<sup>87</sup> it is possible to maintain a distinction between *o-nu*, *o-nu-ka* and *o-nu-ke* accompanying (modifying?) records of LANA<sup>88</sup> on the one hand, and *o-nu-ka* as a possible adjectival form accompanying (modifying?) records of TELA by

- <sup>82</sup> Since Killen 1985a, 30-31 (even admitted by the quite skeptical Woodard 1997, 86).
- <sup>83</sup> As stated *supra*, our only positive evidence (the contextual associations of *to-ro-wi-ko* on PY Cn 655.2) indicates that *to-ro-wi-ko* is in Genitive Sing. (*-ikos*) and this identification affects *to-ro-wi* as well.
- <sup>84</sup> Nakassis 2006, 191-192 for other PNs of smiths in the Jn series and "shepherds" (*to-ro-wi* occurs on Jn 601.2) on PY An 5.
- <sup>85</sup> Chantraine proposed that "[u]ne flexion *torowi(s)* /Gen. *torowikos* surprendrait, mais n'est pas absolument impossible. S'il y avait un génitif *torowiko* il ne nous concernerait pas". He further suggests that "*torowiko* peut être un anthroponyme inexpliqué, au nominatif" and that *to-ro-wi-ka* would be a different PN (Chantraine 1966, 174). Both possibilities are rather unlikely (see *supra*), although Woodard (1997, 84) seems to accept Chantraine's skeptical approach.
- <sup>86</sup> This is the common interpretation preferred by Aura Jorro for the types *o-nu* (Nom. Sing.), *o-nu-ka* (Nom. Pl. in -ŭ) and *o-nu-ke* (Dat. Sing. in -ει) of the same hypothetical neuter noun (*DMic* II, 28-9, s.v. *o-nu*). These are, however, quite idiosyncratic. Aura Jorro proposes to recognize *o-nu* as \*ŏvvχ (*DMic* II, 29, s.v. *o-nu*), apparently implying *-contra opinionem communem* that final stops were not lost yet in the LBA (cf. also Ruipérez and Vara 1973; Garrett 2006, 141). Woodard (1997, 84) is also reluctant to accept *o-nu* as Nominative Sing. (but does not attempt a reinterpretation).

<sup>88</sup> o-nu: KN Od(1) 681.a (Hand 103); ]o-nu-ka: KN Od 485.b (Hand 115); o-nu-ke: KN Ln 1568 lat. inf. .b (Hand 103), M 683.1b, Od(1) 682.1 (all Hand 103). Possibly wool is indicated on nodule Ws 1703.γ (unassigned) with o-nu-ke.

<sup>&</sup>lt;sup>87</sup> Killen 1979, 158-161.

Hand 116 on the other.<sup>89</sup> Problems do remain about the interpretation of *o-nu-ka* in the Knossos cloth Ld(1) tablets,<sup>90</sup> but the situation is slightly more clear in the LANA entries: *o-nu-ke* occurs in the prepositional phrase *o-pi*, *ma-tu-we o-nu-ke* with 1 unit of LANA (KN Ln 1568 *lat. inf.* .b), as well as LANA 9 M 2 (M 683.1b) and LANA 5 (Od(1) 682.1). Since the *o-pi* + Dative structure is well attested and since a single unit of wool is recorded, *o-nu-ke* on Ln 1568 *lat. inf.* .b can be reasonably assumed to be in Dative Singular (-ει). As in the other cases, the only possibility to make sense of a Dative Singular is to suggest the syntactic function of purpose: "so much wool for/ to be made into *o-nu-ke*" *vel. sim*, which might be defensible. However, the occurrence of *o-nu-ke*, in this context, must be a Nominative Plural in -ες (even rubric), since otherwise we are left with no plausible candidate for an indication of the commodity itself.<sup>91</sup> The Nominative *o-nu-ke* must be in the Plural (-ες), and it therefore follows that *o-nu* and *o-nu-ka* can only be 3<sup>rd</sup> declension *masculine or feminine*.

The final verdict on these alternative spellings should take into account two features of them as a group: (i) that all of them are (or can be most plausibly

- <sup>89</sup> o-nu-ka: KN Ld (1) 584.2 (suprascript) and 591.2 (Hand 116, alongside po-]ki-ro-nu-ka (\*ποικιλώνυχă "with variegated o." and re-u-ko-nu-ka (\*λευκώνυχă "with white o."). o-nu-ka can almost be safely reconstructed on Ld(1) 5615.2 (where ]o-nu[ is preserved alongside re-u-]ko-nuka in .1) and 5916.1a (where ]o-nu[ is preserved as well), as well as in the suprascript "]nu-ka" on 5845.2 (alongside po-ki-ro[-nu-ka in .1).
- <sup>90</sup> It is difficult to understand the significance of *o-nu-ka* in these documents (cf. previous footnote), especially where it appears alongside composite adjectives in Nom./Acc. Plural. Since *po-ki-ro-nu-ka* and *re-u-ko-nu-ka* are semantically transparent, it is not straightforward why plain and unmodified *o-nu-ka* had to be written after these entries. As Killen (1979, 158) put it "[i]f the type of *o-nu-ke* is specified in the first instance, we should also expect it to be specified in the second". Killen has suggested that this adjectival *o-nu-ka* here means "with [...] *o-nu-ke*" and observed that this form consistently occurs –or can be reconstructed to occur– after the formula *pa-ro e-ta-wo-ne(-we)*, indicating that such cloth was still in the finishing stages of production and the quality of *o-nu-ka* here might indicate a composite with the first component left purposefully incomplete by the "scribe" is hardly convincing).
- <sup>91</sup> The text of this document is as follows (KT5):
  - KN Ws 1703 (--)
  - .α P supra sigillum
  - .β ta-to-mo

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.γ o-nu-ke

P on .α is a metrogram (Killen 1985b; how *ta-to-mo* on .β should be understood is not entirely clear, but it must be quite different from Pylian *ta-to-mo* in livestock records (the Knossian term most likely is σταθμός or -óv "weight" or "standard"). In any case, such a syntax (with an oblique case modifying adverbially an *omitted* commodity designation) would be unparalleled on string nodules inscribed in Linear B. Of course, crucial information can occasionally be missing altogether (e.g. PY Wr 1329, where only the numeral "20" is recorded on .β), but it is certain that it could be deduced from paratextual sources. Knossian nodules Ws(1) 1707 and 8493 remain the most syntactically eloquent so far known. reconstructed as) 3<sup>rd</sup> declension masc./fem. nouns in Nom. /-ks/, Gen. /-kos/<sup>92</sup>; (ii) that no "scribe" seems to write both variants<sup>93</sup>. Therefore, on the strength of the certain *to-ral to-ra-ka* variation, we may abandon any skepticism and accept *o-nu* and *to-ro-wi* as alternative spellings of *o-nu-ka* and *to-ro-wi-ka* respectively.

At this point, we may briefly discuss Woodard's systematic attempt to distinguish between three types of such "word-final *stop* + [s] spellings" in Linear B:

Type 1: e.g. to-ra for θώραξ: /-ks/ unrepresented.

Type 2: e.g. *to-ra-ka* for θώρāξ: /-ks/ represented as <-*k***a**> (regress. OCV <-**a**>).

Type 3: e.g. *o-nu-ka* for ŏvu $\xi$ : /-ks/ represented as <-ka> (OAV <-a>).<sup>94</sup>

Woodard's Type 1 may also accommodate spellings *o-nu* and *to-ro-wi*.<sup>95</sup> In this classification, *wa-na-ka* could be theoretically classified into *either* Types 2 and 3; Woodard prefers to classify it under Type 2 and use it as evidence for "regressive spelling in Linear B" (see *supra* §3.4).<sup>96</sup> However, when he comes to discuss Type 3, he commendably admits that "acceptance of the reading *o-nu-ka* for [onüks] would obviously open up the possibility that the final *<-a>* in *to-ra-ka* and/or *wa-na-ka* is also an arbitrary empty vowel and that these forms do *not* then display the "regressive" spelling of  $a_3$ -*ti-jo-qo* ([ait<sup>h</sup>iok<sup>w</sup>s]). It would be *impossible* to determine which of the strategies is at work".<sup>97</sup>

Woodard's comment eloquently reveals the "Achilles" heel' of the "regressive spelling" hypothesis: Could it be in fact a mirage? Is it possible to accept that  $-k\mathbf{a}$  actually represents an OAV and that the occurrence of preceding "identical" "true" vowels (<-*ra*-> or <-*na*->) is purely accidental? There is a certain clear advantage in

- <sup>92</sup> The non-spelling of internal -ks/ kt- clusters in such cases such as we-pe-za (PY Ta 713.2) or e-te-re-ta (KN Se 879.b) is based on problematic identifications of these sign-sequences: we-pe-za as \*hweks-pedya "six-footed" (cf. e-ne-wo-pe-za/-zo "nine-footed" on PY Ta 713.1, .3; 715.1, .3) and e-te-re-ta as an alternative spelling to e-ka-te-re-ta (KN Se 891.B). Cf. Woodard 1997, 84-86 and infra §5 for e-ka-te-re-ta.
- <sup>93</sup> to-ra and to-ra-ka are from different sites, where spelling practices may have differed. o-nu is recorded by Hand 103 (who, despite being prolific within the Knossian textile documentation, never gave us o-nu-ka). to-ro-wi is written by \$131 Hand 1 (responsible for PY Cn 131) and \$310 Hand 2 (responsible for PY Jn 601) vs. to-ro-wi-ka by a so far unidentified Class ii "scribe". Interestingly, this condition is not met in the case of the alleged e-ka-te-re-tal e-te-re-ta "variation" (see previous footnote): both types occur on documents assigned to Hand 127 and may be different terms altogether (see also infra §5).
- <sup>94</sup> Woodard 1997, 124. Their one shared consistent feature is the non-representation of final /-s/. Woodard bases his analysis on the hypothesis that word-boundaries (i.e. the end of a lexeme) would function as a stop in his proposed "hierarchy of orthographic strength".
- <sup>95</sup> Woodard 1997, 124 recognises this possibility, despite his doubts of them being actual variants of the <-ka> Nominatives.

<sup>97</sup> Woodard 1997, 126 (*italics* added).

<sup>96</sup> Woodard 1997, 125.

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the latter possibility: The interpretation of final  $\langle -k\mathbf{a} \rangle$  as including an OAV would explain both *wa-na-k***a** and *o-nu-k***a**, while "regressive spelling" is only compatible with spellings such as *wa-na-k***a** or *to-ra-k***a**. Therefore, rejecting the "regressive spelling" hypothesis, at least in Nominatives in /-ks/, is the most economical option, as Ockham's razor would have it.<sup>98</sup>

All this may be true for the /-ks/ Nominative spellings. However, what about spellings such as  $a_3$ -ti-jo-qo for \*Aiθíoκ<sup>w</sup>ç and po-ki-ro-qo for \*Ποικίλοκ<sup>w</sup>ç<sup>299</sup> Do these demonstrate that "regressive spelling" of final consonantal clusters was occasionally practiced? If we accept this possibility, we must also explain –and this is a most crucial issue– why this "regressive spelling" is used so seldom.

Meissner has recently carefully surveyed the evidence of orthographic vowels in final position in Linear B sign-sequences<sup>100</sup> and has called attention to the still puzzling fact that "we seem to get a variety of dead vowels used".<sup>101</sup> The consistent spelling of  $/-o\kappa^w c/$  as  $<-o-q\mathbf{o}>$  is chiefly Pylian and employed by five or six different

In what follows in this section we shall only review evidence for "regressive spelling" for the rendering of final consonantal clusters. However, it would be heuristically useful to consider one alleged example of "regressive spelling" of a medial position cluster. *a-ra-ro-mo-to-me-na*[ on KN Sd 4416.b is Perfect Participle \*ἀραρμοτμένā or -ă with /-tme-/ rendered <-to-me-> (DMic I, 95 s.v. a-ra-ro-mo-to-me-na[). The type is unanimously considered as a variant of the more "canonical" spelling *a-ra-ro-mo-te-me-na* featuring the expected OCV with /-tme-/ rendered <-te-me-> (KN Sd 4402.b; 4403.b; 4404.b; 4405; 4406.2b; 4407.b; 4408.b; 4409.b; 4413.b; 4415.b; <4450>.c; 4468.b; 5091.b; a-ra-ro-mo-te-me-no: KN Sd 4401.b; a-<ra->ro-mo-te-me-na: KN Sd 4402.b.; cf. DMic I, 94-5, s.v. a-ra-ro-mo-te-me-na). Risch (1983, 375) considered the type as evidence for "regressive spelling" and paralleled it to the *wa-na*ka- spellings. The fact that this spelling is a hapax graphomenon ("densité des lapsus" is rightly regarded as "un critère de faute" by Maurice 1985, 36-39), by the same scribe (Hand 128) that has elsewhere consistently preferred -te-me- suggests that this clearly a simple scribal mistake without any necessary or reliable implications for Linear B spelling practice. Maurice has called attention to other cases of confusion between te and to (e.g. PN o-pe-te-re-u in PY Ea 805 by S28 Hand 43 and PY Eb 294.1 by Hand 41 vs. o-pe-to-re-u in PY Ep 704.1 by S74 Hand 1), which she called "une faute purement graphique" (Maurice 1985, 33). The administrative "opus" of Hand 128 (responsible for Knossos series Sd) is also infested with other spelling mistakes and missing syllabograms, e.g. a-<ra->ro-mo-te-me-na on Sd 4402.b (Maurice 1985, 37 regards that this scribe "révèle une attention très perturbée").

- <sup>99</sup> Pylian PNs: DMic I, 140; II, 135, s.vv. ka-ro-qo (references in the text infra) may also be \*Xάροκ<sup>w</sup>ς, but could also be \*Xάροκ<sup>w</sup>oς (DMic I, 326, s.v.). Knossian PN wa-ru-wo-qo (KN As(2) 1516.23; DMic II, 408, s.v.) probably conceals a non-Greek first "component" and its interpretation as ending in /-ok<sup>w</sup>s/ can be questioned. One might also add ]du-ru-wo-qo, although this might be in (possessive) Genitive \*Δρύροκ<sup>w</sup>oç, if it modified reconstructed do-[e-ro (PY Un 853 verso .1: DMic I, 198, s.v.). At least for a<sub>3</sub>-ti-jo-qo, the spelling of the Dative Singular a<sub>3</sub>-ti-jo-qe (PY Eo 247.2, .3, .4, .5, .6 and .7 by Hand 41) virtually secures that the declension is athematic. Although -qe is corrected over [[-qo]] in two out of six occurrences of the PN on the same document (Eo 247.2, .3), this mistake may reflect the preference of a Dative over a rubric Nominative.
- <sup>100</sup> Meissner 2007, 106-110 = 2008, 515-519. I shall be referring to Meissner 2008 for convenience.
- <sup>101</sup> Meissner 2008, 518 (preferring to explain  $a_3$ -ti-jo-qo as featuring regressive spelling).

"scribes".<sup>102</sup> At Knossos we get a far more diverse picture. *ka-ro-q***o** (KN Sc 257.1; Xd 7634; X 1047.1; also on PY Vn 865.5; MY Au 657.4), *if* \*Xάροκ<sup>w</sup>ς, conforms to the Pylian spelling in *-q***o**. However, we *may* also get Knossian *ke-ni-q***a** for \*χέρντγ<sup>w</sup>ς (KN Ws 8497.β);<sup>103</sup> *ti-ri-jo-q***a** for \*Tρίοκ<sup>w</sup>ς, although \*Tρίοκ<sup>w</sup>āς is just as possible (KN Sc 226; Vc(1) 303; Xd 294);<sup>104</sup> and if we interpret the boonym/adjective *wo-no-q***o***-s***o** (KN Ch 897 and 1015) as \*Foīvoκ<sup>w</sup>ς "wine-coloured",<sup>105</sup> we are led to assume that even final /-s/ was indicated (why was \**wo-no-q***o** insufficient?), in contrast to any other Linear B spelling type.<sup>106</sup> Assuming –at least as a working hypothesis– that all these spellings render Nominative Singular types and leaving aside alternative interpretations for a while, we may be justified to wonder whether this "orthographic diversity" in rendering final /-k<sup>w</sup>s/ clusters might have anything to do with differential scribal training (reflecting the choice of different *secondary* spelling options?) across or within central sites. In any case, it is important that we can contrast this with the consistent treatments of certain /-ks/ clusters from at least three different sites (Pylos, Knossos and Tiryns) that we have just surveyed.

We cannot lose sight of the fact that the only so far incontestable cases of /-k<sup>w</sup>s/ as <-q**o**> remain Pylian:  $a_3$ -ti-jo-q**o** and po-ki-ro-q**o**. We must observe that both PNs are actually compound names (second component \*-ok<sup>w</sup>-); and one should consider that a possible non-spelling (i.e. graphemic omission) of the final /-k<sup>w</sup>s/ cluster would result in spellings \* $a_3$ -ti-jo and \*po-ki-ro. Could these spellings have attempted to specifically remedy the situation in which the second component would have been almost unrepresented graphically?<sup>107</sup> Even if so, the concentration of the most certain

- <sup>102</sup> a<sub>3</sub>-ti-jo-qo by S74 Hand 1 and Hand 41; po-ki-ro-qo by S657 Hand 1, S64 Hand 21 and unidentifiable Class i scribe. ka-ro-qo by another unidentifiable Class i scribe (Vn 865.5) and ]du-ru-wo-qo -if not in Genitive- by S6 Hand 6 (assignments after Palaima 1988a).
- <sup>103</sup> Meissner 2008, 517-518 (cf. later χέρνιψ -βος). *ke-ni-qa* is not without problems in its interpretation as a Nominative Singular. Aura Jorro prefers Nominative Plural of a neuter \*χέρνιγ<sup>w</sup>ov (*DMic* I, 342, s.v. with references). A proper assessment of this type should await a further examination of the abraded? or worn? area under and to the right of *-qa* in facet .β.
- <sup>104</sup> The latter actually favoured in *DMic* I, 352, s.v. with references.
- <sup>105</sup> In theory, an interpretation \*Fοινόκ<sup>w</sup>-ορσος "with a brown backside" is possible (\*Fοίνοκ<sup>w</sup>σος less so), cf. *DMic* II, 444, s.v. (add Killen 1992-1993 for such "boonyms" as a whole). In preferring the interpretation of the term as \*Fοινοκ<sup>w</sup>ς, Homeric βόε οἶνοπε (*Il.* xiii.703) has had special gravity.
- <sup>106</sup> To these cases, we might also add *ki-da-pa*, interpreted *inter alia* as \*σκίνδαψ (*DMic* I, 358, s.v.). However, any proposal must remain unconfirmed, since this is a hapax graphomenon (KN So 894.3); context suggests a technical term related to chariot-wheels, we may expect it not to have survived in the post-palatial Greek lexicon. Since 41 pairs of *te-mi-dwe-ta* wheels are modified as *ki-da-pa*, this may well be a neuter adjectival form in Nominative Plural (/-ă/).
- <sup>107</sup> We may also consider that in all these <-o-qo> spellings, the rendering of the Nominative and the Genitive Singular types would be identical. Of course, homography troubles should never be pressed too far: the tablet-writers/readers had an array of paratextual data at their disposal to make sense of the records, which we lack.

cases of such possible "regressive spelling" in names in  $/-\bar{o}k^w s/$  alone (all virtually with a common second component) remains an *explanandum*. We should note that, even for these PNs, the case for "regressive spelling" is not compelling: it is still not possible to refute Householder's proposal that final *-qo* included *<-***o***>* as a sort of "reflex" OAV used particularly for the rendering of  $/-k^w s/$  clusters.<sup>108</sup>

In this last regard, it is quite interesting that the other OAV occasionally used for the rendering of other final clusters in athematic Nominatives seems to be consistently <-a>. Besides /-ks/ clusters, other cases of the rendering of final /-n/ or /-r/ with the help of an OAV would be *ki-to-na* (KN Ld(2) 785.2b by Hand 114) for χιτών or ]*ka-ra-te-ra* (MY Ue 611.2 by Hand 60) for κρατήρ. Unless we accept the possibility of (rubric) Accusatives or –in the case of *ki-to-na*– an obscure adjectival form parallel to other such modificatory designations in the Ld(2) set, they are to be interpreted as evidence for the *scarce* rendering of final /-n/ or /-r/ with the aid of an OAV <-a>.<sup>109</sup>

<sup>108</sup> Householder had suggested that <-o> may be the "reflex" OAV after labiovelars (<-q->), vs. the "reflex" OAV <-a> after velar stops (<-k->): "We may argue that the vowels in *wa-na-ka* and *-o-qo* are not echo-vowels [i.e. our OCVs] but inherent vowels [i.e. our OAVs], i.e., that any final *-ks* would be written *-ka* and any *-qs*, *-qo*, no matter what vowel preceded" (Householder 1964, 75).

<sup>109</sup> As in Meissner 2008, 515-519 (cf. also DMic I, 322, 368, s.vv. ]ka-ra-te-ra, ki-to). ]ka-ra-te-ra admittedly makes good sense as Nominative Singular, since it is the only entry on MY Ue 611 followed by the numeral "1" (all other being possible or certain Plural forms). Other possibilities have already been proposed: Chadwick proposed a scribal lapsus and considered the possibility that other types on the tablet could also be Accusatives (Ventris and Chadwick 1973, 496); Varias García (1993, 278, n. 560) considers an omitted verb *a-ke* (3<sup>rd</sup> person Sing. Ind. Pr. ἄγει) as the only possibility for maintaining the interpretation of ka-ra-te-ra as an Accusative, although he finally rejects it as unnecessary. However, since a-ke also occurs on MY Ue 611 verso .1, this would not be an arbitrary reconstruction. Although ki-to and ki-to-ne (DMic I, 368, s.v. ki-to) suggest that the noun concerned is athematic χιτών, the term is parallel to adjectives (po-ki-ro-nu-ka, ki-ri-ta, ke-rota, o-re-ne-ja etc.) in the same set. The interpretation of ]-ke-ra2-u-na (PY Un 853.1) as a variant spelling of the same PN Nominative elsewhere rendered as e-ke-ra,-wo may also be considered, and other possible "variants" also occur (e-ke-ra-ne on Un 219.1 by Hand 15; ]e-ke-ri-ja-wo on Qa 1292 by S1295 Hand 15) and the reading itself is not entirely certain. [•]-*ja-wo-ne* (perhaps *wj-ja-wo-ne*) on KN Wm 1707. $\gamma$  is also too obscure. Although Meissner (2008, 516) justifiably notes that it must be considered as the subject of *do-ke*  $(.\beta)$ , the reading is still not certain. Killen (2000, 6) has also argued that me-na (KN E 842.2 unassigned; Fs 3.B unassigned; Gg(3) 717.1 by Hand 140) can be interpreted as Nominative Singular  $\mu\eta\nu$  "month" with an OAV <-a> to enable the rendering of the final /-n/. Indeed, we may postulate that the natural antipathy of Linear B for monographemic spellings -which would be confused with acrophonic abbreviations or adjuncts- would have led to this solution for the spelling of athematic  $\mu$ <sub>1</sub> $\eta$ v. However, there is no compelling reason why extant me-na on KN Gg(3) 717.1 would not be an Accusative Singular μήνα with an adverbial function comparable to that of the Genitive me-no μηνός on comparable honey records by Hand 103 (KN Gg(1) 704.1; 5552.1: 7369.1; 8053), while the context of me-na on E 842.2 and Fs 3.B cannot compellingly demonstrate its interpretation as Nominative µýv either (for earlier interpretations of me-na see DMic I, 434, s.v.).

One further Pylian case of an unexpected final OAV <-e> deserves discussion. The spelling *e-ke-ra<sub>2</sub>-wo-ne* precedes *a-pe-e-ke* on PY An 724.5 (by S657 Hand 1). *e-ke-ra<sub>2</sub>-wo-ne* would under other circumstances be interpreted as a Dative Singular (-ει), but, since it is reasonably argued to be the subject to the verb *a-pe-e-ke* (cf. *ra-wa-ke-ta*, *a-pe-e-ke*[in .7), Chadwick proposed that *e-ke-ra<sub>2</sub>-wo-ne* is here intended to render the Nominative with *-ne* as "an attempt to indicate the final /-n/".<sup>110</sup> However, we may set a further crucial question: Why did S657 Hand 1 not use the same (or another) OAV for other such PNs? Let us resort to a most certain case where final /-n/ is omitted by this "scribe": the Nominative Singular *a-re-ku-tu-ru-wo*, incontestably \*Aλεκτρυρών on PY An 654.8.<sup>111</sup> There, a spelling \**a-re-ku-tu-ru-wo-ne* is not employed and S657 Hand 1 prefers the mainstream option: the graphic omission of /-n/. If we wish to sustain the interpretation of *e-ke-ra<sub>2</sub>-wo-ne* as a Nominative, we should also explain the unpredictable rendering of the final /-n/; otherwise, our data seem to point to a scribal error –even an incidental, spontaneous solecism– for this exceptional spelling.

Overall, we observe highly erratic patterns (as well as considerable uncertainties surrounding many types) in cases *other than* the very tight and consistent (even cross-site) rendering of the /-ks/ final clusters. Restricting ourselves to these latter cases, we may therefore conclude with reasonable certainty that:

- (i) First, they do reveal that, when rendering the final /-ks/ clusters in Nominative Singular of 3<sup>rd</sup> declension nouns, Linear B "scribes" could -in theory- follow *no more than* two alternatives:
  - a) Only the final /-s/ would be omitted (in *accordance* to the non-spelling of /-s/ in all nominal suffixes), but the first stop of the cluster /-*k*-/ would be graphically indicated with the help of an orthographic vowel <-**a**>: e.g. Fάναξ as <*wa-na-k***a**>; θώραξ as <*to-ra-k***a**>.<sup>112</sup>
- <sup>110</sup> Chadwick 1987, 80 (*inter alios*: Meissner 2008, 516; Del Freo 2002-2003, 149-50 with nn. 40-45). The possibility of a scribal lapsus is also mentioned (but not favoured) by Chadwick. Although it is a sound principle not to surrender any interpretation to simple "mistakes", this might not be entirely inappropriate in this case. Pylian *te-ko-to-na-pe* has been cited as a further example and segmentated as *te-ko-to-n-|a-pe* (Duhoux 1985, 43), although its recent reinterpretation as a TN is more convincing (Killen 1996-1997). *ko-to-na-no* on PY Ea 922 (by S28 Hand 43) which had been interpreted as κτοίναν ἄνωνον, could better be interpreted as a *scriptio continua ko-to-na* | *<a->no-no* (Lejeune *apud* Duhoux 1985, 69, n.102).
- <sup>111</sup> Other PNs in Nominative Singular recorded on tablets assigned to S657 Hand 1 may end in /-on/, e.g. *a-pe-ri-ta-wo* (An 657.3) or *a-ti-ja-wo* (An 654.2). In theory, of course, these PNs could be in the 2<sup>nd</sup> declension (-oç rendered <-o>), although the presence of the glide suggests an athematic declension (Gen. /-onos/).
- <sup>112</sup> A further possible example could perhaps be added, even if quite doubtful. The types *si-ra* (at least on KN B 988.a) and *si-ra-ko* (at least on KN B 822.1b and Ai 5976.1), for instance, demonstrably

- b) The entire /-ks/ cluster could be graphically omitted altogether: *to-ra* for  $\theta \omega \rho \bar{\alpha} \xi$  is certain, and *o-nu* and *to-ro-wi* are also probable examples.
- (ii) Second, they indirectly demonstrate that the concept of "regressive spelling", according to which an OCV would replicate the graphic value of the *preceding* true (i.e. functioning as a syllabic nucleus) vowel, is *not necessary* to explain these Linear B spellings.

It is uncertain whether the non-occurrence of both variants between the two "options" can be considered meaningful or not (e.g. *wa-na-ka* is consistently used, but we have so far no *\*wa-na* spelling for the Nominative Fáva $\xi$ ).<sup>113</sup>

We may conclude this survey with emphasising that the employment of OAV <-a> for the rendering of final consonant clusters /-ks/ is *normal* in Linear B spelling.

4.2. At this point, it seems worthwhile to offer some careful speculation on the possible origin of Linear B OAVs<sup>114</sup>. That the relationship between Linear B spelling and spelling in other Cretan scripts (specifically addressing Linear A data) was somehow genetic, is a commonly shared assumption, although rarely phrased in a precise manner. The phonographic component (or syllabary) of the Linear B writing system is obviously modelled on Neopalatial writing, and it is almost certain that the Linear A script (or a very close variant) must have been the dominant influence in its formation. Many of the so-called "imperfections" of the Linear B spelling to suit Greek phonetics have been attributed to the fact that these were taken over from a writing system initially suited for a different language/ languages, most plausibly the one(s) used by Neopalatial administrations:<sup>115</sup> the assumption that the overwhelming majority of syllables in the language(s) in question were open (i.e. lacking codas) has been widely popular since the earliest days of Mycenology.<sup>116</sup>

conceal the same Knossian PN. This might be 3<sup>rd</sup> declension in /-aks/, unless *si-ra* is explained as a "scribal lapsus" (intended *si-ra<-ko>*: in which case the name is 2<sup>rd</sup> declension in /-os/). A "shepherd" *si-ra-ko* on KN Db 8352 may be a homonym. In the former case, though, a different orthographic vowel would render /-ks/ (-ko instead of the -*k*a in *to-ra-ka, wa-na-ka* etc.). For references cf. *DMic* II, 294-5, s.vv. *si-ra, si-ra-ko* (add Landenius Enegren 2008, 169 and Duhoux 2008, 253).

<sup>&</sup>lt;sup>113</sup> As rhetorically asked by Morpurgo-Davies 1987, 103. We must be reminded, however, that Fάναξ is the only safely attested name with a stem ending in /-kt-/ in the extant Linear B documents (cf. also *infra* §7.4). It has also been observed that "*wa-na* might have been regarded as insufficiently clear, so *wa-na-ka* was written to assist the reader" (Chadwick 1958, 295).

<sup>&</sup>lt;sup>114</sup> The fact that Hittite cuneiform regularly uses <-C*a>* phonograms to indicate final consonantal clusters is, of course, interesting, but should be dismissed as coincidental. For Hittite orthographic vowels (OCVs or OAVs) see Kavitskaya 2001 and Hoffner and Melchert 2008, 11-2 §1.11.

<sup>&</sup>lt;sup>115</sup> Duhoux (1985, 48-53 §4.2), whose initial rhetorical question is aptly phrased ("Peut-on render le linéaire A responsible des défauts du linéaire B?") offers a commendably cautious treatment of the problem of the "lacunes organiques" and "fonctionelles" in Linear B.

<sup>&</sup>lt;sup>116</sup> Cf. "Linear B is derived from an earlier Minoan script, probably represented by Linear A. It is therefore a reasonable assumption that the form of the syllabary reflects not Greek but another language, which

If this assertion is accepted, it would follow that the graphemic omission of syllable codas (including final consonants) would have been –by and large– a Linear B (Greek) compromise, as "Minoan" –with its *allegedly* rare codas– would hardly need it.<sup>117</sup> But what about the orthographic vowels used to render initial, medial or final consonant clusters? In fact, unless wild speculations about the structure and nature of "Minoan" are made, we may have reached an impasse.<sup>118</sup>

Nonetheless, we may observe that two compellingly "Minoan" TNs feature consonantal clusters whose graphic rendering *necessitates* orthographic vowels in Linear B:  $\langle ko-no-so\rangle Kv\omega\sigma\delta\varsigma$ ,  $\langle a-mi-ni-so\rangle A\mu v u\sigma\delta\varsigma$ ,  $\langle di-ka-ta\rangle \Delta i\kappa\tau\bar{\alpha}$  or perhaps  $\langle a-pa-ta-wa\rangle$  \*Aπταρ<sub>F</sub>α. We may observe that all these cases involve "progressive" OCVs<sup>119</sup> and this encourages to consider  $\langle su-ki-ri-ta\rangle$ , also occurring in Linear A  $\langle Tsu-ki-ri-ta\rangle$ , which, if both related to  $\varepsilon u\beta \rho i\tau\bar{\alpha}$ , etc., would be our first positive clue for a "progressive" OCV in Linear A. We should additionally note that the only reliable evidence for "regressive" OCVs in Linear B (the Pylian  $/-k^ws/: \langle -qo\rangle$  names, cf. above §4.1), utilizes the one Linear B sign that is almost certainly

<sup>119</sup> Cf. material assembled in Heubeck 1983, 158-159. As Duhoux notes, "comme il ne semble pas que le linéaire A ait connu l'emploi des signes syllabiques à voyelle "morte" –du moins en finale de mots–, il faut en conclure que les groupes consonantiques du linéaire A n'étaient sans doute guère mieux rendus que ceux du linéaire B" (Duhoux 1985, 48). We should be cautious not to read too much into the fact that <*ko-no-so>* and *<a-mi-ni-so>* employed syllabograms that *may* have been Linear B novelties, namely *<no>* and *<so>*. A resemblance may be noted between sign B12 *so* and signs A363 (also A364?), so far attested only at Kato Zakros (A363: ZA 14.2; A364: ZA 15a.7). Similarly, sign B52 *no* resembles Cretan Hieroglyphic sign 008 (open palm), as well as A362 (also attested only at Zakros: ZA 10b.1). An argument against the meaningfulness of these comparisons would be that, except for sign B72 *pe*, all Linear B novelties in the basic syllabary concern syllabograms that include an *-o* vocalic component. This indicates a consistent pattern of supplementation.

we may for convenience designate "Minoan". This may perhaps have resembled the Polynesian type, consisting mainly of open syllables, final consonants being either absent or at least not significant" (Ventris and Chadwick 1956, 69). Lejeune: "A travers les imperfections du syllabaire B dans la notation du grec, on est amené à restituer quelques traits du phonétisme de la langue \*X, initialement responsable de ces imperfections; cette langue peut être, mais n'est pas nécessairement, celle que note le syllabaire A [...] si les usages orthographiques mycéniens continuent, à cet égard, des usages plus anciens [...] dans la langue \*X, prédominaient les syllabes ouvertes" (Lejeune 1958, 329-330).

<sup>&</sup>lt;sup>117</sup> Cf. Stephens and Justeson 1978, 278.

<sup>&</sup>lt;sup>118</sup> The lack of high-frequency final phonograms in Linear A (supported by the data presented in Duhoux 1978, 68-69) *may* indicate that final consonantal clusters were not graphemically indicated in this writing system. However, we have no way to decide whether this was an orthographic or phonetic feature. As Duhoux commendably admits, "[c]et usage peut être dû soit à une convention orthographique (langue possédant des consonnes finales de mots, mais écriture ne les notant pas), soit à un facteur linguistique (langue ne possédant pas ou peu de consonnes finales de mots)" (Duhoux 1978, 69).

without extant antecedents in earlier Aegean systems and may have been a novelty in Linear B: B32  $\langle qo \rangle$ .<sup>120</sup>

What about the very consistent spellings of /-ks/ as <-ka>? These utilize a sign of definite Linear A ancestry, AB 77. There are sign-groups ending in AB 77 in Linear A,<sup>121</sup> but their significance must be considered unknown.<sup>122</sup> There is, however, an interesting common feature of the most certain (and most of the probable as well) Linear B spellings of /-ks/ as <-ka>: they seem to render terms of non-IE Greek etymology. Fávaξ and θώρāξ are clear examples;<sup>123</sup> θῶμιγξ and ῥāξ (*if* indeed the types rendered as *to-mi-ka* and *ra-ka*, which is not certain) also lack secure IE etymologies.<sup>124</sup> The identification of certain other spellings –all of them PNs– in <-*ka*> is too uncertain<sup>125</sup> and non-IE Greek forms might be concealed (though this is again far from certain); a positive argument for a non-IE Greek PN can be developed at least for Knossian \*56-*du-nu-ka*, which employs sign AB 56, plausibly argued to represent a particularly "Minoan" consonant.<sup>126</sup>

We should discuss two *seeming* exceptions:

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<sup>120</sup> Nagy (1963, 195, 207; 1965, 302) had suggested that "*regressive* spelling" of OCVs was the "norm" in Linear A. However, he uses this merely as a convenience to argue that a few LA>B readings would resemble Greek-like lexemes.

- <sup>121</sup> We should admit that AB 77 is not overwhelmingly frequent in final position in Linear A (cf. table in Facchetti 1999, 7). According to Facchetti's counts, signs in higher frequencies in final position are (in order of frequency): AB 24 <†*ne>*, AB 27 <†*re>*, AB 04 <†*te>*, AB 09 <†*se>*, AB 37 <†*ti>* and AB 60 <†*ra>* (Facchetti 1999, 10). It might not be entirely fortuitous that the "top-four" of these signs include, in their highly conjectural LA>B values, a common vocalic component <-*e>*.
- <sup>122</sup> GORILA V, 259 (later discoveries have added no new examples). A couple of cases might be potentially interesting: AB 01-77 (<†*da-ka*>; four times: HT Wa 1001; 1003; 1004; 1005) may possible render the same term as single AB 01 (<†*da*>; hapax on HT Wa 1031). This might only be significant because of the similar administrative context in which the candidate "variant" forms occur (on single-hole hanging nodules from the same site, cf. *GORILA* II, 4, 10). If so, it is interesting that AB 77 is optionally omitted, recalling the optional non-spelling of /-ks/ ~ <-ka> in Linear B (cf. §4.1). Sequence AB 01-41-118 (HT 13.5; 85a.3-.4; perhaps 99b.1; 122a.2) might –just conceivably– be a variant spelling of AB ]41-118-77 on HT 140.2 (*GORILA* I, 236 reads AB §6-41-118-77, but the reading of the first sign falls almost entirely in a lacuna of the document and no reliable *vestigium* can be discernible). Also interesting is the sign-group AB 80-26 (hapax on HT 117a.3), whose LA>B "transcription" is <†*ma-ru>*. Although this might be a PN, it is interesting to bring to mind the Hesychian gloss μάλλυκες · τρίχες. Could <†*ma-ru>* (which also occurs in monogrammatic fashion as graphemes A 546, 558-562 definitely rendering a commodity: HT 12.4, 24a.5; KH 43.1; PH 3.3) render a term close to \*μάλλυκξ /\*malluks/? Again, we are reminded of the optional non-spelling of /-ks/ in Linear B.
- <sup>123</sup> DÉLGn, 80-1 and EDG I, 98-9 (ἄναξ); DÉLGn, 433 and EDG I, 569 (θώρᾶξ). For ϝάναξ cf. also §7; on the origin of θώρᾶξ cf. also Renfrew 1998, 244-245.
- <sup>124</sup> DÉLGn, 432 and EDG I, 569, s.v. θῶμιγξ; DÉLGn, 932 and EDG II, 1274-5, s.v. p̄αξ.
- <sup>125</sup> to-ro-wi-ka, pu-ru-da-ka, \*56-du-nu-ka and ku-ru-ka (cf. §4.1).

<sup>&</sup>lt;sup>126</sup> Melena 1987, 216-218.

(i)  $\kappa \tilde{\alpha}\rho \nu \xi$  is commonly paralleled to Sanskrit  $k\bar{a}r\dot{u}$ -"singer" with a -*k*- enlargement.<sup>127</sup> However, certain doubts have been expressed on this IE etymology,<sup>128</sup> and we should also consider that neither the reading *ka-ṛu-ṣa*[ on KH Z 1 nor its interpretation as a PN \*K $\tilde{\alpha}\rho\nu\xi$  are certain (see *supra* §4.1).

(ii) Although *o-nu-ka* reasonably renders an athematic form in /-ks/, we cannot be certain that the form represented is Greek ŏvvξ "claw, nail", a term of certain IE etymology.<sup>129</sup> As Leukart observed long ago, this would hardly explain the use of *o-nu-ka* as a technical term used at an advanced stage of textile manufacture,<sup>130</sup> nor the adjectival forms *po-ki-ro-nu-ka* and *re-u-ko-nu-ka*; Leukart ingeniously proposed to explain *o-nu-ka* as *lo-nukh-l* a passive adjectival form "stitched on" (cf. vúσσω < \*nuk*h-j-*), with non-adjectival *o-nu-ka* being substantivised forms.<sup>131</sup> In Leukart's view, *o-nu-ka* would be quite unrelated to IE Greek ὄνυξ, yet phonetically similar to it.<sup>132</sup>

It would perhaps be permissible to consider the possibility that *o-nu-ka* (related to  $v\dot{v}\sigma\sigma\omega$  or not) had been an entirely non-IE formation. This indeed would be most expected, since a considerable amount of the "Mycenaean" textile terminology used on Knossian documents is patently non-IE.<sup>133</sup> It seems just as plausible (and perhaps more economical) to assume that *o-nu-ka* renders a non-IE Hellenised form,

<sup>128</sup> Beekes 2003; *EDG* I, 690, s.v. κῆρυξ. Chadwick (1975, 810) includes κῆρυξ in his indicative list of Greek words with "no exact cognates in other languages" (cf. also Ventris and Chadwick 1956, 68).
 <sup>129</sup> DÉC 776 7... τ EDC II. 1096 7... τ 1

<sup>130</sup> As noted by Ventris and Chadwick (1956, 317-318, 401; 1973, 564), Palmer (1963, 293) and Killen (1979, 157-158), the context compels us to accept that *o-nu-ka* refers to an item of textile decoration made of wool, which could be weighed separately and that was added only at an advanced stage of textile manufacture (it does not occur in the production target records of the Lc series). The existence of specialist workers (Nom. Pl. *o-nu-ke-ja* PY Ab 194.B and Gen. Pl. *o-nu-ke-ja-o* PY Ad 675; Dat. Sing. masc. *o-nu-ke-wi* from TH Oh 206.2) suggests that their manufacture was quite skill-demanding and time-consuming. In theory, a metonymic use of IE ὄνυξ could be possible: the same process took place in the use of ὄνυξ for the homonym veined gemstone, tools plant and shell parts, shells, as well as a sea-weed, anything that bore a resemblance to the shape or colour patterns of nails or claws (cf. *DÉLGn*, 777, s.v. ὄνυξ II; *LSJ*, 1234, s.v. ὄνυξ 2). The late adjective ὀvίχινος modifying garments and sheep seems to refer to colour patterns (*LSJ*, 1234, s.v. ὀvu<sub>2</sub>; quoted by Ruijgh 1967, 250, n. 14). An *obscure* metonymic use of ὄνυξ seems to occur on the Erekhtheion building inscription (*IG* 1<sup>2</sup>.373, 208, 212).

- <sup>132</sup> The elaborate scenario advanced (Leukart 1987, 186) to explain this homonymy is hardly necessary.
- <sup>133</sup> The concurrence of IE Greek and Hellenised non-Greek terms within the Knossian technical textile vocabulary seems to be historically significant (Petrakis 2012, 81). Examples of terms that defy IE Greek etymologies are: ἀσκέω (DÉLGn, 118-9 and EDG I, 150; cf. *a-ke-ti-ri-ja* and variants: DMic I, 42-3); ἡλακάτη (DÉLGn, 392, 1304 and EDG I, 513-4; cf. *a-ra-ka-te-ja*: DMic I, 93-4); *ko-u-ra* (DMic I, 394, s.v.); *tu-na-no* (DMic II, 376, s.v.); τάπης (DÉLGn, 1054-5 and EDG II, 1450-1; cf.? te-pa: DMic II, 331-2, s.v.); to-u-ka (DMic II, 372, s.v.); φῶρος < \*φῶρϝος (DÉLGn, 1136-7 and EDG II, 1555; cf. pa-wo, pl. pa-we-a/-a<sub>2</sub>: DMic II, 91-2).

<sup>&</sup>lt;sup>127</sup> DÉLGn, 507, s.v. κῆρυξ.

<sup>&</sup>lt;sup>129</sup> DÉLGn, 776-7, s.v. ὄνυξ Ι; EDG ΙΙ, 1086-7, s.v. ὄνυξ 1.

<sup>&</sup>lt;sup>131</sup> Leukart 1987, 183-187.

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phonetically close or even similar to /onukhs/, but with no further etymological or semantic relationship to the IE term.<sup>134</sup>

The certain, probable or possible non-IE etymology of all names in /-ks/ rendered as  $\langle -ka \rangle$  is, therefore, particularly interesting.<sup>135</sup>

4.3. It was previously (§4.1) possible to demonstrate that *wa-na-ka* fits within a very consistent and established spelling practice that uses an OAV <-a> in order to render final /-ks/ clusters. Luria's proposal to recognise *wa-na-ka* as \*/wanakants/ would be entirely unnecessary, but could *wa-na-ka-te* still be \*/wanakantei/? It is the occurrence of Datives *wa-na-ka-te* and *wa-na-ke-te* in similar textual environments at Pylos that makes this suggestion most unlikely.<sup>136</sup> The relevant texts are given in TABLE 2: the types occur on records of perfumed oil, written by different "scribes", but found in the same area (Room 23) within the Pylian palace complex.

TABLE 2. Occurrences of the types *wa-na-ka-te* and *wa-na-ke-te* in entries on Pylian Fr tablets. All readings checked by the author through personal autopsy (July-August 2008). Stylus/Hand assignments follow Palaima 1988. Apparatus criticus follows *PTT* I and personal autopsy. For the identification of the commodity on Fr 1215, see n.138.

Document	Stylus/Hand assignment	Техт	Apparatus criticus
PY Fr 1215.1	S1219 Cii	wa-na-ke-te, wa-na-se-wi-jo, we-a-re-pe	
<b>PY Fr 1215</b> .2	S1219 Cii	sa-pe-ra ọ.ẹ+ <i>RA</i>	RA preferable? OLET possibly erased. No numeral following.
<b>PY Fr 1220</b> .2	S1202 H2	di-pi-si-jo-i , <b>wa-na-ka-te</b> OLE+PA s 1	
PY Fr 1227	S1202 H2	wa-na-ka-te , wa-na-so-i , [ ] s 1 v 1	[OLE]+A possible
<b>PY Fr 1235</b> .1	S1202 H2	wa-] na-so-i , <b>wa-na-ka-te</b> , pa-ko[-we ] OLE+PA 1	

The contents of all four documents are similar. Although PY Fr 1215 (where *wa-na-ke-te* occurs) presents some differences from other Fr records, these seem to point to an *unfinished* document. The lack of any numeral<sup>137</sup> following the commodity sign<sup>138</sup> in

- <sup>134</sup> We should perhaps note here that νύσσω "has no clear Indo-European cognates nor etymology" (Leukart 1987, 186; DÉLGn, 732 and EDG II, 1028, s.v. νύσσω), so our proposal is not incompatible with Leukart's hypothesis.
- <sup>135</sup> This observation *may* be used to indicate that the relative lack of high-frequency final phonograms in Linear A grapheme-sequences may reflect "une convention orthographique (langue possédant des consonnes finales de mots, mais écriture ne les notant pas)" (Duhoux 1978, 69).
- <sup>136</sup> Theban *wa-na-ke-te* (TH X 105.2) is not considered here, since it occurs on a fragmentary and not properly comprehensible document with no clear contextual associations.
- <sup>137</sup> Bennett 1958, 47, pls. X-XI; *PTT* I, 159; Bennett 1992, 120.

<sup>138</sup> The identification of the commodity on Fr 1215 is not straightforward. Its original reading was <u>RA</u> (Bennett 1958, 47), corrected later to *ra* (*PTT* I, 156). Palmer (1963, 242, 245) proposed to read a ligature OLE+RA (so far not found elsewhere), eventually accepted by Bennett (1992, 120). There

line .2 makes the entire record incomplete. Despite these "oddities", Fr 1215.1 features vocabulary known from in other Fr tablets: *we-a-re-pe* recurs on Fr 1223.1 and .2, and its variant form *we-ja-re-pe* (Fr 1205 by S1202 Hand 2; Fr 1217.1, 1218.1 and 1225 *recto originalis* .2 by S1217 Class ii).<sup>139</sup> There should be no reasonable doubt that, besides differences, Fr 1215 belongs with the rest of the perfumed oil elongated tablets from Room 23 (see further §6).

Luria's \*/wanakami/ is denominative from Fάναξ and, therefore, semantically equivalent to \*Fανάσσε*h*εν > ἀνάσσειν "to be/ act as Fάναξ". In that sense, \*/wanakants/ and Fάναξ would be practically equivalent in meaning. Why would they be used one alongside the other, in such similar contexts? What sort of difference would they convey? This question is meaningful, since administrative records –for the most part quite formulaic in structure– are expected to use vocabulary with clarity and consistency. Delicate variations in nuance like the one implied by Luria's proposal would be hardly anticipated. In that sense, spelling *wa-na-ke-te* (with its "canonical" progressive OCV) provides us with an indirect but conclusive indication that both it and *wa-na-ka-te* can be nothing but variants of the same lexeme; and since the identification of *wa-na-ke-te* as \*Fανάκτει is incontestable, we may also be confident that *wa-na-ka-te* should represent \*Fανάκτει as well. In a literal sense, *wa-na-ke-te* seems to have been the rule that proved the exception.

# 5. The idiosyncratic *wa-na-ka-* spellings and their possible parallels within Linear B

Since the idiosyncratic spellings *wa-na-ka-te* and *wa-na-ka-te-ro* attracted attention, further parallels have been drawn to suggest that the spelling of /-ktV-/ clusters presented occasional irregularities in Linear B<sup>140</sup> and this has been sporadically argued for other SCV clusters (usually in medial position). This

are clear signs of erasure between the area under *-ra* (of *sa-pe-ra*) and the commodity sign, including an erased numeral "1" (or a "divider"?) clearly discernible immediately to the *left* of the commodity sign. The traces atop the vertical element of the sign seem to encourage a reading OLE+*RA*, although they are somewhat more faint that the rest of the ductus (confirmed by personal autopsy). It is not unthinkable that this was originally OLE, erased and converted into *RA* and that extra lines belong to the erased original (Shelmerdine 1985, 33; followed by Bendall 2007, 98). I have preferred here to transcribe the sign as OLE+*RA*. *RA* recurs as a commodity sign for an aromatic substance on PY Un 219.6 by Hand 15 (perhaps all commodity signs/ acrophonic syllabograms on this document indicate aromatics, as exemplified by *tu-wo* on .1). *sa-pe-ra* is a hapax graphomenon. In any case, whether OLE+*RA* or *RA*, the recorded commodity is unquestionably associated to the perfume industry.

<sup>&</sup>lt;sup>139</sup> wa-na-se-wi-jo is recorded on Fr 1221, which is also assigned to S1219 Class ii.

<sup>&</sup>lt;sup>140</sup> E.g. already in Ventris and Chadwick 1953, 91 §5.10 (cf. Ventris and Chadwick 1956, 46; Vilborg 1960, 36).

matter is of crucial importance to the consideration of the "spelling idiosyncrasy" of the wa-na-ka- types. We shall here discuss systematically other cases that have been (or could be) considered to feature an OAV in their renderings of non-final SVC clusters and address their reliability and, hence, relevance to our case.

*a-re-ka-tu*[-]*ru-wo*: A quasi-join of KN Sc(3) 256 with 5163 to the right has been suggested.<sup>141</sup> The publication of the quasi-join suggests the following reading on the *verso*.<sup>142</sup>

KN Sc(3) 256[+]5163 (124-1) *verso* а-re-ka-ţu[-]ŗu-wo т

Olivier comments that "tu[ (non vu dans *CoMIK* I) très proche du *ka* mais difficilement évitable; ]ru assez incertain". Personal autopsy of both fragments at Herakleion in 7 December 2009<sup>143</sup> has confirmed that ]ru is a most likely reading, but tu[ is quite doubtful, while the actual physical distance between the two fragments cannot be certainly ascertained. Moreover, metrogram T, if correctly identified, is hard to explain on a personnel record. *If* we read this as PN \*A $\lambda$ ektpuF $\omega$ v here, with /-ktr-/ rendered as <-ka-tu-ru->, then the orthographic asymmetry –entirely unparalleled in Linear B– of a /SCV/ cluster represented with *both* an OAV <-a-> and a progressive OCV <-u-> seems highly suspicious. The fragility of the whole hypothesis is also clear from the fact that it depends entirely upon the uncertain reading *a*-re-ka-tu[-]ru-wo and its even more doubtful interpretation as \*A $\lambda$ ektpuF $\omega$ v, which Olivier wisely refrains from suggesting.<sup>144</sup>

*e-ka-te-re-ta*: This type (KN Se 891.B) has been argued to render ἕκτρητα<sup>145</sup> with the /-ktV-/ cluster represented with an OAV <-**a**->. The interpretation of the type should be discussed alongside *e-te-re-ta* (KN Se 879.b). *e-ka-te-re-ta* and *e-te-re-ta* are most likely different types rather than variant spellings, since they are produced by the same "scribe" (Hand 127) and since the crucial *-ka-* in *e-ka-te-re-ta* is visibly corrected over a clearly visible erased [[*te*]].<sup>146</sup> However, if the possibility of variant

- <sup>141</sup> KT4, 274, 279 (cf. DMic I, 97-8, s.v. a-re-ka[); CoMIK I, 108 (the quasi-join is characterised as "possible").
- <sup>142</sup> Olivier *apud* Driessen *et al.* 1988, 64. The identification of the "scribe" follows Driessen 2000.
- <sup>143</sup> I am grateful to Professor Athanasia Kanta and Dr Georgia Flouda for facilitating this autopsy.
- <sup>144</sup> Before the quasi-join had been proposed, Palmer (1963, 409) had reconstructed *a-re-ka*[ as *a-re-ka*[-sa-do-ro λλέξανδρος. Aura Jorro (*DMic* I, 98, s.v. *a-re-ka*[) accepting the quasi-join, proposes *a-re-ka-wo* or *a-re-ka-ru-wo*, but these readings cannot be reconciled with the *Vestigia* of at least two signs between *-ka-* and *-wo*.
- <sup>145</sup> DMic I, 205, s.v. with references (add Leukart *apud* Perpillou 1987, 279; Bernabé *et al.* 1992-1993, 135-136; Woodard 1997, 85-86).
- <sup>146</sup> The same "scribe" would hardly be using two alternative spellings, or even make a correction to differentiate between the two "variants" (the *vestigia* of the original sign under *-ka-* are clearly discernible in the photo and drawing of KN Se 891 in *CoMIK* I, 361).

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spellings is left out, and we turn to the possibility that *e-ka-* and *e-* render /ek-/ and /en-/ respectively, then what would the semantic difference be beyond the overall "perforation" concept?.<sup>147</sup>

*ru-k*i-*to*: This well-attested Knossian TN (derivative adjective *ru-ki-ti-jo*)<sup>148</sup> had already been cited as an example of an irregular rendering of /-ktV-/ in the publication of Ventris" decipherment. This Cretan Bronze Age geographical designation may (or even must) have been of "Minoan" ancestry, and this opens up several complex possibilities. Chadwick had suggested that <-*k*i-> was an attempt to record some obscure "Minoan" vowel (so, not an orthographic vowel at all).<sup>149</sup> Much of the problem actually derives from the belief that *ru-ki-to* should render the Bronze Age form of the historical Cretan TN Λύκτος,<sup>150</sup> although the spelling inconsistency is widely recognized. It would be far more simple to identify it as \*Λύκιστος (derivative form \*Λυκίστιος),<sup>151</sup> perhaps related to the attested TN Λύκαστος.<sup>152</sup>

*sa-pa-ka-te-ri-ja*: This type occurs at Knossos and could either be the Nom./Acc. Pl. of a neuter adjectival form or an heortonym (<substantivised adjective).<sup>153</sup> Although its most common interpretation is \*σφακτηρια "victims" (referring to the animals recorded) or "sacrificial slaughter festival", most scholars admit the spelling difficulties:

- <sup>147</sup> From this latter perspective, adverb ἐγκάς "deep inside" could theoretically make sense in the very technical sense "through hole": *e-ka-te-re-ta* \*ἐγκάστρητά "perforated throughout" vs. *e-te-re-ta* ἔντρητα "perforated for inlay" (both adjectives modify unassembled chariot bodies CUR and are syntactically linked with *a<sub>3</sub>-ki-no-o* ("goat tendons"?) –the latter showing the *purpose* of the perforation.
- <sup>148</sup> DMic II, 267-8, s.vv. ru-ki-ti-ja, ru-ki-ti-jo, ru-ki-to; McArthur 1985, 86-89, s.v. ru-ki-to for an analytical listing of occurrences.
- <sup>149</sup> Chadwick 1973, 43 (cf. Ventris and Chadwick 1956, 586: "It could indicate an obscure vowel in the non-Greek form of the name").
- <sup>150</sup> Cf. references in *DMic* II, 268, s.v. *ru-ki-to*, n. 5.
- <sup>151</sup> \*Λύκιστος is the form preferred by Aura Jorro (*DMic* II, 268, s.v.; Ruijgh 1967, 180 §152, n. 413). Woodard (1986, 63-64) suggests that "the non-Greek form was simply \**Lukitos* and that the middle vowel was syncopated at some point after the fourteenth century. Notice that assimilation ultimately produced Λύττος". Palmer (1972, 40) is also critical of the Λύκτος identification. Chadwick had noted that a spelling \*Λύκιτος should be excluded, since the form of the adjective would be \**ru-ki-si-jo* (Chadwick 1973, 43). In this regard, it would be interesting to note the "error" *ru-ki-so* on KN Db 1297.B, if not a purely graphic confusion for *ru-ki<-to> (KT5*, 78). However, unassibilated *t* before *i* might also occur in the Knossian adjective *ti-ri-ti-jo* from TN *ti-ri-to* which is generally accepted as related to \*Τριτος (Hesychius glosses Τρίτ(τ)α as another name for Knossos) or river-name Τρίτων (Woodard 1986, 64; cf. McArthur 1985, 97-100 s.v. *ti-ri-to*).
- <sup>152</sup> This is hardly necessary. The number of 1<sup>st</sup> millennium BC Greek and Anatolian TNs beginning with Λυκ- easily permits the possibility that *ru-ki-to* may render a form that did not survive the Bronze Age.
- <sup>153</sup> DMic I, 331; II, 280 s.vv. ]ka-te-ri-ja, sa-pa-ka[ and sa-pa-ka-te-ri-ja: sa-pa-ka-te-ri-ja occurs on KN C(2) 941.B by Hand 112; sa-pa-ka-te[-ri-ja (X 9191.a) and sa-pa-]ka-te-ri-ja (C 1561.a) can be plausibly reconstructed. In both cases where commodity is indicated, sa-pa-ka-te-ri-ja seems to modify sheep.

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the notation of the initial /s-/ before a stop, as well as the "idiosyncratic" rendering of /-kte-/ as <-k**a**-te-> (the latter concerns us directly here).<sup>154</sup> Killen has discussed the matter with commendable caution and has favoured the identification, citing parallels for both spelling "idiosyncrasies": the rendering of /spha-/ as <s**a**-pa-> at Knossos may be seen in the Perfect Participle *e-sa-pa-ke-me*[*-na*  $i\sigma\phi\alpha\gamma\mu\epsilon\nu\alpha$  (KN L7371.a) and /-kte-/ as <-k**a**-te->, of course, is found in the *wa-na-ka-* spellings.<sup>155</sup> The former would pose no problem at all and we should add the potentially important observation that most likely spellings of sibilant+stop clusters occur at Knossos.<sup>156</sup> It is also hard to argue against Killen's basic argument that the C(2) set by Hand 112 records animals to be consumed in a religious banquet,<sup>157</sup> which seems a most fitting administrative environment for the occurrence of a derivative from \*/sphag-/ whose associations with ritualized killing or sacrifice are incontestable and widely documented.<sup>158</sup>

Under these conditions, it would seem that interpreting *sa-pa-ka-te-ri-ja* as \*σφακτήρια is almost inevitable. If so, this would constitute the strongest parallel to the *wa-na-ka*- "idiosyncratic" spellings. There is one possible alternative: to consider *sa-pa-ka-te-ri-ja* as rendering \*σφαγαστηρια from a hypothetical denominal verb \*σφαγαdjω or \*σφαγαgjω (<\**sa-pa-ka-zo>*?) from \*σφαξ/ σφαγα (cf. δίκᾱ > δικ-άζω). This is somewhat better than just a counsel of despair: the contextually plausible (even compelling) association with \*/sphag-/ is maintained and a spelling "idiosyncrasy" is explained.<sup>159</sup> If one takes into account the lack of an IE etymology for \*/sphag-/ (which has no cognates outside Greek),<sup>160</sup> it is not impossible that an

<sup>&</sup>lt;sup>154</sup> The idea was first put forward by Lejeune (1960, 102-103, n. 18) and was sceptically treated by Chadwick (Ventris and Chadwick 1973, 581); Palmer (1963, 184-185) and Householder (1964, 75) are quite dismissive. Gallavotti (1956, 13) has suggested alternatively a composite name (first component *sa-pa-*), which is, however, obscure. An "orthodox" spelling of /Sphaktēria/ would have been \**pa-ke-te-ri-ja* (cf. Pylian *pa-ki-ja-ne* \*Σφαγιάνες).

<sup>&</sup>lt;sup>155</sup> Killen 1994, 74-76 (cf. also Parker 1995-1996, 242; Consani 2008, 156).

<sup>&</sup>lt;sup>156</sup> Certain (besides *e-sa-pa-ke-me*[*-na* and *sa-pa-ka-te-ri-ja* itself) is only PN *i-su-ku-wo-do-to* \*Ίσχυϝόδοτος (KN Fh 348.1 by Hand 141). However, the concentration of other probable types, such as the rather obscure PNs ]*sa-ka-ri-jo* (KN V(7) 1523.3 by Hand 101) and *sa-pa-nu-wo* (KN X 999 unassigned), the also obscure Knossian *sa-pa* on KN L 693.2 by Hand 103 (not necessarily the same as *sa-pa* on MY Oe 108.1) and *si-ki-ro* σκίρρος glossed as "gypsum" on KN U 8210.1, might be meaningful (cf. *DMic* I, 287-8; II, 276, 280, 293, s.vv.). It is not inconceivable that such a sporadically differential graphemic treatment of <*s->* before stops may indicate a special Knossian sibilant, although this would be admittedly an *obscurum per obscurius* explanation.

<sup>&</sup>lt;sup>157</sup> Killen 1994 discusses the parallelism between the Knossos C(2) tablets and the Theban Wu nodules (cf. also Bendall 2007, 39-40, 43).

<sup>&</sup>lt;sup>158</sup> Cf. DÉLGn, 1036-7, s.v. σφάζω; EDG II, 1426, s.v. σφάζω.

<sup>&</sup>lt;sup>159</sup> I remain most grateful to Professors Tom Palaima and José Luis García Ramón for discussion on this point, although none of them should be held responsible for the opinion expressed here.

<sup>&</sup>lt;sup>160</sup> Cf. Beekes 2009, 1426-1427, s.v. σφάζω.

early denominal verb was formed with the addition of the ultra-productive suffix  $-\alpha dj\omega/ -\alpha djw/ -\alpha$ 

\*34-ka-te-re: The identification of this type (PY Va 15 recto .1; verso) is highly dubious because of the uncertain transliteration of \*34 and our insufficient understanding of the Pylian document where it occurs.<sup>162</sup> Any rendering of the type as a verbal adjective in /-ktēr/ can only remain hypothetical. The problem has been most analytically tackled by Melena in his recent thorough treatment of untransliterated Linear B syllabograms, suggesting the values /hai/ or /?ai/ for \*34.<sup>163</sup> In this vein, types \*34-ka-te-re,<sup>164</sup> a-ke-te-re (PY Jn 832.1), a<sub>2</sub>-ke-te-re (KN V(1) 118)<sup>165</sup> and ja-ke-te-re (PY Mn 11.2)<sup>166</sup> could be considered as orthographic variants with OAV <-a-> vs. OCV <-e-> used for the rendering of the /-ktV-/ cluster. This would be possible, although the type \*34-ra-ka-te-ra (PY Va 15 recto .2a) is still an odd spelling: *if* somehow related to \*34-ka-te-re,<sup>167</sup> it should cast doubt on the validity of the aforementioned "alterations".

In the above case-by-case discussions, the weaknesses of each proposal were deliberately overstressed. Certain cases were dismissible with more or less certainty, or susceptible of alternative interpretations. It would be possible to follow the threads of our two alternatives:

- We might theoretically accept that at least some of the aforementioned spellings did indeed feature an OAV: it might be meaningful that all such "idiosyncratic" spellings (with the exception of the very obscure \*34-ka-te-re) occur at Knossos; and that the strongest such cases (*sa-pa-ka-te-ri-ja* and *e-kate-re-ta*) might involve the rendering of a medial /-ktV-/ cluster. One would be led to the supposition that the rendering of a /-ktV-/ cluster with an OAV was
- <sup>161</sup> A possible Linear B parallel for such a formation might be provided by the agent noun \*λυραστας (attested Dual -rubric?- Nominative: *ru-ra-ta-e* on TH Av 106.7). If this identification is accepted (cf. Aravantinos, Godart and Sacconi 2001, 178; Professor García Ramón *per litteras electronicas* prefers \*λυρατας), then it presupposes a denominative verb \*λυρ-αdj/gj-ω from λύρα of non-Greek etymology (*DÉLGn*, 625-6, s.v. λύρα), comparable to κιθαρίζω from non-Greek κιθάρα (cf. *DÉLGn*, 509-10, s.v. κιθάρα; the actual attested denominative verb from λύρα in later Greek is λυρ-ίζω, with agent noun λυρ-ιστής).
- <sup>162</sup> DMic II, 465, s.v. \*34-ka-te-re.
- <sup>163</sup> Melena 2000, 12, 14.
- <sup>164</sup> On the verso -ka- of \*34-ka-te-re is over [[qe]].
- <sup>165</sup>  $a_2$  over [[*a*]] (*CoMIK*I, 57).
- <sup>166</sup> *ja* probably over erasure (*PTT* I, 200).
- <sup>167</sup> This possibility is indeed encouraged by the fact that both types co-occur on this same document. Chadwick remained sceptical but hypothesised that \*34-*ra-ka-te-ra* might be "a *scriptio plena* of the Singular of \*34-*ka-te-re*" (Chadwick 1992, 172). It is impossible to confirm this suggestion on such meagre evidence.

*optional* at Knossos, but, apparently, not followed on the Greek mainland. This seems consistent, although the *sporadic* employment of the OAV in such cases, as we saw with the "regressive spelling" evidence (§4.1), is quite problematic: Why such practice is not applied more often? Knossian Hand 123 uses the normal OCV to render /ktoina/ as <*ko-to-i-na*>.<sup>168</sup> How did "scribes" chose between optional OAVs and "mainstream" OCVs? These remain essentially open questions, but quite pressing ones: unlike these scarce OAVs, *wa-na-ka*-spellings show a considerable spatial (and, perhaps, chronological) distribution (TABLE 1; FIGURE 1) and, above all, consistency.

2) On the other hand, if we accept that alternative interpretations of the above cases should be preferred, then the idiosyncratic spellings of the *wa-na-ka-type* can be argued to have been virtually unparalleled.

We should conclude that, either way, the *wa-na-k***a**- spellings do stand out quite markedly. Even if we accept that the rendering of *certain* /-ktV-/ clusters as <-*k***a**-*t*V-> would be slightly more "at home" at Knossos as compared to the Greek mainland, the distribution of the *wa-na-k***a**- spellings remains formally unparalleled in Linear B.

# 6. "Canonical" vs. "idiosyncratic" *wa-na-k***a**- spellings

With their "canonicality" or "orthodoxy" (i.e. consistency with the spelling patterns attested in the overwhelming majority of Linear B sign-groups) as a criterion, we may classify the extant wa-na-ka- spellings into two Groups:

- I. "Canonical" types, compatible with the "spelling rules": *wa-na-k***e**-*te* and *wa-na-k***a**.
- II. "Idiosyncratic" types, incompatible with the "spelling rules": *wa-na-ka-to*, *wa-na-ka-te* and *wa-na-ka-te-ro*.

Is it possible to classify any of these types of spellings as "erroneous"? Clearly not. As Maurice has observed, "low frequency" is a major criterion for identifying a spelling mistake.<sup>169</sup> In this regard, each of these types is broadly attested and types of both groups co-occur at the same sites, a pattern that excludes the possibility of a "momentary lapse of attention" or any other erratic factor that would generate what we usually term a "mistake".<sup>170</sup> The only hapax graphomenon is currently *wa-na-ka-*

<sup>&</sup>lt;sup>168</sup> KN Uf(3) 981.a; 1022.a; 1031.a (note the differential Knossian spelling with <-*i*-> vs. Pylian *ko-to-na*). Cf. DÉLGn, 569-70, 1319, s.v. κτίζω.

<sup>&</sup>lt;sup>169</sup> Maurice 1985, 36-39.

<sup>&</sup>lt;sup>170</sup> Contra Hooker 1979b, 108: "The word appears in the Dative as wa-na-ka-te, except that in Fr 1215 the scribe has erroneously written wa-na-ke-te" (*italics* added). Wisely, <wa-na-ke-te> is not considered as a scribal "error" by Maurice (1985).

to on PY La 622 verso .1, but, since this type features the very same "idiosyncrasy" as *wa-na-ka-te* and *wa-na-ka-te-ro* (the unmotivated OAV <-a->), this is hardly problematic.

We should be very intrigued by the fact that the peculiar spellings of Group II seem to be, just as well, *consistent* features of these lexemes. On the strength of the discussion in §4, we should note that the "idiosyncrasy" of Group II spellings is exclusively concerned with a scarcely paralleled graphemic rendering of a SCV cluster, namely the non-use of the anticipated progressive OCV. We deal, therefore, purely with a matter of orthography.

If Nominative *wa-na-ka* used an OAV and *not* a "regressive" OCV (§4.1), it would be interesting to explore the possibility that the same OAV is also imposed on the spellings *wa-na-ka-to*, *wa-na-ka-te* and *wa-na-ka-te-ro*. This suggestion seemingly follows the paradigmatic levelling hypotheses (§3.1), but we hope we will be able to provide a more analytical explanation for the logic of these spellings. Since this spelling idiosyncrasy is *perhaps* unparalleled in its genre and *certainly* unparalleled in its diffusion and consistency (§5; TABLE 1; FIGURE 1), we may describe it as a very specific *orthographic cliché*. We shall further comment on this idea at the end of this section.

Let us return to Group I spellings. We should note that *wa-na-ka* and *wa-na-ke-te* are not identical cases. *wa-na-ka* follows the widely attested rendering of final /-ks/ as  $\langle -ka \rangle$  with an OAV (§4.1) and, therefore, was, as far as we know, the only available graphemic rendering of /wanaks/ in Linear B. This is not true of the "canonical" *wa-na-ke-te*, which could have been rendered as *wa-na-ka-te*, according to the widely attested "idiosyncratic" spellings. Especially intriguing is the situation in the Pylian Fr series, a relatively closely defined set, where both spellings coexist on similar documents (§4.3; TABLE 2).

We may begin by considering the spelling features of S1219, a Class ii Stylus group, to which PY Fr 1215 is assigned.<sup>171</sup> Apart from *wa-na-ke-te*, S1219 also yielded *wa-no-so-i* (Fr 1219) vs. the more usual *wa-na-so-i* (Fr 1222; 1227; 1228; 1235.1, .2; 1251 all by S1202 assigned to Hand 2), as well as *we-a-re-pe* (Fr 1215.1), shared by the scribe who also wrote Fr 1223.1, .2, vs. the more usual *we-ja-re-pe* (Fr 1205 by S1202; Fr 1217.1; 1218.1 and 1225 *recto originalis*.2 assigned to S1217 Class ii). Three spelling peculiarities within such a limited sample is a considerable score. Palaima had every good reason to conclude that S1219 "should be considered a secondary hand because of peculiarities in writing style and in spelling".<sup>172</sup> The significance of the variation between *wa-na-so-i* and *wa-no-so-i*.

<sup>&</sup>lt;sup>171</sup> Cf. Palaima 1988a, 123-124.

<sup>&</sup>lt;sup>172</sup> Palaima 1988a, 124.

is rather obscure,<sup>173</sup> but *we-a-re-pe* features the interesting optional omission of a orthographic glide that has parallels elsewhere at Pylos.<sup>174</sup>

In any tentative assessment of the spelling competence of S1219, we should never lose sight of a fact of major importance: *wa-na-ke-te* is a spelling compatible with the "canonical" spelling of a SCV cluster in medial position. It is therefore hardly evidence that S1219 had insufficient mastery of the writing system. In fact, as the *wana-ke-te* spelling indicates, this "scribe" had mastered the rendering of SCV clusters with the help of an OCV quite well. Yet, what S1219 apparently did not follow, was the specific *orthographic cliché* that would have produced the *wa-na-ka-te* spelling.

Such "deviation" had been, it would seem, quite rare. It only occurs once more, within the Thebes Odos Pelopidou assemblage, on TH X 105.2 by an unidentified "scribe". Its text<sup>175</sup> seems ultimately obscure, unless we assume that the commodity sign and metrograms/ numerals were intended to be supplemented to the right of the "recipient" Datives *wa-na-ke-te* (.2) and possibly *pe-re-wi-jo* (.3: PN or substantivised patronymic of \**pe-re-u*?) where sufficient space was available. Even so, we remain puzzled by line .1 ]*to-sa*, *ko-na* which –if the first sign is correctly identified– would resemble an (incomplete) totalling entry, but occupies the position of a "heading" instead.<sup>176</sup>

We may consider what PY Fr 1215 and TH X 105 have in common. Given that entries are fully preserved on both documents, it is remarkable that they both lack numerals.<sup>177</sup> Could they be rough drafts or incomplete documents, waiting to be

<sup>173</sup> The identification of the type is not certain, but it seems quite preferable to interpret it as a Locative or Dative of a TN, rather than a Dative Dual \*<sub>F</sub>ανάσσουν (cf. Hajnal 1995, 63-67; Petrakis 2011, 203-205). Since the etymology is uncertain, it is impossible to speculate on the significance of the *-na- l -no-* variation. Maurice (1985, 33) regards *wa-no-so-i* as the result of confusion between syllabograms that share a common phonetic element, but this cannot be confirmed without a proper reconstruction of the term.

<sup>175</sup> Its text is as follows (Aravantinos, Godart and Sacconi 2001, 30; Aravantinos et al. 2005, 135):

TH X 105 (---) margin supra

- .1 ]to-sa, ko-na
- .2 wa-na-ke-te
- .3 pe-re-wi-jo
- .4 vest. [

100

infra mutila

The *lat. sin.* seems to be preserved, as the transcription and the facsimile drawing indicate, so that the dimensions of the document would resemble those of PY Vn 20.

- <sup>176</sup> Cf. *to-sa-pe-mo* (or, rather, *to-sa*<sub>L</sub>*pe-mo*) on TI Ef 2.
- <sup>177</sup> Cf. §4.3 for PY Fr 1215 and *supra* for TH X 105.

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further processed or corrected? This may remain an open possibility, since, with the exception of clay labels, numerals are a consistent, *logically defining* feature of Linear B administrative documents.<sup>178</sup> That both occurrences of *wa-na-ke-te* appear alongside such an unusual feature might be meaningful. It can be reasonably hypothesised that a more experienced "scribe" would have supplied the missing *crucial* information in the further processing of these documents, if the fire destruction episode that preserved them had not intervened.<sup>179</sup> In this way, it is possible to speculate that these documents might represent work by less experienced "scribes", subject to further editing.<sup>180</sup>

Would these "editors" have corrected the unusual –but nonetheless formally correct– *wa-na-ke-te*? "Scribal" commitment to spelling rules or degrees of "scribal" strictness cannot be easily assessed, but the (not uncommon) spelling mistakes and variants between –or, more scarcely, within– individual "scribes" betray certain flexibility. It is perfectly arguable that the very purpose of the documents, which was to act as effective administrative notes for internal consumption, would mean that a mistake, as long as it did not generate serious confusion, could have been left uncorrected. Indeed, we do have obvious "mistakes" that could have been easily corrected, but were left as they were. A patent case is  $\langle ku-ro-ro_2 \rangle$  (PY Un 616 *recto* .1 by S616 Hand 1), which, with the mere addition of a single horizontal stroke and no fuss or erasures, would have been corrected to  $\langle ku-pa-ro_2 \rangle$ . Yet, although the tablet was found in Pylian AC and is assigned to an experienced "scribe", this simple action was not taken and one is led to think that it was deemed redundant, or at least unimportant.<sup>181</sup>

Our current knowledge about Linear B spelling balances intriguingly between their sufficient relative regularity, indicating that "rules" did exist and were specifically

<sup>181</sup> Or, as Palaima's interpretation of Hand 1 as a "master-scribe" implies, that there was nobody else with sufficient status to correct him!

<sup>&</sup>lt;sup>178</sup> There are a few exceptions that prove the "rule": PY Ad 697 (S60 Hand 4) and Na 924.B (S106 Hand 1), where it has been speculated that the vacant numeral slot intended to indicate "zero" (Chadwick 1987, 77, n.3 and *apud* Bennett 1987, 64).

<sup>&</sup>lt;sup>179</sup> We have so far evidence only from Pylos about the supplementation of data by different "scribes" on documents initially composed by other colleagues. On PY An 594, the annotations VIR 10 (.1) and VIR 1 × (.2) were written by a different hand, and the same holds for VIR 1 on PY Cn 595.2 (*PTT* I, 58, 78). In both cases this conclusion is based on the considerably different forms of the VIR sematogram. In the case of Fr 1215, we can only speculate that a further "editing" –if this was conceivable– would have been made by a more experienced "scribe" in Room 23, perhaps the rather prolific S1202 Hand 2.

<sup>&</sup>lt;sup>180</sup> PY Fr 1215 was found, along with the majority of the Fr tablets, in Room 23 of the Main Building of the Ano Englianos complex (Palaima 1988a, 141-5; S1219 has been identified only on tablets from this room). According to the overall centripetal tendency of the Pylian system, as reconstructed by Palaima (1988a, 171-189), these documents would have been directed towards the AC. The contextual associations of TH X 105 are so far unknown.

taught, and also a considerable amount of orthographic variation revealing a certain degree of flexibility.<sup>182</sup> Precisely because it conformed to the "canonical" rendering of SCV clusters (with a "progressive" OCV), *wa-na-ke-te* could have been easily tolerated and left uncorrected, as long as it did not generate uncertainty in its comprehension, despite the fact that the aforementioned *orthographic cliché* was not followed.

A final comment should consider the place of such a *cliché* within Linear B spelling practice. Taking into account the considerable spelling variation in Linear B, the wide distribution of the *wa-na-k***a**- spellings does indicate that it must have belonged to one of the "core" components of Linear B training.<sup>183</sup>

It is unthinkable that the occurrences of such idiosyncratic spellings –spanning the entire south Aegean for a century–<sup>184</sup> could have emerged independently. Rather, we should accept that a uniformly spread tradition compelled "scribes" to employ these spellings and this must have been no less than central in Linear B scribal training. Most importantly, such consistent occurrence of a very specific idiosyncrasy flies in the face of the quite frequent spelling (or graphic) variants encountered throughout our extant Linear B corpus.<sup>185</sup>

However, if this *cliché* was such a key "core" component of scribal education, how can the *wa-na-ke-te* types be explained? It might not be entirely off the mark to observe that both PY Fr 1215 and TH X 105 date to the very end of LH IIIB period (end of the 13<sup>th</sup> century/early 12<sup>th</sup> century BC),<sup>186</sup> the latest known horizons of use of Linear B. With all due caution, it may be permissible to ask whether this might indicate a later deviation from this specific orthographic *cliché*, which might have had begun to fade. It might be possible that, by the end of the end of the LH IIIB on

- <sup>182</sup> Palaima 2003a, 174-175, nn. 33, 38; also Duhoux 2007 on this problem.
- <sup>183</sup> One is inclined to think in terms of standardised spellings perhaps listed in a way analogous to the Sumerian "Standard Professions List" of titles and professional appellatives, copied repeatedly for over a millennium within *-inter alia-* the context of scribal training (cf. Nissen 1986, 327-329, fig. 5).
- <sup>184</sup> A century would imply at least three or four generations of "scribes". Palaima (2011, 125) conservatively estimates the "active" period in a literate administrator/ "scribe" to span fifteen years and hypothesizes that the Pylian administration would need to maintain a regular flow of a mere four "scribes" per year to keep its business running.
- <sup>185</sup> For variant spellings cf. Olivier 1967, 98-100 (Knossos) and Palaima 1988a, *passim* (Pylos). For a thoughtful discussion of Linear B spelling flexibility as an index of a vivid language cf. Duhoux 2007.
- <sup>186</sup> Driessen 2008, 73-75. Proposed dates of the final destruction horizon of the Pylos palace complex (where PY Fr 1215 belongs) range from early LH IIIB to an initial stage of LH IIIC. A date at the very end of the LH IIIB period, when certain elements of IIIC had begun to appear seems most widely accepted, although the occasionally idiosyncratic development of Messenian IIIB wares along with the puzzling scarcity of decorated pottery from the palace generates serious difficulties in any assessment of the evidence. The Odos Pelopidou deposit is dated to the end of the LH IIIB2 period. Cf. TABLE 1.

the Greek mainland, the standardised idiosyncratic *wa-na-k***a**- spellings had become optional, perhaps even an "archaism" that could be avoided. Certain prolific<sup>187</sup> "scribes" still employed them (e.g. Pylos "Hands" 1 and 2), but the tendency to move away from them might have already begun.

# 7. γάναξ: a loanword from a non-IE adstrate

7.1. Although there have been various attempts to accommodate Fáva $\xi$  within IE, these have so far been unconvincing. Here we shall focus particularly on those proposed after the decipherment of Linear B.<sup>188</sup>

Fάναξ has been associated with certain supposed Tocharian cognates, mostly Tocharian B *ňäkte* "god" (cf. Tocharian A *ňkät*)<sup>189</sup> or Tocharian A *nātäk* "lord" and *nāśi* "lady"<sup>190</sup> (the two cognates being incompatible to each other). Although the semantic similarities are intriguing, there are phonetic differences that are difficult to account for: the loss of the initial glide (preserved in Fάναξ) is problematic, while Winter's PIE etymon \**wnh2tk* > *nātäk* cannot easily lead also to \*Fανακτ-.<sup>191</sup> Considering the lack of other possible extra-Tocharian cognates for these terms and their alternative IE etymologies<sup>192</sup> and our difficulty to reconstruct a plausible historical context in which a hypothetical PIE form could have been shared between the ancestor of Tocharian and Greek while leaving no other IE cognates, it seems

- <sup>187</sup> It remains to be carefully considered whether such scribal prolificacy is to be interpreted as a sign of hierarchical superiority, greater experience and, consequently, seniority. Palaima has argued very strongly that Pylos "Hand 1" is a "master-scribe", but it is mainly his "editorial" role -not his nonetheless considerable overall output- that supports such a conclusion (Palaima 1988a, 35-38; 2011, 123).
- <sup>188</sup> Of earlier attempts we may mention Schwyzer 1915; Ribezzo 1928; Pisani 1930. All attempts treat Fάναξ as an archaic compound (cf. the proposals of Puhvel, Szemerényi, Georgiev, Hajnal and Willms, *infra*). The first component is either \**wenh* "to love" or \**wen* "to conquer" and the second vaguely related to Greek κτίζειν "to construct" or κτᾶσθαι "to own". These proposals can hardly be reconciled with the attested semantics of Fάναξ. Schwyzer later withdrew his proposal (Schwyzer 1939, 499: "Fremd Fανακτ-").
- <sup>189</sup> Lidén *apud* Nordling 1929, 72; Hemmerdinger 1970, 59; Gamkrelidze and Ivanov 1995, 655 (rejected by Pedersen 1941, 44; Puhvel 1956, 214, n. 3; Frisk 1960, 103, s.v. ἄναξ). For the Tocharian terms cf. Normier 1980; Winter 1987.
- <sup>190</sup> Winter 1970 (cf. Adams 1984, 401).
- <sup>191</sup> Willms (2010, 251) notes that -tk could conceivably develop to -kt through analogy from Greek \*νυκτ- and \*γαλακτ-, while wn- could have been wan- if we postulated a syllabic η (cf. Szemerényi 1979, 217).
- <sup>192</sup> Cf. discussion in Willms 2010, 249-251. Both A *ňkät* and B *ňäkte* seem to presuppose a common Proto-Tocharian form \**ňäk(ä)te* (Adams 1999, 263, s.v. *ňäkte*). Van Windekens (1976, 326-327) has suggested a not implausible derivation from PIE \**h1nek*- "to obtain; to take" (cf. Greek ἐνέγκω).

advisable not to pursue this association any further and explain the resemblance of these forms as accidental.  $^{193}\,$ 

Brixhe has suggested that  $F^{\alpha\nu\alpha\xi}$  is part of the common IE inheritance of Greek and Phrygian.<sup>194</sup> This is based on the occurrence of the Dative Favaktei in the Old-Phrygian dedicatory inscription M-01a, from the so-called "Tomb of Midas":<sup>195</sup>

ατες ! αρκιαεραις ! ακενανογαρος ! Μιδαι ! λαραγταει ! ρανακτει ! εδαες

as well as the epiclesis in the Bağlica Neo-Phrygian inscription πουρ Ουανακταν κε Ουράνιον "for Ουάνακταν [Acc. Sing.] and Ουράνιος"196 or the occurrences of (theophoric?) Neo-Phrygian names, such as Ουάναξος, Ουαναξίων or Ουανάξων (possibly also Μοδρο<sub>F</sub>ανακ on M-04.2).<sup>197</sup> Brixhe's reasoning relies on the proximity between Greek and Phrygian (itself based on certain isoglosses), which he sees as further illustrated by the common sharing of Favaktei;<sup>198</sup> however, this cannot constitute proof of the common IE origin of the Greek and Phrygian titles. Instead, the most commonly shared opinion is that Phrygian Fάναξ is a loanword from Greek<sup>199</sup>. Indeed, the concurrence of Favaktei alongside laFaytaei on M-01a posits a different set of questions. Phrygian λαγαγταει is understood as corresponding to \* $\lambda \bar{\alpha} F \bar{\alpha} \gamma \epsilon \tau \bar{\alpha} c$  (Linear B *ra-wa-ke-ta*).<sup>200</sup> Since the formation of \* $\lambda \bar{\alpha} F \bar{\alpha} \gamma \epsilon \tau \bar{\alpha} c$  is patently IE Greek (\* $\lambda \bar{\alpha}_{F}$  +  $\dot{\alpha}_{Y}$  + agent suffix - $\epsilon \tau \bar{\alpha}_{C}$ ), we are on safe grounds to affirm that λαγαγταει (perhaps a misspelling for \*λαγαγεται, a Dative form parallel to Μιδαι, cf. also *infra*) is a loanword from Greek.<sup>201</sup> This certainly opens the way for the second title of Midas to be a loanword of the same origin as well. Given the differentiation between Fávaz and \*λāfāyetāc in the Linear B records as opposed to the dual title of Midas on M-01a, it is far more plausible to assume the adoption and subsequent "fusion" of the two elite LBA Aegean titles by the Phrygians, perhaps in post-Bronze Age times.<sup>202</sup> The occurrence of the aforementioned Phrygian names with probable etymological association to Fάναξ (e.g. Ουάναξος etc.) is, of course, no indication

- <sup>193</sup> Even, perhaps, "the chance occurrences that the historical linguist must expect of his material" (Mallory 1989, 61).
- <sup>194</sup> Brixhe 1990, 73-75; 1993, 340-341; 1994, 178-179; 2002, 257; 2004, 87; 2008, 72 (cf. Hajnal 1998, 64-66).
- <sup>195</sup> Brixhe and Lejeune 1984, 6-9, pl. Ia-c (cf. also commentaries in Huxley 1959; Lejeune 1969).
- <sup>196</sup> Brixhe 1992, 331-332; 2002, 256-257.
- <sup>197</sup> Neumann 1986. Μοδρο- might be a TN and, if so, it could either a title "Fάναξ of Μόδρο-" or a PN of the type Λεσβῶναξ (cf. Neumann 1988, 9; Innocente 1997, 38).
- <sup>198</sup> Almost a circular argument (Brixhe 1990, 73-75; 1994, 178-179; 2008, 72).
- <sup>199</sup> Frisk 1960, 103; DĚLG I, 84; Lejeune 1969, 192; Cassola 1997, 145-146; DÉLGn, 81; EDG I, 98, s.v. ἄναξ.
- <sup>200</sup> DMic II, 229-231, s.vv. ra-wa-ke<-si>-ja, ra-wa-ke-si-jo, ra-wa-ke-ta. See now Nikoloudis 2006.
- <sup>201</sup> As explicitly noted by Neumann 1988, 16.
- <sup>202</sup> Cf. Willms 2010, 247-248.

of the title's origin, since adopted loanwords can also be used to form simple or compound PNs in the recipient language.<sup>203</sup> There is still no compelling reason to accept that Fáva $\xi$  is an IE title inherited in Greek and Phrygian.

Puhvel<sup>204</sup> has attempted to interpret Fάναξ as a compound, after assuming that the original meaning of the term should be related to the "exclusion of the idea of death".<sup>205</sup> Assuming a primacy of \*Fανακ- over the \*Fανακτ- stem, he suggests a segmentation \*Fα-νακ-(τ) < \**wnn-nk-(t-*) with a negative prefix \*Fα(ν)- (< \**wnn-)*<sup>206</sup> and \*-νακ- (< \*-*nk*- cf. νέκ-υς, νεκ-ρός<sup>207</sup>) with an overall meaning "not subject to doom" (originally adjectival and later substantivised).<sup>208</sup> Puhvel's proposal has been severely criticised.<sup>209</sup> Besides phonetics and morphology, a further serious problem is that it does not adequately explain how Fάναξ semantically came to be used in the sense of *human* –and hence *mortal*– "lord" or "ruler", and provides no explanation either for the fact that this original meaning of Fάναξ was already covered by such transparent (and widely used) IE Greek formations as ἀθάνατος<sup>210</sup> or ἅμβροτος "immortal".<sup>211</sup>

Szemerényi argued that Favakt- is to be segmented as  $*wn-a\hat{g}-t-:$  a compound of IE \*wn ("kin", "group") + verbal root  $a\hat{g}-$  ("lead"; cf. Greek  $\check{\alpha}\gamma\omega$ ) + "agent-suffix" -t, which would etymologise F $\check{\alpha}\nu\alpha\xi$  as "'leader of the kin/ tribe'".<sup>212</sup> This might seem as an appropriate characterization for the tribal origins of a royal title that would fit certain neoevolutionist schemes and is morphologically plausible. Szemerényi's idea

- <sup>204</sup> Puhvel 1956.
- <sup>205</sup> Puhvel 1956, 211. This conclusion follows a somewhat cursory survey of the characteristics of IE divine figures in Homer and Vedic, moving from "brilliance" to "vigour" and "vital force". Puhvel reads far too much into *Il.* i.529-530 (ἀμβρόσιαι δ' ἄρα χαῖται ἐπερρώσαντο ἄνακτος | κρατὸς ἀπ' ἀθανάτοιο [Διὸς]...) where ἄναξ is associated with ἀμβροσίη and ἀθάνατος. This concurrence hardly supports the view of a synonymity of ἄναξ with the other adjectives and, in fact, can be used against it (see immediately *infra*).
- <sup>206</sup> Puhvel 1956, 212-213 (the glides reconstructed in *Il.* iii.40 are: αἴθ' ὄφελες ϝἄγονος τ' ἕμεναι ϝἅγαμος τ' ἀπολέσθαι).
- <sup>207</sup> Puhvel 1956, 213-214.
- <sup>208</sup> Puhvel 1956, 215.
- <sup>209</sup> "Puhvel [...] cherche dans cette direction une étymologie indo-européenne sans vraisemblance" (DÉLG I, 85 = DÉLGn, 81); "On ne sera convaincu, ni pour le sens, ni pour la forme, par l'essai récent de J. Puhvel" (Lejeune 1962, 11, n. 36); "Une étymologie plus qu'hasardeuse du mot *wanax*" (van Effenterre 1967, 20); "Puhvel suggests [an] unconvincing Indo-European derivation" (Hooker 1976, 143).
- <sup>210</sup> In the Plural, ἀθάνατοι is typically used in Homer to denote the gods, either modifying θεοί or in a substantivised role.
- <sup>211</sup> DÉLGn, 188, 406; EDG I, 242-3 and 533-534 s.vv. βροτός, θάνατος.
- <sup>212</sup> Szemerényi 1979, 215-217; 1981, 321-323.

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<sup>&</sup>lt;sup>203</sup> Cf. Greek χρυσός, a definite Semitic loanword, conspicuously used as the basis of PNs, simple (Χρύσης etc.) or compound (Χρυσόθεμις etc.). It might also be interesting to note that PNs such as Ουάναζος etc. are almost consistently *late* Neo-Phrygian (cf. Innocente 1997, 38).

was also adopted by Georgiev.<sup>213</sup> Most recently, this proposal has been revamped by Willms, who argues that the original meaning of \**wn* was not "tribe", but rather "to fight" or "to win".<sup>214</sup> Willms therefore advances an etymology that explains Fávač as originally being a "battle-leader" or "he who leads to victory". These ideas have certain merits, but also have to face considerable difficulties: (i) despite the prevalence of \**wn* in other IE languages, this root is never attested in Greek; (ii) the athematic formation of a compound with  $-a\hat{g}$ - is unparalleled in Greek, as is the presence of agent suffix -*t*- in such a form (cf. the thematic form  $\sigma\tau\rho\alpha\tau-\bar{\alpha}-\gamma\delta\varsigma < *strt-o-h_2g\delta s$ ); (iii) a semantic realm where Greek Fávač is most conspicuous, namely divine lordship, is left unconsidered; (iv) we remain puzzled by the fact that the original meaning proposed by Szemerényi/ Georgiev/ Willms is quite close to the etymology of *ra-wa-ke-ta* \* $\lambda\bar{\alpha}_F\bar{\alpha}\gamma\epsilon\tau\bar{\alpha}\varsigma$  as "leader of the armed folk": although by no means impossible, we would have to assume that LBA Greek employed two quasi-synonymous titles for two different power figures.

Following a similar segmentation, Hajnal has proposed to examine  $F\dot{\alpha}\nu\alpha\xi$  in parallel the Greek formation  $*\lambda\bar{\alpha}F\bar{\alpha}\gamma\epsilon\tau\bar{\alpha}\zeta$  (see *supra*) which, in his view, constitute a "Begriffspaar" ("conceptual pair") whose semantic parallelism may have been reflected in the etymology of both titles.<sup>215</sup> Hajnal derives  $*\lambda\bar{\alpha}F\bar{\alpha}\gamma\epsilon\tau\bar{\alpha}\zeta$  from  $*lah_2wo-h_2\dot{\alpha}g$ -"he who leads the armed folk" and  $F\dot{\alpha}\nu\alpha\xi$  from  $*wn -h_2\dot{\alpha}g$ -t-"the person who brings profit/gain/increase" (accepting, like Willms, such an interpretation of \*wn).<sup>216</sup> Hajnal suggests that, while both the second component of these lexemes were initially athematic formations in *-aks*,  $*lah_2wo-h_2\dot{\alpha}g$ -t-  $*l\bar{\alpha}w\bar{\alpha}g$ t- retained its archaic form.<sup>217</sup> Hajnal's reconstruction  $*wn -h_2\dot{\alpha}g$ -t- is in many ways very close to Szemerényi and Willms and the same objections could apply here as well. We should also mention that the "archaic" form  $*l\bar{\alpha}w\bar{\alpha}gt$ - is only supported by the Phrygian  $\lambda\alpha_F\alpha\gamma\tau\alpha\epsilon$ , which, however, must be either corrupt or mispelt.<sup>218</sup>

- <sup>215</sup> Hajnal 1998, 60-69; cf. also Palaima 2006, 55-56.
- <sup>216</sup> Hajnal also cites the Vedic "cognate" *vanij* "merchant" etymologised from \**van* (Hajnal 1998, 67-68). Willms (2010, 263-266) is rightly skeptical of the association, given the uncertainty over the *-ij* formant and the obscurity of the earliest attestations of *vanij* in the Vedas.
- <sup>217</sup> Hajnal 1998, 66-67, n. 79.
- <sup>218</sup> Most likely a misplaced <ε> (if so, the reconstructed form would be λα<sub>F</sub>αγ<ε>τα<<>>). A similar observation is also made by Brixhe and Lejeune (1984, 8) but they conclude with a rhetorical question: "Mais a-t-on le droit de supposer un lapsus dans une inscription officielle d'une telle qualité graphique?" Since it was almost unfeasible to correct this mistake once made, we may give an affirmative answer.

<sup>&</sup>lt;sup>213</sup> Georgiev 1984.

<sup>&</sup>lt;sup>214</sup> Willms 2010, 257. Even Szemerényi (1981) admits that the meaning "tribe" appears certainly only in Veneti.

Moreover, the parallel formation of  $F\dot{\alpha}\nu\alpha\xi$  and  $\lambda\bar{\alpha}F\bar{\alpha}\gamma\epsilon\tau\bar{\alpha}\zeta$  is problematic, since their conceptual "pairing" is supported by disparate evidence, such as Old Phrygian M-01a (see above) and PY Er 312.1-.3 (in the latter both figures are implied as holders of a *te-me-no* τέμενος). However, besides the obviously different contexts of these documents (socio-political, economical, chronological), we should emphasise the radically different use of the two titles in each case: their clear prosopographic and functional distinction on the Pylian tablet vs. their assignment to the same individual on the Phrygian monumental inscription.

Furthermore, the dramatically different historical trajectories of the two terms in the 1<sup>st</sup> millennium BC, when Fáva $\xi$  survived –even as a literary title or a cult adnomen– but \* $\lambda \bar{\alpha}_F \bar{\alpha}\gamma \epsilon \tau \bar{\alpha}_\zeta$  became an obscurity (cf.  $\lambda \bar{\alpha}\gamma \epsilon \tau \bar{\alpha}_\zeta$  in Pindar -through elimination of the intervocalic glide and contraction?), does not offer any positive clues for any conceptual pairing of the two titles in the LBA. Hajnal explains the metrical incompatibility of \* $\lambda \bar{\alpha}_F \bar{\alpha}\gamma \epsilon \tau \bar{\alpha}_\zeta$  as the main reason of its absence from the epic tradition, in sharp contrast to (F) $\dot{\alpha}\nu \alpha \xi$ . Despite its ingenuity and attractiveness, Hajnal's multi-faceted proposal leaves some important unanswered questions: Why the "modernisation" of \* $\lambda \bar{\alpha}_F \bar{\alpha}\gamma \epsilon \tau \bar{\alpha}_\zeta$  was not extended to Fáva $\xi$ ? Why was not premodernised \* $l \bar{\alpha} w \bar{\alpha} \bar{g} t$ - utilised by the epic tradition, like Fáva $\xi$  was?

Lastly, Haudry proposed that  $F\dot{\alpha}\nu\alpha\xi$  is to be understood as derived from IE \*wenH- "friend" with an enlargement analogous to other Greek kt- stems, such as  $\gamma\dot{\alpha}\lambda\alpha$  (< \*glkt).<sup>219</sup> Haudry seems to read too much into the Vocative Singular type  $\dot{\alpha}\nu\alpha$  (instead of  $\dot{\alpha}\nu\alpha\xi$ ) in the Homeric epicleses Zeõ  $\dot{\alpha}\nu\alpha$  (3 times) and  $\Omega$  $\ddot{\alpha}\nu\alpha$  (once; referring to Apollon),<sup>220</sup> yet he does not consider the metrical motive behind the phrasing: Zeõ  $\ddot{\alpha}\nu\alpha$  and  $\Omega$   $\ddot{\alpha}\nu\alpha$  are dactyls occurring always at the very beginning of the verse (a natural position for a divine epiclesis), while \*Zeõ  $\ddot{\alpha}\nu\alpha\xi$ or \* $\Omega$   $\ddot{\alpha}\nu\alpha\xi$  would be impossible in this position.<sup>221</sup> It seems therefore probable that  $\ddot{\alpha}\nu\alpha$  was specifically employed for purposes of metrical compatibility. Moreover, the extension \*wenH- > \*wanakt- supposed by Haudry is unparalleled, with "analogy" hardly providing enough motivation for it. Semantically, again, the original meaning "seigneur-ami" needs to be overstretched to explain the use of F $\dot{\alpha}\nu\alpha\xi$  as the title for "ruler" in the LBA Aegean. Haudry admits the difficulties and is forced to speculate that the meaning of F $\dot{\alpha}\nu\alpha\xi$  as a "Lordfriend" is semantically paralleled to the etymology of another LBA title attested

<sup>&</sup>lt;sup>219</sup> Haudry 1996, esp. 53-54. IE verbal \**wenH*- "to love" had been suggested by Ribezzo (1928) and Pisani (1930), although only as the first component of a compound Fάναξ.

<sup>&</sup>lt;sup>220</sup> Il. iii.351; xvi.233; Od. xvii.254; h.Ap. 179.

<sup>&</sup>lt;sup>221</sup> Vocative ἄναξ occurs 37 times as opposed to the mere 4 attestations of ἄνα. Once, we have –through elision and again perhaps for metrical convenience– the phrase ῶ ἀν' (*h.Ap.* 526). Ζεῦ ἄνα is metrically equivalent (a dactyl) to the far more usual Ζεῦ πάτερ (41 times: *Il.* 25, *Od.* 16).

in the Linear B documents, *e-qe-ta* \**h*εκ<sup>w</sup>έται "companions".<sup>222</sup> As in the semantic parallelism between Fάναξ and \*λāFāγετāς, we remain puzzled that two quasi-synonymous titles –of vastly different status– were simultaneously in use in LBA Aegean palatial societies.

So far, we have seen that no compelling IE etymology of Fáva $\xi$  has been produced. A most significant criticism that can be directed to all the above proposals is that they fail to explain why Fáva $\xi$  is unique to Greek.<sup>223</sup> Although not all of them are entirely dismissible, we should bear in mind Winter's cautionary note that an uncertain etymological proposal is not much better than speculation.<sup>224</sup> So far, proposed IE etymologies of Fáva $\xi$  seem to try quite hard to avoid the obvious alternative: that the title's origin is to be sought outside IE.<sup>225</sup>

7.2. Meillet suggested that  $F^{\alpha}\nu\alpha\xi$ , along with the similarly etymologically obscure  $\beta\alpha\sigma\iota\lambda\epsilon\psi\varsigma$ , may have been a word of "Aegean" origin.<sup>226</sup> Ever since, its non-IE

- <sup>223</sup> We also have no positive evidence that pάναξ was etymologically transparent to Greek speakers of any period. In this context, we may note the recent ingenious proposal offered by Palaima 2006, 158-162 that the etymology of the title may be illuminated by the supposed "interchangeability" between the two compound names assigned to one of Agamemnon's daughters: Τφι-γένεια (Euripides *Orestes 23*) and Τφι-άνασσα (Homer *Il.* 9.145; Sophokles *Elektra* 157). Palaima has provocatively hypothesised that Τφι-γένεια may have been "a 'gloss'-substitute for Iphi*anassa*, i.e. a later name in which the underlying meaning of the *-anassa* component of the name is translated into Greek" (Palaima 2006, 62). This view remains unconfirmed, however, especially since we cannot definitely demonstrate that the names refer to the same individual (for sure, the two names belong in radically different mythological traditions: unlike the famously "sacrificed" Τφιγένεια, Τφιάνασσα was still very much alive when Agamemnon offers her to Achilles in *Il.* 9.144-148, the two names are assigned to different daughters in *Cypria*, fr. 15.
- <sup>224</sup> "An etymology may be probable or improbable; the degree of probability depends on the degree of clarification of details in the formal and, secondarily, the semantic correlation [...] etymologies are never data themselves, but only working hypotheses" (Winter 1958, 205).
- <sup>225</sup> Francis has pointed that, "if we are unable to interpret a term as part of a formal paradigm, or wish to derive some feature of the language of our study from a foreign source, we sacrifice whatever empirical power is inherent in the techniques of internal or comparative reconstruction and become persuasive only to the extent that our hypotheses are also credible on non-linguistic criteria" (Francis 1992, 471). This is, of course, a fair critique. However, if an arguable and historically plausible interpretation of a term can be achieved, it should at least be given the chance to stand on its own, against patently non-compelling etymological reconstructions.
- <sup>226</sup> "Quand on constante que des mots comme *basileus* ou comme *wanax* n'ont rien rappelé l'indoeuropéen ni par l'aspect général ni par les éléments constituent on est même conduit à se demander si la civilisation "égéenne" n'a pas exercé sur la constitution des Hellènes une action considérable" (Meillet 1930, 65). "L'emprunt de Fάναξ et de βασιλεύς traduit linguistiquement le prestige de la civilisation égéenne qu'ont rencontrée les troupes d'Achéens descendues au Nord et qui ont eu devant eux des choses toutes nouvelles, admirables et surprenantes" (Meillet 1932, 588). For an early submission of his "Mediterranean" etymologies cf. Meillet 1908-1909.

<sup>&</sup>lt;sup>222</sup> Haudry 1996, 62 (cf. also 55-56, 65-66).

origin has been accepted by most scholars and reference works.<sup>227</sup> Fáva $\xi$  has been commonly included in the broad and diverse group of lexical items that are both unique to Greek and unsatisfactorily explained as IE formations.

These are variously named "pre-Greek", "substrate", "non-Greek" or "loanwords" of obscure origin. While any collective appellation –however conventional– for what is clearly a quite diverse and mostly uncertain grouping of lexemes should best be avoided,<sup>228</sup> we may note that before this vocabulary is considered non-Greek, the concept of "Greek" must first be explicitly defined. Is it permissible to use 1<sup>st</sup> millennium BC Greek alongside the IE reconstructed forms as linguistic yardsticks in order to define degrees of "Greekness"?<sup>229</sup> Can we define features that are, in fact, unique to Greek as "non-Greek"? Chadwick's most economical hypothesis of "an Indo-European idiom which, after influence with the surviving peoples, emerged as Greek" is a fitting macro-interpretation of the linguistic facts.<sup>230</sup> Paraphrasing Myres, we may say that the Greek language, and in particular its lexical stock, has been "ever in process of becoming";<sup>231</sup> we need to acknowledge a much more dynamic interplay between IE and non-IE Aegean elements during the formative period of Greek. In this scheme, Fáva& may be considered as "Greek" as any transparent IE term, but still originating in its crucial non-IE component.

- <sup>227</sup> Meillet 1932, 588; Boisacq 1916, 60 ("obscure"); Frisk 1960, 102-103 ("Unerklärt"); DÉLG I, 84-5; DÉLGn, 80-1, 1271 ("Inconnue. On admet que c'est un terme d'emprunt"); EDG I, 98-99 ("No IE etymology, and probably a substrate word"). The same view shared by Lejeune (1969, 179: "d'origine obscure"), Duhoux (1988, 79: ἄναξ is classified along with "emprunts dont on ignore ou discute la langue et la région d'origine") or Ruijgh (1999, 521: "sans doute préhellénique").
- <sup>228</sup> This cautionary note implies that no reconstruction of any "Aegean" language can be achieved with reasonable certainty. As Chadwick noted "[i]f we know of a language only through its loan-words to another language, where they may have been deformed by phonetic and pseudo-etymological pressures, we cannot hope to reconstruct an accurate picture of the lost language" (Chadwick 1969, 84). Cf. also Hester 1969 for an overview of relevant theories. A most recent attempt to treat these features as material to reconstruct a coherent "pre-Greek" language is by Beekes (*EDG* I, xiii-xlii; cf. Beekes 2007).
- <sup>229</sup> From a quite different angle, this agenda has had a specifically Mycenological impact, with various oddities in the Linear B documents interpreted as "non-Greek" elements (cf. Hooker 1968; Levin 1972 with earlier references; response by Chadwick 1970). Most recently, Garrett has tackled the similar questions from the point of view of phonology, and argued that "Mycenaean was a late NIE [Nuclear IE] dialect with Greek vocabulary; a distinctively Greek phonological and inflectional profile was largely a development of post-Mycenaean history" (Garrett 2006, 142). Garrett has offered some invaluable and penetrating insights into Mycenaean phonology, but we may still hold onto Chadwick's assertion that "[t]he answer to this comes *partly from the morphology, partly from the vocabulary*, both of which correspond exactly to Greek" (Chadwick 1998, 27, *italics* added; cf. Hooker 1979a, 56-57). A very convenient list of features that already clearly differentiated Greek from "nuclear" IE already in the LBA is found in Horrocks (2010, 9-10).

<sup>&</sup>lt;sup>230</sup> Chadwick 1975, 817 (cf. Horrocks 2010, 21).

<sup>&</sup>lt;sup>231</sup> Cf. Myres 1930, 538 (original quotation referred, of course, to the Greeks themselves).

The frequently used terms "pre-Greek" or "substrate" are problematic. 7.3. The idea of a linguistic "substrate" entails the historical assumption of a superposition (even imposition) of a IE Greek "superstrate" over the "pre-Greek" linguistic communities<sup>232</sup> and, implicitly or explicitly, population movements or invasions. Formally, elements assigned to a "pre-Greek substrate" are expected to pre-date the formation of "Greek".<sup>233</sup> However, Renfrew has brilliantly cautioned that non-IE vocabulary need "not necessarily represent a linguistic substratum but could conceivably indicate a linguistic *adstratum* (or even *superstratum*) [...] the result of linguistic borrowing".<sup>234</sup> Renfrew has argued that this extensive borrowing took place within the context of a MBA-LBA Aegean linguistic "Versailles effect", whereby a dominant innovative high culture stood as the source of vocabulary and ideas.<sup>235</sup> Renfrew's analysis needs to be supplemented by the consideration of whether the pattern of these non-IE elements fits any of the two major categories of contact-induced language change: borrowing vs. shift-induced interference.<sup>236</sup> While not mutually exclusive,<sup>237</sup> these processes are expected to leave distinct linguistic fingerprints. As Thomason observes, "the crucial prediction about shiftinduced interference is that, unlike borrowing, it does not start with the lexicon. Instead it starts with phonology and syntax".<sup>238</sup> Lexical borrowing instead, being "the most common specific type of influence"239 and defined as the defined as the importation of material and/or structures from one language into another", occurs in varying degrees of intensity, is definitely supported by the evidence of non-IE vocabulary in Greek.240

If we accept that these lexical items are most plausibly interpreted as loanwords, the very idea of a "substrate" –with its sociolinguistic implications– becomes almost misleading. As lexical borrowing is contact-induced, *at least* two living contemporary linguistic communities were required for the observed pattern to be created. We may

- <sup>232</sup> "Substrate" and "superstrate" carry the implication of sociopolitical and sociolinguistic domination (Crystal 2008, 463-464, 465, s.v. substrate, superstrate). If non-IE elements in Greek originate from a substrate language, then we imply that Greek was imposed as superstrate upon the hypothetical non-IE linguistic communities.
- <sup>233</sup> "An original language which disappears but which leaves traces in the surviving successor is called a substratum language" (Beekes 2011, 46, italics added).
- <sup>234</sup> Renfrew 1998, 240, 260 (*italics* added).
- <sup>235</sup> Renfrew 1998; 1999. Renfrew argued that the source of most of these "loans" was the palatial Minoan culture, a position we shall discuss extensively *infra*.
- <sup>236</sup> Thomason 2001, 59-83.
- <sup>237</sup> Thomason and Kaufman 1988, 45; cf. Thomason 2001, 211.
- <sup>238</sup> Thomason 2001, 75; cf. Thomason and Kaufman 1988, 39.
- <sup>239</sup> Thomason 2001, 10, 267.
- <sup>240</sup> Cf. also Garrett 2006, 149, endnote 11.

no longer be justified to speak of some "*pre*-Greek *sub*strate"; we should rather follow Renfrew in a "*non*-IE *ad*strate". The term "adstrate" will here be used to indicate a contemporary living linguistic source for lexical borrowing.<sup>241</sup>

Our extant Linear B evidence (TABLE 1) includes the earliest recorded 7.4. attestations of  $F\alpha v\alpha \xi$ , already displaying the stem \* $F\alpha v\alpha \kappa \tau$ -, as types *wa-na-ka-to*, wa-na-ka-te and wa-na-ke-te clearly show. Stems in /-kt-/ are guite rare in Greek and, derivatives and compounds aside, we have only two other such nouns, both of compelling IE etymology: νύξ (\*νυκτ- < IE \* $nek^wt$ - or  $nok^wt$ -) "night" and γάλα (\*γαλακτ- < \**glkt*) "milk".<sup>242</sup> We could hypothesise that  $Favaκ(\tau)$ -ς > -ξ,  $Favaκ\tau$ -ος etc. of non-IE origins (§7.1), received these athematic suffixes via analogy. In this regard, the scarcity of /-kt-/ stems,<sup>243</sup> as opposed to the proliferation of stems that end in velar stops (e.g. φύλακ-, πτέρυγ-, ὄνυγ- etc.) may be significant. In particular, it raises the natural question why Fάναξ would have been formed by analogy of these rare kt- stems and not have followed the more popular k- stems.<sup>244</sup> This is a question we cannot answer for two principal reasons: on the one hand, analogy is not quite predictable as a mechanism, especially in loanword adaptation; on the other hand, if indeed Fάναξ is a loanword, it belongs to an unknown language and, therefore, we cannot hope to plausibly reconstruct its original form.<sup>245</sup>

If this might be expected to bear on the conundrum over the chronological priority of either of the two historically attested stems of  $F^{\alpha\nu\alpha\xi}$  (\* $F^{\alpha\nu\alpha\kappa\tau}$ - and \* $F^{\alpha\nu\alpha\kappa-}$ ), we should

- <sup>241</sup> "When two languages live side by side they are called 'adstrates'" (Beekes 2011, 70). A different usage of the term "adstrate" is proposed by de Vaan 2008, 206-207, as a neutral term used for instances where the whereabouts of the lexical transfer are unknown. De Vaan conveniently associates lexical "borrowing" with a "substrate" and lexical "imposition" with a "superstrate". "Substrate" and "superstrate" therefore indicate the relationship between the donor language and the recipient language, in terms of the initiative for the lexical transfer. In this study, we follow the definition of "substrate" by Beekes 2011, 46.
- <sup>242</sup> νύξ: DÉLGn, 730-1; EDG II, 1027 s.v. γάλα: DÉLGn, 198-9; EDG I, 256 s.v.
- <sup>243</sup> Buck and Petersen 1949, 452-454. They list also a number of obscure Nominatives in - $\xi$  (mostly glosses or terms attested only in scholia) whose stems cannot be readily identified, although there is no reason to dispute their assertion that "probably the large majority of words here listed were  $\kappa$  stems" (Buck and Petersen 1949, 454).
- <sup>244</sup> "Why should pre-Hellenic speakers have complicated things by adding an analogical *t*, especially since *wanax*, a person, semantically belongs to a different group from the abstract *nyx* and the concrete noun *gala*?" (Willms 2010, 236). The question is justifiable, although, of course, we should be reminded that semantic association is one of the motivations for analogy, but hardly the only one. In theory, it is possible to suggest that the analogical formation of Greek Fάναξ was prompted by phonetic similarities of the original foreign lexeme to either vúξ or γάλα.
- <sup>245</sup> It would be of great interest to have Linear B spellings of νύξ or the oblique cases of γάλα, even derivatives or compounds. For the time being, <sub>F</sub>άναξ is the only athematic *kt* stem in our extant Linear B corpus.

note that types formed from a stem without - $\tau$ - occur both for vú $\xi$  and yá $\lambda \alpha$  as well.<sup>246</sup> Analogical formation of the  $\kappa$ -stems would be most reasonable and motivated by the popularity of stems ending in velar stops (as opposed to the scarce  $-\kappa\tau$ - stems). Although initially types such as (F)άνασσα and (F)ανάσσω (already in Homer) were thought to have derived only from \*Fava $\kappa$ -j- $\alpha$ , \*Fava $\kappa$ -j- $\omega$  (cf. \* $\phi$  $\nu\lambda\alpha\kappa$ -j- $\omega$  >  $\phi\nu\lambda\alpha\sigma\sigma\omega$ ) –with  $\tau$  explained as secondary enlargement- Linear B evidence reopened the question by attesting to a LBA \*Favakt- stem. As the reflexes of -/kj/- were shown to be rendered with <z-> graphemes, a type such as *wa-na-so-i* interpreted as the Dative Dual \*Fανάσσουν "to the two Mistresses (Goddesses)" has been frequently cited in support of the impossibility of \*Fανακ- and the priority of the \*Fανακτ- stem. Different reconstructions have been proposed to explain either possibility.<sup>247</sup> A full discussion of the problem is beyond our scope here, but it should be noted that the relevance of the forms *wa-na-so-i* and wa-na-se-wi-jo as evidence for a conjectured spelling \*wa-na-sa for Fávaooa is highly disputable.<sup>248</sup> If Fávaooa is not associated with either of these Pylian terms, the problem should remain open. Yet, at least for Fάναζ, we may observe that (F)άνακες occurs not just scarcely, but in very specific contexts as an adnomen/ quasi-theonym particularly applied to the Dioskouroi.<sup>249</sup> In theory, it would be possible to hypothesise that (F)άνακες may have been a fossilised cult adnomen that preserved an archaic stem, especially since \*<sub>F</sub>ανακτ- has been the dominant stem throughout antiquity.

# 8. Idiosyncratic wa-na-ka- spellings: Evidence for orthographic adoption

8.1. It is convenient to summarise here the main points we have reached so far regarding  $F\alpha\alpha\zeta$  and its Linear B spellings:

- i) While lacking any convincing IE etymology, Fάναξ, Fάνακτος etc. is declinable in accordance to athematic nouns of compelling IE etymology, such as νύξ, νυκτός etc.
- ii) Fάναξ fits well within a pattern that suggests a great extent of lexical borrowing from non-IE sources into the Greek vocabulary. It is, therefore, most likely a loanword itself.

<sup>&</sup>lt;sup>246</sup> Gen. Sing. γάλακ-ος; Dat. Sing. γάλακ-ι. We should note the variety of stems besides γαλακτ-: γαλακ-, γλακ- and γλακτ-, but also γαλατ- (in one case we have an undeclinable γάλα) (LSJ, 335-6, DÉLGn, 198-9, s.v. γάλα with references). A stem νυχ- occurs in certain forms (DÉLGn, 731, 1332, s.v. νύξ).

<sup>&</sup>lt;sup>247</sup> Willms 2010, 235-245 offers the most recent survey of the problem, which is, however, somewhat biased towards the priority of the \*Favaκτ- stem. Cf. also Ruijgh 1970, 309-310; 1999, 531-532 for arguments supporting the priority of \*Favaκ-.

<sup>&</sup>lt;sup>248</sup> Cf. *supra* nn. 28 and 173.

<sup>&</sup>lt;sup>249</sup> Hemberg 1955; LSJ, 107, s.vv. Ἀνάκειον, Ἀνακες (cf. the adjective ἀνακώσιος); DÉLGn, 80-1, s.v. ἄναξ.

- iii) If the result of lexical borrowing, Fάναξ would be the Hellenised form of a non-IE loanword. Its lack of IE etymology presupposes its *adaptation* into the Greek athematic declension (patently IE). We should accept the earliest Linear B documents where Fάναξ occurs (cf. §9) as *terminus ante quem* for the adoption of the term.
- iv) Fάναξ eatures a certain spelling idiosyncrasy that concerns what seems to be an OAV conventionally utilised for the spelling of the Nominative <wa-na-ka>. Interestingly, renderings of final /-ks/ clusters as <-ka> display an intriguing –almost exclusive– concentration on certain (Hellenised?) lexemes that defy clear IE etymology, unlike the unimpressive frequency of its Linear A homomorph in final position.<sup>250</sup>
- v) Types featuring these idiosyncratic spellings have a wide distribution among "scribes" in southern Aegean administrative centres with at least thirteen "scribes" on documents produced in at least four different regions, ranging chronologically from the end of LH/LM IIIA2 to the end of LH/LM IIIB (i.e. for more than a century) (TABLE 1; FIGURE 1; cf. also *supra* §2).
- vi) *Possible parallels* for the conventional graphemic representation of a cluster /-ktV-/ as <-*k***a**-*t*V-> are almost without exception Knossian, although none of them is absolutely incontestable. In that sense, such *possible* parallels vastly differ from the *wa-na-k***a** spellings, as the latter feature wide distribution (FIGURE 1; TABLE 1).
- vii) The aforementioned spelling idiosyncrasy can be properly described as a *orthographic cliché* that concerned this particular lexeme, widely shared among Linear B "scribes". This distribution indicates that this *cliché* must have occupied a central place in Linear B scribal education. This is remarkable given the spelling variations encountered throughout our extant Linear B corpus.
- viii) Only two "scribes" diverted away from this particular cliché in their rendering of the Dative Singular type as <*wa-na-ke-te>* (S1219 Cii responsible for PY Fr 1215 and the unidentified hand responsible for TH X 105). It is possible that both types occur on incomplete documents awaiting further editing or supplementation and had, therefore, been produced by "secondary" officials. That both documents belong to the two latest horizons of use of Linear B is also of interest, as a possible sign that a "traditional" spelling was gradually being given up and that the orthography of \*/wanaktei/ was integrated within the "canonical" use of prospective OCVs for the rendering of SCV clusters in this script.

<sup>&</sup>lt;sup>250</sup> GORILA V, 259; Facchetti 1999, 7 [table].

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In the present and following sections, I intend to argue that it may be possible to synthesise all the aforementioned points into a coherent account about the orthographic conceptualisation and history of the word.

We may begin with the aforementioned suggestion that the OAV employed for the rendering of the final consonant cluster in the Nominative Sing. *wa-na-ka*, had been imposed on the spellings *wa-na-ka-to*, *wa-na-ka-te* and *wa-na-ka-te-ro* (§6). This might suggest a "paradigmatic levelling" explanation for these spellings (§3.1). However, this is not the only way to view these types: we may consider the possibility that the entire *<wa-na-ka->* sequence was treated as a fixed graphemic unit.

We may suggest a "orthographic segmentation" of these forms as follows:

<i><wa-na-k< i=""><b>a-</b>&gt; <i>&lt;-</i>Ø&gt;</wa-na-k<></i>	<b>Fάνα</b> ξ	Nominative Singular
<wa-na-k<b>a-&gt; &lt;-to&gt;</wa-na-k<b>	<b><i><i>Γάνακτος</i></i></b>	Genitive Singular
<wa-na-k<b>a-&gt; &lt;-te&gt;</wa-na-k<b>	* <sub>F</sub> ανάκτει	Dative Singular
<wa-na-k<b>a-&gt; &lt;-te-rol-ra&gt;</wa-na-k<b>	* <sub>F</sub> ανάκτερος	derivative adjective

It would be arguable that the "idiosyncratic" spellings might have been conceived as the mechanic addition of the syllabograms *-to*, *-te* and the sequence *-te-ro* to the "frozen" sign-sequence wa-na-ka- which, in itself, was utilised for the graphemic rendering of the Nominative Singular Fávaž. From this viewpoint, it is interesting that the added syllabograms where the ones that graphemically rendered the IE Greek suffixes: *<-to> /-*tos/, *<-te> /-*tei/ and *<-te-ro> /-*teros/.

Such an interpretation of the orthographic segmentation might indicate a heterosyllabic *perception* of the /-kt-/ cluster,<sup>251</sup> but may also point to an aspect of the adaptation process of the *loanword* Fávač. At the point of the *graphemic rendering* of the loanword, a distinction may have been made between the sequence wa-na-ka- and the syllabograms added after it: the former may have been treated as a fixed and unchanged grapheme-sequence, whatever the value of the added syllabograms.

As in most loanword adaptations, a stem must have been somehow extracted from the foreign lexeme and IE Greek suffixes were added. This cursory description of the process is, however, hardly sufficient to account for the spelling idiosyncrasy. It is important to divert to possible parallels in loanword adaptations (particularly into Greek, so-called Hellenisations) that might help us obtain some insights into the mechanisms of such transformations.

<sup>&</sup>lt;sup>251</sup> Note, however, that the spelling idiosyncrasy cannot be explained through the assumption of regressive spelling (§§3.4 and 4.1).

8.2. The matter of whether loanword adaptations are phonetically or phonologically driven is, of course, still debated. Dohlus has recently persuasively argued that both processes are at play in most cases: "Loanword adaptations are basically phonetically grounded, but a lack of oral input and a large influence of written media trigger phonological approximation".<sup>252</sup> The influence of orthography<sup>253</sup> should be seriously and cautiously considered. Lack of awareness of the written form of a lexeme can leave its phonetic rendering as the only possible source for its adaptation; yet, exposure to the foreign orthography may also lead to a further *distancing* from the phonic substance of the original lexeme. Key points to consider are (i) the *typological compatibility* between the writing systems used to render the donor and the recipient language and (ii) the literacy pattern that characterises the specific context of loanword adaptation. We shall explore the relevance of these observations to the Hellenisation of borrowed lexemes.

Besides lexemes of obscure etymology and origins, LBA Greek has yielded other lexical items of *known* origin: *ki-to*  $\chi tr \omega v$ ,<sup>254</sup> *ku-mi-no*  $\kappa \omega \mu v v$ ,<sup>255</sup> *ku-ru-so*  $\chi \rho \upsilon \sigma \omega c$ ,<sup>258</sup> and *sa-sa-ma*  $\sigma \omega \sigma \omega \mu \omega$  (Sing.  $\sigma \omega \sigma \omega \mu v$ )<sup>257</sup> are safely identified as Semitic loanwords,<sup>258</sup> and they seem to have been fully integrated within Greek nominal declension. With the advantage of knowing (more or less accurately) the original foreign etyma of these lexemes,<sup>259</sup> we can observe the *choice* between thematic ( $\kappa \omega \mu v v$ ,  $\chi \rho \upsilon \sigma \omega c$  or  $\sigma \omega \sigma \omega \mu v$ ) and athematic ( $\chi t \omega v$ ) Hellenised forms.  $\chi t \omega v$ , for instance, is the Hellenised form of either Phoenician *<ktn>* or Northwest Semitic (Aramaic) *<kitun>* which could have been perceived as the nasal-stem /khitōn/ (long ō; k > h perceived as /kh/). In this adaptation of the Semitic lexeme into Greek athematic declension, the foreign word *in toto* was interpreted as Nominative Singular, with the endings of athematic declension added: Nom. /khitōn- $\emptyset$ /; Gen. /khitōn-os/; Dat. /khitōn-ei/ etc.

We cannot presently hypothesise any influence/ interference by the orthography of the Semitic lexemes in their adaptation process as early as the LBA. We have no positive evidence for *emic* Aegean comprehension of any of the Western Asian

<sup>&</sup>lt;sup>252</sup> Dohlus 2005, 133. Her examination focused on the analysis of differential Japanese receptions of the same mid front rounded vowels in French and German.

<sup>&</sup>lt;sup>253</sup> Vendelin and Peperkamp 2006; Dohlus 2005, 130.

<sup>&</sup>lt;sup>254</sup> ki-to: KN Lc(1) 536.B; L 693.1; L 5745; ki-to-na: Ld(2) 785.2b; ki-to-ne: L 771.2.

<sup>255</sup> ku-mi-no: MY Ge 605.3B, .4B, .6A; ku-mi-no-jo[: Ge 602.3; ku-mi-na: Ge 605.2B.

<sup>&</sup>lt;sup>256</sup> ku-ru-so: KN K(1) 872.3; X 1014; Ta 714.1, .2, .3; 716.1; ku-ru-so-jo: PY Ae 303.a; ku-ru-sa-pi: Ta 707.1; 714.3.

<sup>&</sup>lt;sup>257</sup> sa-sa-ma: MY Ge 602.1, .3, .4A; 605.2B, .6B; 606.4.

<sup>&</sup>lt;sup>258</sup> Duhoux 1988, 79 offers a succinct overview of this evidence. Cf. also comments by Francis 1992, 491.

<sup>&</sup>lt;sup>259</sup> Of great help here are the Septuagint, Greek-Phoenician bilingual inscriptions and, most importantly, late Greek alphabetic transcriptions of Akkadian texts (Sollberger 1962; Knudsen 1990).

writing systems used 1500-1200 BC.<sup>260</sup> It is not possible, therefore, at the state of our knowledge, to argue that graphemic renderings could have interfered in any meaningful way in the adoption of any of these early Semitic loanwords. Instead, we may postulate a further complication, which, although historically plausible, cannot be properly assessed yet: that certain loanwords of ultimate Ancient Near Eastern origin were introduced into Greek not directly, but through "Minoan". Of course, we should approach this delicate issue with extreme caution.<sup>261</sup>

As far as we can tell, the adaptation of the aforementioned loanwords was phonetically-driven. Instrumental in this process must have been the role of perceptual assimilation, "a process that applies during speech perception and that maps non-native sound structures onto the phonetically closest native ones".<sup>262</sup> We may add intriguing evidence from the "interpretation" of compound Persian PNs beginning with *baga-* "god" mostly as Meya- (and very rarely Baya-) in their Hellenised forms, or the Persian \**xša*θ*rapā* as σατράπης.<sup>263</sup> Overall, we encounter significant diversity in the adaptation patterns of foreign words into Greek<sup>264</sup> and we might explain this as reflecting the dependence of most of these adaptations to diverse phonetic perceptions.<sup>265</sup>

<sup>260</sup> These would have been the Anatolian hieroglyphs, cuneiform rendering Hittite or Akkadian, the Semitic linear scripts or the Ugaritic cuneiform (all systems in use during the LBA). However, our scepticism is perplexed by the occurrence of diplomatic correspondence between Ahhiyawa and the Hittites. *If* Ahhiyawa is identified with any of the LBA Aegean *literate* administrative centres, then this correspondence –perhaps in Akkadian, the *lingua franca* of the era or, as Bryce (1999, 258) prefers, Hittite– necessarily implies cuneiform literacy in the corresponding Aegean centre. Yet, it must be stressed that this is a strictly "logical" argument: the evidence that would positively demonstrate this point (e.g. a cuneiform tablet from an Aegean site) has yet to be found. We also need to consider another aspect of the problem: would knowledge of extra-Aegean scripts be worthy to develop and maintain when LBA Aegean polities seem to have been so peripherally and scarcely engaged in the Ancient Near Eastern diplomacy?

- <sup>261</sup> It is interesting to observe the grapheme-sequence AB 31-31-13 which *might* be transcribed †*sa-sa-me* (HT 23a.4-5). Of course, context remains totally unverifiable, but the similarity of this term with *sa-sa-ma* (references *supra* n. 257) remains intriguing.
- <sup>262</sup> Peperkamp, Vendelin and Nakamura 2008, 131. Also important is the influence of the phonological grammar of the recipient language that would define the availability of sounds and sound structures that foreign phonemes could be mapped onto.
- <sup>263</sup> Schmitt 2007, 137-138, 140-144. We should note the varying "accuracy" of these Hellenisations of different authors (Ktesias, for instance, is generally more accurate in his rendering of non-Greek names in his consistent rendering of \*Bagapāta as Βαγαπάτης in Περσικά as opposed to Μεγα-βάτης elsewhere). The Old Persian \*xš- rendered as <σ> is also not universal (cf. the form ξατράπης, corrupted as ἐξατράπης etc).
- <sup>264</sup> As opposed, for example, to the relative consistency of Hittite, where most loanwords are *i*-stems (loanwords in other categories being quite rare) (Hoffner and Melchert 2008, 53 §2.12).
- <sup>265</sup> It is interesting that, although the possibility of undeclinable terms was available, integration within the Greek declensional system was preferred in the vast majority of cases. In antiquity, undeclinable

A quite different aspect of Hellenisation of foreign names occurs within katharévousa, the 18th-20th century AD deliberately archaizing, artificial (predominantly written) idiolect.<sup>266</sup> Within such a highly literate environment, a name such as Byron was received as the *n*-stem athematic noun Búpow, exactly because of the seeming "similarity" of the word-final sequences, and was declinable according to the athematic declension (Gen. Βύρων-ος, Acc. Βύρων-α etc.). Similarly, Guinea could become Γουϊνέα because of the "similarity" with feminine *a*-stems (Gen. Γουϊνέας, Acc. Γουϊνέαν etc.). Thematic declension (with addition of the Nominative suffix) was generally assigned to names that might not be found "convertible" to acceptable Greek Nominatives.<sup>267</sup> What is most interesting is that, while they take place in a highly literate environment, with formal knowledge of the English, German or French, such Hellenised forms often display a patent *indifference* to the phonetic rendering of the relevant lexemes. Γουϊνέα [yuinea] is quite distant from "Guinea" ['gɪni] and, of course, Búpuv ['viron] has little to do with "Byron" ['bairən], or Σνεϊδέρος [snei'ðeros] with Schneider ['[najdər].<sup>268</sup> In all these illustrative examples, one sees a clear attempt to produce "Hellenised" stems through an actual and often rigid grapheme-to-grapheme correspondence that displays explicit indifference for meaningful phonetic realisation. Any notion of "resemblance" in these cases is explicitly non-phonetic, and exclusively orthographic.<sup>269</sup>

lexemes were restricted in very specific contexts that reveal interesting patterns, especially Hebrew terms (neuter nouns μάννα, πάσχα or PNs, e.g. undeclinable Ἰωσήφ, but the author Ἰώσηπος [2<sup>nd</sup> declension]; undeclinable Ἰακώβ [the patriarch] but Ἰάκωβος, Μαριάμ but also Μαρία, etc.). The choice between the two options did entail degrees of Hellenisation considered appropriate in specific contexts.

<sup>&</sup>lt;sup>266</sup> Cf. Horrocks 2010, 445-448.

<sup>&</sup>lt;sup>267</sup> E.g. Darwin becomes Δαρβίν-ος, Humboldt Ούμβόλδ(τ)-ος, while first name Bertrand becomes Βερτράνδ-ος. Pantazides" Homeric lexicon conveniently includes a concordance of the Hellenised *thematised* names of foreign scholars. A few examples will suffice (added suffixes are indicated by added *italics*): Baumeister becomes Βαουμεϊστέρος, Bekker Βέκκερος, Buttmann Βούττμαννος, Herman "Ερμαννος, Thiersch Θήρσιος, Krüger Κρύγερος, La Roche Λαρόχης, Lehrs Λέρσιος, Max Müller Μαξ Μύλλερος, Passow Πάσσωυος, Preller Πρέλλερος, Wolf Ουόλφιος, Voss Ουόσσιος "[ň μᾶλλον Φόσσιος]", Schneibewin Σνεϊδεβίνος, Schneider Σνεϊδέρος and Völcker Φοέλκερος (Pantazides 1888, ιστ΄-τη΄).

<sup>&</sup>lt;sup>268</sup> Also Hermann [hérmən] vs. "Ερμανν-ος, Liddell [lídəl] vs. Λίδελλ-ος, Scott [skát] vs. Σκῶτ-ος, or Canning [kænıŋ] vs. Κάννιγγ-Ø, Genitive Κάνιγγ-ος (maintained in the current homonymous square in modern Athens). Note that such grapheme-to-grapheme correspondences occasionally modify those grapheme clusters that did not occur in contemporary Greek: <Λίδελλ-ος> for <Liddell> retained <-λλ-> for <-ll->, but <-dd-> was "simplified" to <-δ-> and not <-δδ-> (references from Pantazides 1888, ιστ΄-ιη΄). We should also mention the impact of implicit "Latinised" forms (e.g. \*Hermanus, \*Lidelus or \*Scotus) on these Hellenisations.

<sup>&</sup>lt;sup>269</sup> This is quite different than the influence of orthography identified by Vendelin and Peperkamp 2006, who studied the differential adaptations of English phonemes according to the input register (oral *or* mixed oral and written).

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Though extreme, these latter "orthography-based" Hellenisations recall the *wana-ka-* "idiosyncratic" spellings in very interesting ways: *Katharévousa* was quite distanced from the contemporary vernacular language and could only be used by literates with adequate knowledge of ancient Greek (*katharévousa* itself being largely based on koine forms); yet *katharévousa* was not a perfectly fixed idiolect and featured diverse degrees of archaisation. The LBA Greek recorded on the Linear B documents is also a sort of supra-regional "interdialect",<sup>270</sup> although, as we already noted, it tolerated considerable orthographic variation.<sup>271</sup> Lastly, such "orthographic adaptations" are found to occur in contexts of highly restricted specialised literacy.<sup>272</sup>

Of key importance is the observation that orthographic adaptations require two basic preconditions: (i) the overall similarity and typological compatibility of "donor" and "recipient" writing systems (i.e. between syllabaries of the same type or between alphabetic systems etc.); (ii) the existence of certain shared homomorph graphemes to facilitate *any* process of orthographic adaptation.

In the light of the above parallels, I wish to propose a comparable orthographic adoption of the loanword  $F \dot{\alpha} v \alpha \xi$ : *«wa-na-ka»* may have been adopted as a grapheme sequence and maintained unchanged as the spelling of the Nominative Singular. Other types, such as the extant Genitive and Dative Singular, as well as the derivative adjective, were formulated by the plain, mechanical addition of further syllabograms to this fixed, stable sequence of graphemes.

- <sup>270</sup> This is hardly the place to elaborate on the common features across sites that support this position. Regional preferences cannot be ignored, and it would be futile to argue that even regional ("dialectal") features could not (or did not) break through. In any case, it is the commonality that is remarkable. Bartoněk has put it quite eloquently: "Die Texte der LB-Schrift selbst sind [...] in der Form eines vereinfachten Kanzlei-Idioms verfaßt, das auf einer übermundartlichen Koine-Form zu beruhen scheint, die sich in den Zentren der mykenischen Zivilisation zu einem überregionalen Interdialekt herausgebildet hat -unter Verlust spezifischer argolischer, pylischer, knossischer und anderer Sprachbesonderheiten, von denen in den Texten Spuren nur spärlich zum Vorschein kommen. Trotz der enormen Sprachuniformität der Linear B-Inschriften gibt es aber doch vereinzelte sprachliche Unterschiede, sowohl zwischen den einzelnen Lokalitäten als auch innerhalb von ihnen" (Bartoněk 2003, 480). Cf. "a semi-standardized written language that differed in key respects from ordinary spoken varieties of the period" (Horrocks 2010, 19).
- <sup>271</sup> Duhoux (2007) has painstakingly argued (chiefly sampling the Knossos S- sets) that the amount of variation observed in Linear B (what he calls "flexibilité orthographique") indicates a vivid spoken, rather than a fossilized written language. But was it a natural idiom? We may cite the diverse degrees of archaisation encountered in Greek *katharévousa*, which cannot support its interpretation as a natural language.
- <sup>272</sup> As Horrocks (2010, 454) observes, "*katharévousa* was a hard-won badge of upward mobility". It would be interesting to consider the sociolinguistic status of the LBA Greek "intedialect" under a similar prism.

A couple of comments and clarifications are in order:

We need not assume that the same explanation should account for other possible cases of a /-ktV-/ clusters rendered as <ka-tV>, namely Knossian sa-pa-ka-te-ri-ja and e-ka-te-re-ta (§5). Even *if* these are indeed examples of such a spelling (which is not certain), the occurrence of such a spelling practice would explain why such an idiosyncratic spelling would not create any serious legibility problem (at least at Knossos) and, therefore, provide a clue as to why it would have been tolerated.

However, the occurrence of these (even probable) types at Knossos and *not* on the Greek mainland<sup>273</sup> is potentially of interest: Can it be possible that this conventional spelling had been a specifically Cretan practice? Naturally, it is quite difficult to explain the exclusively Cretan occurrence of such spellings *vs.* the pan-Aegean diffusion of the *wa-na-k***a**- spellings, unless we hypothesise that the latter *begun life* as Cretan.

2) The above proposal might be taken to indicate a *quasi*-logographic perception of the fixed *«wa-na-ka-»* sequence. We should be quick to emphasise that we *by no means* imply a diversion from the fundamental Linear B principle of "mutual functional exclusivity" between sematograms and phonograms within sign-groups.<sup>274</sup>

However, we should consider certain interesting points of similarity between our proposed explanation of the *wa-na-k***a**- spellings in Linear B and a common practice in Hittite writing: the addition of phonetic complements to *received fixed* graphemes, those received logograms (word-signs) known as Sumerograms.<sup>275</sup> A particularly apt example is the Sumerogram LUGAL "king"<sup>276</sup> (semantically equivalent to the meaning of *wa-na-ka* in Linear B),

- <sup>273</sup> sa-pa-ka-te-ri-ja and e-ka-te-re-ta are the stronger cases for such a spelling practice, while other Knossian types are highly dubious (discussion in §5).
- <sup>274</sup> As rigidly asserted by Duhoux, Linear B "n'intègre jamais syllabogrammes et idéogrammes en un mot. [...] Le LB n'ajoute non plus jamais a un mot représenté par un idéogramme un syllabogramme destine à indiquer sa terminaison" (Duhoux 2000, 50-51). Of course, homomorphs do occur (i.e. syllabograms and commodity sematograms of the same form), but *no sign-sequence combines signs of both categories*. Naturally, ligatured commodity sematograms cannot be considered as sign-groups.
- <sup>275</sup> Unlike Akkadograms, the addition of phonetic complements is regular in Hittite Sumerograms, because the chance of ambiguity is greater in the latter. It is interesting that Hittites preferred to add phonetic complements to Sumerograms, and did not employ the Sumerian case-markers/particles. If the assumption that borrowed logograms were normally pronounced with their corresponding Hittite lexical equivalents is correct, then it is clear that Sumerograms are merely borrowed graphemes across semantic equivalences and *not* loanwords at all.
- <sup>276</sup> Like Akkadograms, Sumerograms are examples of alloglottography (a phenomenon inherent in the cuneiform systems, cf. Rubio 2006, 48-52). Sumerian LUGAL is accurately translated "great man" (eventually "king" or "Lord"), but it is generally assumed that the same Sumerogram is pronounced in Hittite as *hašsuš* "king"; on the other hand, plain GAL "great" was pronounced as *šalliš*, "great" in Hittite.

which received added phonetic complements to indicate the grammatical case: LUGAL-uš (Nominative Singular), LUGAL-(w)aš (Genitive Singular), LUGAL-un (Accusative Singular), etc.<sup>277</sup> While all components of these types are written in cuneiform, LUGAL- remained a fixed graphemic unit throughout, and the only change is discerned in the mechanically added complements. While one might rightfully protest that we compare a probably *unique* Linear B spelling to a *regular* Hittite practice, it might be interesting to note the conceptual similarity of the two processes: in both cases, graphemes have been taken over along with the writing system to render IE languages, although the writing systems were conceived to meet the needs of patently non-IE forms. It is most interesting that Hittite scribes did not adopt the Sumerian case-markers (or case-particles) added to nouns, but preferred to add their own phonetic complements to Sumerograms, thus generating graphemic renderings that were subtly -yet patently- "hybrid". It is redundant to emphasise that Sumerograms were adopted in Hittite writing along with the cuneiform writing system.278

8.3. With these observations we come to the most interesting implication of the aforementioned proposal: the source of the "transplantation" of a fixed grapheme-sequence  $\langle wa-na-ka-\rangle$  into Linear B. We emphasised above that the structural/ morphological compatibility is a crucial and necessary condition for a orthographic reception to occur: the aforementioned *katharévousa* spellings were considerably prompted by the occurrence of homomorph graphemes between the Greek and Latin phonetic alphabets; likewise, the addition of Hittite phonetic complements to Sumerograms presupposes the Hittite adoption of cuneiform. When phonetic reception and reinterpretation are shown not to be the source for the actual spelling of lexical borrowings, influence from the original orthography remains the most likely option. The next question we need to ask is: *from which source would such an orthographic transmission enter into Linear B*?

In order to answer this, we should discuss other possible evidence we might have for such orthographic transmissions/receptions in the LBA southern Aegean. Besides the shared commodity sematograms (variously called "ideograms" or "logograms") between Linear B and other Cretan writing systems (consistently Linear A), we do have some intriguing evidence for shared grapheme-*sequences* 

<sup>&</sup>lt;sup>277</sup> A convenient tabular breakdown of extant types is given in Hoffner and Melchert 2008, 99 §4.47.

<sup>&</sup>lt;sup>278</sup> For questions surrounding the adoption of cuneiform by the Hittites see Rubio 2006, 45-48, Hoffner and Melchert 2008, 9-10.

(i.e. spellings of entire lexemes) between the two systems. The strongest such cases are †*da-i-pi-ta*, †*i-ta-ja*, †*ki-da-ro*, †*pa-i-to* and †*su-ki-ri-ta*, perhaps also †*se-to-i-ja* (†*i-ja-te* perhaps to be rejected).<sup>279</sup>

Evidence suggests that these occurrences are in fact quite meaningful, with the possible exceptions of  $\dagger i$ -*ja*-*te*<sup>280</sup> and  $\dagger se$ -*to*-*i*-*ja*.<sup>281</sup> That [[*su*-*ki*-*ri*-*ta*]] is erased under *pa*-*i*-*to* on KN Da 1163.B might possibly suggest that this TN was somehow associated with Phaistos (not necessarily because of physical proximity). This agrees quite well with the fact that Linear A < $\dagger su$ -*ki*-*ri*-*ta*> is found on a Phaistian document (the MM III single-hole nodule PH Wa 32<sup>282</sup>), just like  $\dagger pa$ -*i*-*to* is twice found on tablets from adjacent Ayia Triada (HT 97a.3; 120.6). The other three cases (*da*-*i*-*pi*-*ta*, *i*-*ta*-*ja* and *ki*-*da*-*ro*) occur on LM IB Linear A documents from Zakros

<sup>279</sup> These are a personal selection, definitely not exhaustive (cf. Olivier 1975, 444-5; Duhoux 1989, 70-71 with additions; cf. *GORILA*, *PTT* I and *KT5*; Linear B references to Knossian TNs *pa-i-to*, *se-to-i-ja* and *su-ki-ri-ta* are given in the cited entries to McArthur 1985 and *DMic*):

_	AB sequence	LA>B	LA references	LB references (scribe)
	01-28-39-59	†da-i-pi-ta	ZA 8.5; 10.4-5	KN B(5) 799.1 (104)
	28-59-57	†i-ta-ja	HT 28a.6	KN Ap 769.2 (—)
				KN Xe 537.2 (103)
	28-57-04	†i-ja-te	PH Zb 4	PY Eq 146.9 (S74 H1)
	67-01-02	†ki-da-ro	HT 117a.9	KN E 842.3 (—)
			HT 47a.4	
	03-28-05	†pa-i-to	HT 97a.3	KN: <i>DMic</i> II, 68, s.v.
		_	HT 120.6	McArthur 1985, 67-70, s.v.
	09-01-28-57	†se-to-i-ja	PR Za 1b	KN: <i>DMic</i> II, 288-9, s.v.
				McArthur 1985, 90-2, s.v.
	58-67-53-59	†su-ki-ri-ta	PH Wa 32	KN: DMic II, 302-3, s.v.
				McArthur 1985, 94-5, s.v.

These have been chosen with the uncompromising criterion of absolute identification between sequences of *at least three* graphemes. Examples that feature an alternation of a final phonogram with a <†-*u*> LA>B vocalic component in Linear A which is "replaced" with a final phonogram of an <-*o*> component in Linear B (e.g. LA>B †*di-de-ru* and LB *di-de-ro*), however interesting, are not considered here. Uncertain readings or incomplete grapheme-sequences should be considered with caution.

- <sup>280</sup> DMic I, 273, s.v. *i-ja-te*. If iατήρ "healer", as commonly accepted, this appellative should be an IE Greek formation (agent suffix -τηρ); therefore, it depends on how likely it is that such a form might be found inscribed before firing on a storage pithos from Neopalatial Phaistos (for PH Zb 4 see GORILA IV, 93). The further fact that <*ii-ja-te>* is so far the only Linear A grapheme-sequence recurring on Linear B *outside Crete* might also raise some justifiable suspicion.
- <sup>281</sup> AB 09-05-28-57 is an *almost* certain reading on the worn surface of the libation table from Prassa (cf. GORILA IV, 46-8).
- <sup>282</sup> GORILA II, 90. Otherwise, su-ki-ri-ta is associated with Phaistos only indirectly in the Knossos tablets: on Dn 1092, su-ki-ri-ta (.2) and e-ko-so (.1) occur together, and on Le 5629[+]8512 adjective e-ki[-si-]ja (.1) occurs with pa-i-to (.3).

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and Ayia Triada and always recur on Linear B documents *from Knossos*, indicating a fairly consistent pattern, where they appear to be PNs *(i-ta-ja; ki-da-ro; perhaps also da-i-pi-ta)* or TNs *(su-ki-ri-ta; possibly se-to-i-ja):*<sup>283</sup> precisely the categories where "Minoan" lexemes would have been most expected.<sup>284</sup>

Beyond giving credence to the close values of the AB homomorph signs involved, the occurrence of identical grapheme-sequences for seemingly the same lexemes in Linear A and *Knossian* Linear B strongly indicates a certain degree of continuity in spelling practice. Assuming that Linear A recorded a language quite unlike Greek, the preservation of the same spellings strongly favours *orthographic reception* (as opposed to phonetic perception) as the source of the corresponding Linear B spellings: should we not have expected much more deviation if Greek-speakers relied on their own phonetic perception and reinterpretation of an unfamiliar phonology and then attempted to generate anew its orthography on that basis? Of course, we need to consider other factors at play in these conditions, such as the pivotal role of "Minoan" literate agents in the formation of the Linear B writing and administrative system, which in fact presupposes a certain degree of Cretan-Helladic *sunergasia* (cf. also §9).

Our attention is particularly focused on Phaistian  $\dagger su-ki-ri-ta$  which seems to be Hellenised in Knossian Linear B with the Linear A grapheme-sequence used apparently for the Nominative type (either feminine *a*-stem or neuter plural). While most attestations of *su-ki-ri-ta* seem to be rubric Nominatives, Locative Plural *suki-ti-ra-pi* (KN Dl 47.2) indicates its full integration within Greek declension. The adjectival form *su-ki-ri-ta-jo* (KN C(4) 911.3 by Hand 111)<sup>285</sup> is actually formed by the mere addition of *<-jo>* to the *<su-ki-ri-ta>* sequence.<sup>286</sup> It is just legitimate to wonder whether our suggested *orthographic* (as opposed to phonetic) *reception* of *<su-ki-ri-ta>* might help explain our own, *etic* difficulties in reconciling *su-ki-ri-ta* with Συβρίτα, Σύβριτος, Σίβυρτος, etc. We usually go back from the latter types to reconstructions featuring a non-IE labiovelar \**g<sup>w</sup>*, whose anticipated Linear B spelling \**su-qi-ri-ta* is unattested. It is, however, far from certain that the origin of the /b/

- <sup>284</sup> We should have placed far less trust in them, if they had been found in disparate Cretan and Helladic contexts. We may be justifiably suspicious of the fact that a form such as <†*i-ja-te*>, so far the only Linear A grapheme-sequence recurring on *mainland* Linear B, also seems to feature -*if* iατήρ- a IE agent-suffix. The similarity of Pylian *i-ja-te* and Phaistian †*i-ja-te* is most likely accidental.
- <sup>285</sup> Also possibly su-]ki-ri-ta-jo on KN B(3) 8006 by Hand 106. PN su-ki-ri-to on KN As(2) 1516.12 is possibly (but not necessarily) etymologically connected to the same TN (DMic II, 303, s.v.).
- <sup>286</sup> It is most attractive to juxtapose this to AB 58-67-53-04-28-57 †*su-ki-ri-te-i-ja* (again on a document from a Mesara site: HT Zb 158b): although we cannot speculate on the etymological relation between †*su-ki-ri-ta* and †*su-ki-ri-te-i-ja*, it is interesting that †*-te-i-ja* could theoretically be "perceived" as Greek-like (note the ?"graphic" *j*-glide noted in the LA>B reading); yet, the formation of the Hellenised ethnic adjective used at Knossos evidently took its own way.

<sup>&</sup>lt;sup>283</sup> DMic I, 149, s.v. da-i-pi-ta; 288, s.v. i-ta-ja; 358, s.v. ki-da-ro; II, 302-3, s.v. su-ki-ri-ta.

(<β>) phoneme in Συβριτā is to be sought in a labiovelar: the historical trajectories of phonetic development of Greek voiced labial stop might have been plural and complex.<sup>287</sup> Beyond the possibility of accepting "un doublet \*Συγ<sup>w</sup>pítā",<sup>288</sup> and before the identification is altogether abandoned, it would be possible to hypothesise that the preservation of the Linear A spelling somehow obscures to us the actual phonetic realization of this TN in its LBA Hellenised form. We may observe the considerable differences in the use of AB 21 in Linear A and Linear B; *if* AB 21 –whose probable Linear B homomorph <*qi*> would have been employed to render the labiovelar in \*Συγ<sup>w</sup>pitā– was not used phonographically in Linear A,<sup>289</sup> it is possible to speculate that Linear A used of AB 67 <†*ki*> to cover a phoneme later interpreted as close to a voiced labial stop.<sup>290</sup>

Also interesting is the spelling  $\langle pa-i-to\rangle$  for  $\Phi\alpha\iota\sigma\tau\dot{o}\varsigma$  (never rendered  $\langle pa-to\rangle$ ), which could have indicated an intervocalic aspiration (\*/Pha/istos/) or a glottal stop (\*/Pha?istos/) that we would *not* normally suspect from the alphabetic rendering  $\langle \Phi\alpha\iota\sigma\tauo\varsigma\rangle$ .<sup>291</sup> Apart from the spelling, we would have no reason to doubt that the Hellenised form of the TN was already /Phaistos/ in the LBA. Of course, a *scriptio plena* of a *i*-dipththong with vowel /a/ would not be unacceptable: this spelling does occur sporadically in Linear B, although its interpretation is in most cases uncertain.<sup>292</sup> However, the similar Linear A sequence generates the question

- <sup>290</sup> There is currently no positive evidence for "alternances" between <†*k*-> and <†*q*-> phonograms in Linear A, but we may note Duhoux's hypothesis that "tous les signes LB notant labio-vélaire –*qa*, *qe*, etc.– pourraient être issus d'une série LA hypothétique notant occlusive vélarisée du type \**kwa*, \**kwe*, etc" (Duhoux 1989, 73). Cf. also Heubeck 1983, 162-163.
- <sup>291</sup> Already in Homer *Il.* ii.648 (cf. also the epic PN  $\Phi \alpha \overline{0} \sigma \tau \sigma \varsigma$ ). Ventris and Chadwick (1956, 77) note: "*a-i*: almost certainly not two syllables in *pa-i-to*". Ruijgh has attempted to explain the situation thus: "Il est possible d'expliquer ceci du fait qu'une graphie comme \**pa-to* impliquerait que deux phonèmes successifs ne seraient pas exprimés dans l'écriture, de sorte qu'on a préféré la notation de u. On peut déduire de ceci la règle qu'une diphtongue à second élément t est notée de façon complète si elle est suivie d'un  $\sigma$  tautosyllabique" (Ruijgh 1967, 24 §3). Yet, the evidence suggesting a preservation of this spelling from Linear A might render such a complex reconstruction unnecessary.
- <sup>292</sup> In theory, <-a-i-> could indicate a hiatus (intervocalic aspiration being certain or arguable only in certain cases). pa-i-to (for which no other spelling variant exists), quintessentially a "Minoan" TN, should be considered quite different from other cases of "insertion de i", which

<sup>&</sup>lt;sup>287</sup> Thompson (2005) cites three possible origins of the /b/ phoneme in Greek: labiovelar \*gw, \*/mrV/ or \*/mlV/ clusters and phonemes included in non-Greek loanwords. He seems to agree with Hajnal (1993) that /b/ in later Συβριτā belongs to the third category, just like mo-ri-wo-do (if \*μόλιξδος > \*μόλιβδος "lead"). However, except for su-ki-ri-ta, there are no positive indications for earlier forms of TN Συβριτā.

<sup>&</sup>lt;sup>288</sup> Ruijgh 1967, 228 §195.

<sup>&</sup>lt;sup>289</sup> Unlike Linear A sign 21<sup>f</sup>, AB 21 does not definitely occur as a phonogram (i.e. within grapheme-sequences) in Linear A; it may be understood as a (commodity) sematogram in its solitary occurrence on HT 38.2 and on roundels KH Wc 2063, 2012 and PH Wc 44 (cf. *GORILA* V, 176).

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whether the Linear B spelling is the result of orthographic "pressure" rather than a reflection of contemporary phonetic features. Interestingly, the "plenary" spelling of the dipthong was transferred onto the spellings of the derivative adjective (the latter being nonetheless a Greek formation, like *wa-na-ka-te-ro*).<sup>293</sup>

8.4. It seems reasonable to conclude that orthographic receptions of Linear A spellings into *Knossian* Linear B did indeed take place, indicating the (even otherwise presumable) close association between the two systems (cf. 9). The idiosyncrasy of the *wa-na-ka-* types can be explained along similar lines. We may attempt to reconstruct the procedure:

- (i) The (not yet attested) grapheme-sequence AB 54-06-77 <†*wa-na-ka>* was transferred onto Linear B.
- (ii) The source must have been the parent-system on which the Linear B phonographic component (i.e. the syllabary *excluding* commodity sematograms, metrograms and numerals) was based: this, as generally justifiably admitted, must have been the Linear A system<sup>294</sup>. Although a grapheme sequence AB

predominantly concern plausible IE Greek formations (listed by Olivier 1967, 99; add the uncertain PN? e-re-pa-ro on KN Ce 144.1 by 124-B vs. e-re-pa-i-ro on Vc(1) 212 by 124-s). <-a-i> spellings are featured in an interesting concentration of Knossian PNs (a-pa-i-ti-jo on unassigned L 588.1; e-na-i-jo on Xd <302> perhaps by 124?; ka-da-i-so on De 5018.B by 117; cf. ka-da-si-jo on PY An 519.2 by Hand 1; ka-da-i-to on unassigned Uf 5726.2; ]ka-ra-ino on B(5) 5028.1 by 104; qa-i-po on Dg 1101.B by 117; qa-ra-i-so on Dv 5285 by 117 and V(3) 466.1 by 115; cf. qa-ra-si-jo on MY Au 657.6 by scribe 62; tu-ma-i-ta on As(1) 605.3 by 103; and the fragmentary sa-i-[ on F(1) 5079.4a by 124-D). In all the above the lack of proper etymology impedes any interpretation of the orthography, although the etymological association of a-pa-i-ti-jo (\*Aquístics or \*Aquistíwy; theophoric? cf. Hquístics etc. < "Hquistos: DMic I, 73-4, s.v.) with *pa-i-to* is very attractive. The case of *pa-i-to* may be even more properly paralleled to the rare spelling of the similarly non-Greek TN ku-ta-i-to (KN C 902.10 by Hand 201; kuta-i-to on Xd 146.2) vs. the most common ku-ta-to (DMic I, 412-3, s.v.). Interestingly, the two versions seem to generate assibilated and unassibilated forms of the derivative ethnic adjective: ku-ta-i-si-jo on KN X 7891 vs. ku-ta-ti-jo elsewhere (PN ku-ta-si-jo belongs to a "shepherd" associated with TN ti-ri-to on Da 1394.B and Dv 1237.B and should not be lightheartedly considered as etymologically associated with ku-ta(-i)-to). Of course, unlike pa-i-to, ku-ta-i-to is in fact very rarely attested (two occurrences by two different "scribes"), as opposed to ku-ta-to (70 occurrences by at least ten different "scribes").

<sup>&</sup>lt;sup>293</sup> pa-i-ti-jo (masc.); pa-i-ti-ja (fem.) (cf. DMic II, 67-8, s.v.).

<sup>&</sup>lt;sup>294</sup> Although the quantitative preponderance of the Ayia Triada material, whose Linear A sign-form variants are not always sufficiently close to the respective Linear B forms of homomorph signs, might give the impression that alternative "sources" need to be sought for the Linear B signary (e.g. Pope 1961-1962), the genetic relationship between the Linear A and B *phonographic repertoires* cannot be seriously doubted. The exact number of secure homomorphs between the two systems is not unanimously agreed upon, but Bennet very aptly estimates that "a figure of 75% overall is plausible

<†*wa-na-ka>* does not occur in the extant Linear A corpus, all three graphemes involved have Linear A homomorphs.<sup>295</sup>

- (iii) The phonetic and orthographic adaptation processes moved in close parallels. Whatever the original form of the lexeme, a stem  $*_{F}\alpha\nu\alpha\kappa(\tau)$ -was extracted and ascribed –through analogy– to the declension of such "core IE" names, such as  $\nu\delta\xi$ . It is not currently possible to ascertain the chronological priority of any of the two historically attested stems ( $*_{F}\alpha\nu\alpha\kappa$ -or  $*_{F}\alpha\nu\alpha\kappa\tau$ -) or exclude their contemporaneity: that Linear B features unequivocal evidence only for  $*_{F}\alpha\nu\alpha\kappa\tau$  may be indicative, but hardly decisive. Likewise, we can only speculate that some phonetically perceived similarity between the original form and IE Greek *kt*-stem (or *k*-stem) nouns prompted this analogy, although we should better avoid what is an unnecessary *petitio principii*.
- (iv) Fάναξ is definitely used as the title of the ruler in our extant Linear B documents and a central figure atop the social and cosmological hierarchies accepted by LBA Aegean palatial societies and administrations;<sup>296</sup> even extrapolation from later Greek usage of the title suggests that a powerful male figure of more-than-human status was consistently involved (whether a ruler, divine ruler or deity is not of our present concern). It would make good

<sup>[</sup>which may rise] even higher (85%) if only the core signs are taken into account" (Bennet 2008, 15). A commonly accepted conspectus of correspondences may be found in Palaima and Sikkenga (1999, 607, Table 1). We should be very cautious in assessing the evidence for B phonograms that do not occur so far in Linear A. Perhaps a good lesson to be learnt is that of sign AB 48 *<nwa>* that had been considered a homomorph shared exclusively between "Cretan Hieroglyphic" and Linear B: it is now documented in Linear A as well (SY Za 4), as anticipated by Ventris and Chadwick 1956, 40 (Olivier *apud* Del Freo 2008, 207).

<sup>&</sup>lt;sup>295</sup> It is interesting to note that signs AB 54 and AB 77 may have potential homomorphs in the "archaic" Cypro-Minoan tablet from Enkomi (cf. Olivier 2012, 22, fig. 5: signs 06 and 09). AB 06 <†*na>* has a secure homomorph in all three Cypro-Minoan systems of arguably Cretan –if not Linear A–ancestry (as recently identified by Olivier, cf. Olivier 2012, figs. 6-9: sign 013) and an impressive "homophone" in Classical Cypriot (both Paphian and Common) <*na>* (the latter fact cementing the validity of the LA>B value of AB 06).

<sup>&</sup>lt;sup>296</sup> Cf. the apt phrasing of this view by Palaima (1995, 125). In our extant textual evidence, this is perhaps best exemplified by the temporal clause in the "header" of the Pylos Ta set, indicating the whole inventory of artefacts was used for an official event that marked the occasion *o-te*, *wa-na-ka*, *te-ke*, *au-ke-wa*, *da-mo-ko-ro* "when the μάναξ appointed Augewās as a dāmokoros" (PY Ta 711.1) or the temporal indication *mu-jo-me-no*, *e-pi*, *wa-na-ka-te* "upon the initiation of the μάναξ" in the heading of a record on feasting provisions (PY Un 2.1). Sparing several other textual references (discussed analytically in Carlier 1984, 44-101), we may safely state that no other figure appears in any remotely similar position throughout our extant Linear B documentation. It should be sufficient to demonstrate that no reference to the μάναξ in Linear B is inconsistent with his interpretation as a supreme title for "king" or "Lord". The alternative interpretation offered by Hooker 1979b is not endorsed here.

sense to expect that *the adoption of this loanword was either shortly followed* or immediately accompanied by the need to record it. The establishment of an administrative mechanism is, of course, a vastly composite set of events, but it is sufficient here to state that it is linked (equally strongly) both with the system used for recording and controlling commodities and services and with the establishment of elite personae, most notably a ruler figure. Both the adoption of Fáva $\xi$  as a title and the development of the Linear B writing and administrative system had one common motivation: the emergence and establishment of an effective mechanism for political control. The adoption of a non-Greek ruler's title in an environment that had no need for written administrative records is extremely unlikely.

- (v) Following the *typical* rendering of final /-ks/ clusters with OAV <-**a**> (final phonogram: <-*ka*>), the sequence <*wa-na-ka>* was adopted *unchanged* as the spelling of the Nominative Singular Fávaξ. Given that this specific OAV is encountered mostly (and potentially exclusively) in names of non-IE etymology (§4.2), it becomes legitimate to wonder whether there might have already been a similar spelling convention in the source whence the sequence was received.
- (vi) The rendering of the oblique cases and the derivative adjective required the addition of phonograms in order to denote the IE Greek suffixes *-os*, *-ei* or the IE Greek contrastive suffix *-teros*. These were added *mechanically* to the received *<wa-na-ka->* sequence. Like other orthographically received spelling types, the preservation of *<wa-na-ka->* may indicate that features of the original received orthography were faithfully maintained, even arguably "fossilised", without necessarily reflecting any phonetic reality in the Hellenised form. Parallels for this practice may be sought in the "received" Knossian TN spellings *su-ki-ri-ta* and *pa-i-to: su-ki-ri-ta* (*< †su-ki-ri-ta*) preserved *<ki> to* indicate a phoneme that later is found rendered as voiced labial stop /b/ (*<*β*>*), an employment quite outside what we know as the "canonical" usage of the *<k->* phonogram series; just as likely, *pa-i-to < †pa-i-to* seems to preserve a bi-graphemic rendering of an *i*-dipthong that seems unmotivated by the Greek phonetic reception of the TN as /Phaistos/.
- (vii) The fact that potentially strong parallels for the graphemic rendering of /-ktV-/ clusters as <-ka-tV-> (namely: sa-pa-ka-te-ri-ja if /Sphaktēria/ and e-ka-te-re-ta if /ektrēta/ cf. §5) occur only at Knossos is not at odds with the interpretation proposed here. If the formation of the Linear B phonographic repertoire was a largely Knossian development, as has been widely suggested (further discussion in §9), it might be hypothesised that the wa-na-ka-

"idiosyncrasy" originated in an seemingly optional use of an OAV in treating such clusters that was specifically available at Knossos, but, as it seems, not elsewhere.

(viii) Given the lack of absolute rigidness in Linear B spelling, as indicated by the considerable spelling variation,<sup>297</sup> it is no less than remarkable that the almost unparalleled spelling idiosyncrasy of the *wa-na-ka-* spellings is so widely distributed (primarily geographically, but also chronologically). This might indicate that the specific orthographic cliché employed in the spelling of these types was included in the basic "core" training in Linear B spelling, used by a broad range of "Hands" (at least thirteen from at least four different south Aegean regions: TABLE 1). As such, it is never featured within the spelling variation that occurs across identifiable scribal "hands", with two exceptions from contexts at the very end of the LH IIIB period (PY Fr 1215 and TH X 105). The late date of both these documents may indicate a deviation from the aforementioned cliché and the beginnings of a gradual abandonment of the conservative ("archaic"?) spelling of these lexemes towards its full accommodation within the canonical graphemic rendering of SCV clusters (with a "progressive" OCV).

This account produces a coherent account of all available data regarding the spelling idiosyncrasy of the *wa-na-k***a**- spellings. A most important historical implication of this account is associated with aforementioned point (ii). Explaining the orthographic obstinacy in these spellings as a result of them being a orthographic transmission *into* Linear B effectively indicates the "parent system" of the Linear B *basic* syllabary as the *source* of this transmission, unanimously accepted as Linear A. Since Linear A by definition rendered a (or *the*) Neopalatial Cretan language (which we may be justified in labelling as "Minoan"), our proposal would be an original and positive argumentation that suggests the probable "Minoan" origin of the title Fávaξ, a conclusion that has been anticipated by past scholarship (*infra* §10). Interestingly, in this way it is possible to suggest the "Minoan" origin of the term without addressing at all the question of the identification of the "Minoan" language.

Such a position would have a seminal implication: it would integrate the question on the adoption and formation of the LBA III Aegean kingship ideology (thereafter referred to as the "*wanax* ideology"<sup>298</sup>) within the intricate nexus of interconnected questions regarding the formation of Third Palace period administrative polities. These will be selectively addressed in the next section (§9). There, we shall attempt to tackle further aspects of our proposal of the adoption of the term, namely *why*,

<sup>&</sup>lt;sup>297</sup> Cf. Olivier 1967, 98-100 and Duhoux 2007 (Knossos); Palaima 1988a, *passim* (Pylos).

<sup>&</sup>lt;sup>298</sup> Kilian 1988. Cf. also Maran and Stavrianopoulou 2007.

*how, when* and *where* did this specific loanword adaptation take place. It would be illusory to think of these questions as independent of each other; they are, in fact, almost seamlessly intertwined.

# 9. The context of the adoption of *<wa-na-ka>*

Acceptance of the adoption and appropriation of LBA Greek Fάναξ from a "Minoan" source, as well as the observation that this spelling "idiosyncrasy" formed part of the core tradition of Linear B scribal training, enables us to associate its adoption with four separate phenomena: first, the formation of the Linear B writing system, particularly its phonographic component; second, the emergence of the administrative system which made use of this script; third, the intensification of Cretan influence on the material culture of the Greek mainland, particularly during the Late Minoan IB/ Late Helladic IIA phases; last, the plausible amalgamation of Cretan and Helladic ideas that would have considerably affected both Cretan and Helladic political evolution. In addressing –necessarily briefly– the above themes we shall attempt to provide an answer to the interconnected problems of the *general context* of this particular lexical adoption.

9.1. We may begin with the ultimately logical observation, that the formation of the Linear B writing and administrative system (potentially a major reform in itself) presupposes a certain cooperation between literate "Minoan" agents and hitherto illiterate mainland Greek-speakers, in which the "Minoan" contribution would have been a *necessary condition*.<sup>299</sup> Otherwise, it would have been quite unfeasible –even arguably impossible in theory– to assume that agents with no knowledge of writing whatsoever would have possibly managed to create such a coherent system without any literate aid. We are forced to assume that the early generations of Greek-speaking literate administrators would have worked quite closely with Cretan literates on the details of the new system: a certain symbiosis of "Minoan" and "Greek" elements, as well as collaboration between members of the respective linguistic communities becomes almost a *sine qua non*. Although the details of such a process are still open questions,<sup>300</sup>

<sup>&</sup>lt;sup>299</sup> Hooker 1967, 134, 138 (cf. Sharypkin 2008). The lack of pre-Linear B literacy on the Mainland is a crucial issue here: although largely an argument from nearly complete silence, this seems to be significant (see immediately *infra*).

<sup>&</sup>lt;sup>300</sup> How this cooperation exactly was accomplished and what the proportional contributions of each side to the formative process are issues yet to be explored. Nonetheless, we may suggest that the hypothetical cooperation had been, in part, a mutually beneficial and convenient *modus vivendi* between a declining and an emerging power. "Minoan"-Greek bilingualism seems to be strongly indicated in such a context (cf. Driessen 1998-1999, 92; 2000, 165-175).

it is sufficient for present purposes to suggest that such cooperation would have provided an ideal environment, not only for loanword adoptions or adaptations, but for the transmission of particular spellings between the "parent" and the new system. Cases such as *<su-ki-ri-ta>* or *<pa-i-to>*, where particular spellings seem to have been maintained from Linear A into Knossian Linear B, may illustrate how this condition would have generated asymmetries in the spelling praxis of the "recipient" system. An *orthographic* transmission of *<wa-na-ka>* and the adoption of the ideological "charge" of the term as part of a Cretan-Helladic amalgamation of political ideologies, can be accommodated without difficulty within such an environment.

Ouite stimulating reconstructions of the environment of this cooperation have been provided by synthetic assessments of the archaeological evidence. The co-existence of "Minoan" and "Helladic" elements in LM II-IIIA1 north-central Crete (perhaps already in the final Neopalatial phases) seems to compose a vivid and colourful picture of a tendency to experiment in monumental proportions that may reflect the "political anxiety" that accompanies the formative period of early states. The widespread use of gypsum in the post-LM I adaptation of the Knossos palace complex and the advertising of official ideology in a widespread elaborate fresco-painting programme, as well as the production of monumental and pictorial ceramic styles (focusing inter alia on military prowess and similarly masculine achievements) pointedly suggesting the Knossos complex as a prestige artefact *per se*; a remarkable outburst in experimentation with mortuary forms in an almost (except for Temple Tomb) unprecedented manner of monumental proportions (Isopata); a major administrative and economic reform under the control of a rigid political hierarchy.<sup>301</sup> The universal political quest for legitimacy must have directed the political strategies of the Knossian elite towards explicit and purposeful associations with the Neopalatial past; these should not be seen as standing in contrast with the aforementioned innovations, but rather as complementary. It is highly attractive, even compelling, to place the adoption of  $F\alpha\alpha\xi$ , a title of a ruler alongside its strong ideological connotations within the scope of such political aspirations.

In this context, discussion about the earliest stages in the formation of the writing system need not revolve around the identification of the "native language of the scribes",<sup>302</sup> but, instead, focus on the crucial role of the "Minoan" contribution in shaping Linear B literacy and, effectively, the earliest Greek attitudes towards writing.<sup>303</sup>

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<sup>&</sup>lt;sup>301</sup> Driessen 1998-1999; Driessen and Langohr 2007; Preston 1999 (all with further references).

<sup>&</sup>lt;sup>302</sup> Initial synthetic discussion in Ventris and Chadwick 1956, 68-73 (cf. also *supra* n. 300).

<sup>&</sup>lt;sup>303</sup> Certain of these points were already stressed by Hooker (1967; 1979a), who, however, suggests that Linear B was already (and initially) developed for "Minoan" purposes (an indigenous script reform), while Mainlanders were incorporating an increasing amount of their own vocabulary into the new writing system. Despite the ingenuity of this historical reconstruction, Hooker's theory is hampered

9.2. Greek literacy must be considered to *begin* with Linear B, whose affiliations to earlier Cretan writing are undeniable. The earliest possible Linear B documents known so far on the Greek mainland are possibly dated in the LH IIB-IIIA2 range;<sup>304</sup> the remarkable absence of evidence for actual literacy (knowledge to produce and comprehend graphemes)<sup>305</sup> or any administrative activity<sup>306</sup> on the central and southern

<sup>306</sup> The crucial "Minoan" contribution to the formation of Third Palace period administrations is also apparent in the development of LBA sphragistic praxis: although the origins of the LBA III sealing

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by his insistence on the identification of "non-Greek" morphosyntactic features on the extant Linear B documents (Hooker 1968; cf. Levin 1972), which is quite problematical (Chadwick 1970; Ruijgh 1979, 89).

<sup>&</sup>lt;sup>304</sup> The Mycenae Petsas House documents date to LH IIIA2 (Shelton 2002-2003; Del Freo 2008, 218-219; 2012, 19-20; Iakovidis, Godart and Sacconi 2012); At Tiryns, an *anepigraphon* fragment of Linear B tablet (to be numbered TI X 26) has been found in a LH IIIA2 context in the Lower Town (Del Freo 2012, 20); at Pylos, Palaima has identified a group of Linear B inscriptions which may date in the LH IIIA period (Palaima 1983; 1988a, 111-113, 133-134); at Iklaina in Western Messenia, a fragment of a Linear B tablet (IK X 1) was found in a burned refuse pit associated with LH IIB, IIIA1 and IIIA2 Early pottery (Del Freo 2012, 18; Shelmerdine 2012). It is also possible that some of the Linear B inscriptions from Ayios Vasileios in Lakonia can be associated with LH IIIA2 pottery (cf. Del Freo 2012, 17). We avoid here to take into account the Kafkania inscription (OL Zh 1), which has been used to substantiate a late MBA mainland origin of the Linear B writing system (references in Del Freo 2008, 216-217; 2012, 18-19). Besides suspicions over its very authenticity (as phrased in Palaima 2002-2003), the type of the inscribed artefact itself (a natural river-pebble) is odd and its administrative function and context of use quite obscure (the object itself was found in a seemingly unimportant site with not the faintest further hints of literacy or administrative activity).

<sup>305</sup> The few isolated (and occasionally disputable) finds of Linear A (or any type of Aegean writing, except for Linear B) on the Greek mainland stand in stark contrast to the pattern seen in the Cyclades, and must refer to the differing processes of "Minoanisation" that were at work in the final MBA and early LBA phases across the southern Aegean. HS Zg 1 (a plaque from Ayios Stephanos in Lakonia: Janko 1982; GORILA V, 16) is the only certain find, and -quite tellingly- comes from a site and a region with intriguing Minoanising pottery production during the aforementioned era (Rutter 1993, 782 with references in n. 150). Other cases are somewhat less certain: A single sign occurs on a bronze cauldron from Mycenae Shaft Grave IV (Grave Circle A) dated to LH I, but this has not been included in any corpus of Linear A inscriptions. Although Palaima (2003b) advanced its identification as A?B 43 (whose Linear B value is  $\langle a_3 \rangle$  /ai/), doubts on its proper function as an inscription have not yet been removed (Del Freo 2008, 218) and, in any case, this sign occurs on a probably imported artefact. A post-fire "graffito" on a pithos sherd from a late LH IIIB context from the Tiryns Lower Citadel has been interpreted by Olivier as Linear A (TI Zb 1: Olivier 1988, 255 [no. 1], 262-263), but the erratic form of the inscription and its late chronological context is troubling. The recent discovery of a clay ball with Cypro-Minoan signs at Postpalatial Tiryns (Vetters 2012) may alert us to the mere possibility that this "graffito" may be a case of non-canonical Cypro-Minoan. Negri's suggestion that the two "mason's marks" on the ashlar dressing on the left jamb in the entrance of Peristeria tholos 1 (LH IIA) are in fact Linear A signs (even so, it should be PER Ze 1, not Zg as Negri suggests) should also be treated with caution (Negri 2001-2002; Del Freo 2012, 13). Even if all the above disparate cases are accepted as "canonical" Linear A, they cannot substantiate a descent case for "pre-Linear B" literacy on the Greek mainland.

Greek mainland before LH IIB, in stark contrast to the development of Cretan writing systems (in intense –but not exclusive– administrative use) almost throughout the first half of the 2<sup>nd</sup> millennium BC (MM IIA-LM IB), cannot be dismissed as merely accidental.<sup>307</sup> The relative –but nonetheless remarkable– uniformity of LBA III Aegean literate administrative activity has also been used to suggest that the Linear B system was created as a single episode on Crete and subsequently exported outside the island<sup>308</sup>.

Besides such *argumenta ex silentio*, the increasingly recognised affinities between the Linear B and the so-called "Cretan Hieroglyphic" writing/administrative systems, particularly in the area of document typology and sphragistic practice (as well as certain epigraphic traits), seem to provide a sound basis for suggesting that Third Palace period literate administrative system took its form on Crete, especially since "Cretan Hieroglyphic" –unlike Linear A– was never truly diffused in the southern Aegean. More specifically, the fact that the arguable concurrence of features hitherto attributed to the "Linear A" and "Cretan Hieroglyphic" systems, seen in the Knossos "Hieroglyphic Deposit" and the Malia "Dépôt Hiéroglyphique" (both datable in the mature Neopalatial period), suggest precisely north-central Crete as the region where the major (re)formation of the Third Palace period bureaucracies took place.<sup>309</sup>

*If* the Greek mainland is disregarded as the place where such a script/administrative reform could have occurred,<sup>310</sup> this has also important consequences for the

types and practices, remarkably uniform throughout the southern Aegean, have been argued to be "shrouded in mystery" (Krzyszkowska 2005, 279), we may safely assume that they were based on a thoroughly revised usage of basically Neopalatial seal and sealing-types, including, nonetheless, major innovations. We cannot explain these developments as occurring exclusively or even predominantly on Helladic initiative.

<sup>&</sup>lt;sup>307</sup> The fact that no widespread burnt destruction horizons of late MBA and early LBA Helladic sites have been recovered cannot account *in toto* for the absence of administrative documents from this period (against the points advanced by Pini 1990, 110-111). The lack of organised polities that would have developed the *need* for written records is in agreement with by the lack of monumental residential architecture from late MBA/early LBA Helladic sites.

<sup>&</sup>lt;sup>308</sup> Sacconi 1976, 65; Olivier 1979, 45-48. Olivier's phrasing is particularly apt: "Si le linéaire B continental est tellement uniforme –alors que celui de Knossos est beaucoup plus riche en variantes individuelles– ce ne peut être que parce qu'il a dû être emprunté *en une fois, à une source unique*" (Olivier 1979, 46; cf. also 1996, 109). Recently, Olivier has preferred a formation of the writing system on the Greek mainland (Olivier 2012, 20).

<sup>&</sup>lt;sup>309</sup> This work has been presented in the London Mycenaean Seminar (abstract to be published as Petrakis in press b; preliminary work on document typology is presented by Tomas 2010; on the concurrence of "Cretan Hieroglyphic" and Linear A see also Karnava 2007). Similarities and homologies between the "Cretan Hieroglyphic" and Linear B systems have been systematically addressed by Hallager (1997-1998; 2011b), although his conclusion regarding a possible formation of Linear B on the Greek Mainland "in the earlier part of the Neopalatial period" (Hallager 2011b, 326) is not endorsed here.

<sup>&</sup>lt;sup>310</sup> Proponents of the theory that the Linear B system was formed on the Greek mainland include Pope (1961-1962, 318-319; further clarified in Pope 1964, 6: intriguingly he argues that the signary is

chronological range where such a process can be placed. At the very end of the Neopalatial period, throughout Crete (Khania, Ayia Triada, Arkhanes or Kato Zakros), Linear A is the administrative script *par excellence*. Besides any detailed palaeographic assessment of the development of the Linear A signary,<sup>311</sup> it is this particular fact that makes any pre-LM IB date for the formation of Linear B on Crete quite difficult to sustain.<sup>312</sup> Bennet's recent observation that Linear A "did not simply disappear", but "was killed"<sup>313</sup> is particularly pertinent in this context: the formation of the Linear B system not earlier than a late stage (or the very end) of LM IB would admittedly provide a very good explanation for the sudden disuse of all other classes of Aegean writing in the very same period.

If LM IB is regarded as a conventional *terminus post quem* for the development of the new system on Crete, then indications about the *terminus ante quem* are provided by the certain or probable dates of the earliest Helladic Linear B finds (LH IIB to LH IIIA2)<sup>314</sup> considerably narrow the possible dates for the genesis of the new system. A further point of potential historical significance needs to be stressed: LH IIA is the first phase in Helladic pottery development that sees such an overwhelming dominance of the Mycenaean decorated style, itself of a "Minoanising" style of Cretan stimulation (as opposed to the quantitative minority of Mycenaean style pottery in LH I assemblages).<sup>315</sup>

influenced by MM III *Knossian* Linear A), Godart (1979, 33-36), Duhoux (1985, 31, 34), Hallager (2011b, 326-327) and Olivier (2012, 20).

<sup>&</sup>lt;sup>311</sup> The detailed presentation offered by Palaima (1988b, 282-306) remains essential.

<sup>&</sup>lt;sup>312</sup> Palaeographic arguments arguing for an earlier date of Linear B have been advanced by Pope (1961-1962). Although the differences between Linear B and the Linear A variants employed on Ayia Triada documents are justifiably stressed, we cannot light-heartedly assume that the Ayia Triada sign-forms were absolutely typical of this phase. One of the central points in Palaima's analysis has been that "there are no compelling reasons for dating the origin of Linear B to MM III or early LM I or for viewing the Mycenaean script as anything other than a transformation of the Linear A system in its most advanced stage [...] many of the later Linear B shapes have their closest Linear A parallels in the LM IB period" (Palaima 1988c, 166; a more detailed presentation of the evidence is presented in Palaima 1988b).

<sup>&</sup>lt;sup>313</sup> Bennet 2008, 22.

<sup>&</sup>lt;sup>314</sup> See *supra* n. 304. We should emphasise the point generally made that the LH IIA-B phases on the Greek mainland (contemporary to LM IB-II on Crete) see the first considerable developments in the previously underdeveloped mainland sites: the LH IIB construction of Menelaion Mansion I is not to be seen as an isolated affair, although we cannot easily interpret this as a *direct* predecessor to palatial developments (which the site of Menelaion did not reach, but apparently was superseded by adjacent Ayios Vasileios). Yet, we may still consider *broadly* the LH II period as "the point after which their economic administration could no longer function without the assistance of written records" (Palaima 1988c, 166-167; cf. also 1988b, 336-339).

<sup>&</sup>lt;sup>315</sup> For the question see Rutter 1993, 787.

In this frame, Knossos, the only Aegean administrative center which may have been arguably functional throughout the MM III-LM IIIA range, becomes a most convincing candidate for the formation and adoption of the Linear B writing system, most plausibly during the advanced LM IB or LM II period.<sup>316</sup> The dearth of Knossian Bronze Age inscriptions before LM IB (and the almost total lack of LM IB inscriptions) perhaps should not be used as an argument for the site's nonadministrative function and is directly related to the continuous use of the complex and the telling absence of a fire-destruction horizon from the palace complex itself at the very end of LM IB.<sup>317</sup> Rather, we should pay close attention to the fact that the rather meagre Knossian pre-LM II corpus features a bewildering diversity of document types, occasionally unparalleled in other Aegean sites.<sup>318</sup> Such a pattern strongly suggests that Knossian literacy was particularly high throughout the Neopalatial period<sup>319</sup> and that the quantitative paucity of the material must reflect conditions unfavourable to its preservation. This point is of direct relevance to the present discussion: if we are prepared to argue that the orthographic adoption of *<wa-na-ka>* took place at Knossos at the close of the LM IB or the LM II period, then the dearth of Linear A inscriptions from this site explains why a grapheme sequence <† wa-naka> has not been found (and may never be retrieved) in Linear A. $^{320}$ 

- <sup>316</sup> Although the date of the palace's final destruction is not settled (and perhaps will never be, at least unanimously), we may still adhere to Palaima's comment that "Knossos [...] might have been the place where Mycenaean administrative systems *originated* under Minoan tutelage. It certainly is the place where the Linear B script and sealing system would have been forced to *develop* rapidly under the pressures of controlling large subject territories. It is definitely a point of *transition*, at least in a typological, if not a chronological sense, for both written and sealing administration. Finally, its administrative practices are *transformed* into those attested at the main land centers at the end of LH III B" (Palaima 1990, 99, original *italics*). Heubeck (1982, 200-202) had suggested a specifically Knossian character for the new system, positing, however, a slightly later (LM II-IIIA) chronological range for its formation.
- <sup>317</sup> Macdonald 1997, esp. 273; 2002; 2003.
- <sup>318</sup> Elaborating upon the data assembled in *CHIC*, *GORILA* V and taking into account finds published until 2010 (and the revision of classificatory W- prefixes in Linear A) we may count: [i] 69 inscriptions in "Cretan Hieroglyphic" disregarding impressions of "Hieroglyphic" seals (29 Ha "crescents"; eighteen He "medallions"; nineteen Hh 4-sided bars; two Hi tablets –of which one *dubitandum* and one Hg *dubitandum* 3-sided bar); [ii] 44 inscriptions in Linear A disregarding uninscribed roundels or nodules (seven tablets; three Wa single-hole nodules; six Wc roundels; one Wy perhaps medallion or odd roundel; four Za incised inscriptions on stone; thirteen Zb incised inscriptions on pottery; two Zc painted inscriptions on pottery; one Zd sign on fresco; three Ze possible inscriptions on architectural material; two Zf inscriptions on metal; two Zg miscellanea).
- <sup>319</sup> Nearly all safely dated Knossian inscriptions mentioned in the previous footnote fall within the MM III-LM IA range. This date may also be accepted for the documents from the so-called "Hieroglyphic Deposit" (Pini in CMS II.8, 6-8; cf. also Petrakis in press b).
- <sup>320</sup> Driessen has recently cited a suggestion by Faure that Linear A sequence AB -10-06-77- <†-u-na-ka> may be associated with Linear B <uanual and a suggested by the reportedly "several"</p>

9.3. The occurrence of *wa-na-ka*, presumably a rubric Nominative Singular type, on KN Vc(1) 73 and Vd 136 (both by Hand 124-s), two "mini-tablettes"<sup>321</sup> belonging to RCT deposit at the West Wing of the Knossos complex, deserves special mention here. Driessen has strongly suggested that this assemblage is earlier than other deposits of Knossian Linear B documents and has proposed to date these

examples of the alteration *ul wa*" (Driessen 2002, 2, n. 5). We may consider this unlikely on several grounds. (1) AB -10-06-77- is consistently part of the longer sequence AB 10-06-77-06-41 < u-na-ka-na-si> (KO Za 1c; PK Za 8b; SY Za 2b; perhaps reconstructable on IO Za 2c-d.1) and never occurs as an independent sequence: AB 10-06-77[ on IO Za 9 is incomplete and must be reconstructed as above. The relation of the complete sequence to AB 10-06-26-77-06-37 < u-na-ru-ka-na-ti> (PK Za 11c) or AB 10-06-26-77-06-57-41 < u-na-ru-ka-na-ja-si> (PK Za 12c) is, of course, uncertain (AB 10-06-26-77[ is also found on IO Za 16: Del Freo 2008, 203). (2) The "alteration" between AB 10 < u-a and AB 54 < u-a> must be treated with caution. Of course, we have some evidence from inscriptions on stone libration tables (cf. also Olivier 1975, 447):

AB 59-AB 06-<u>AB 28-A 301-AB 10</u>-AB 37-AB 55 <†*ta-na-i-*\*301-*u-ti-nu>* (IO Za 6)

AB 57-<u>AB 59-AB 28-A 301-AB 10</u>-AB 57 <†*ja-ta-i-*\*301-**u**-*ti>* (AP Za 1)

AB 08-<u>AB 59-AB 28-A 301-AB 54</u>-AB 38 <†*a-ta-i-*\*301-*wa-e>* (PK Za 11a)

AB 08-<u>AB 59-AB 28-A 301-AB 54</u>-AB 57 <†*a-ta-i-*\*301-*wa-ja*> (IO Za 2a.1, 3, 7; KO Za 1a; PK Za 12a; SY Za 1;2a; 3; 4; 8; TL Za 1a)

as well as tablets:

AB <78-76-10> <†qe-ra2-u> (HT 1.1; 95a.4-.5; 95b.4-.5)

AB <16-76-54> <†*qa-ra*2-*wa*> (HT 86a.3)

This last "alteration" (accepted by Olivier 1975, 447-448) might be supported by the intriguing nexus of interconnections between HT 86a, 95a and 95b (Olivier 1975, 447-8, n. 1; cf. Peruzzi 1959, 317, n. 5). However, since not one but two graphemes "alternate" between these sequences, we may still justifiably wonder whether we have to do with two quite different names. In any case, to consider them as "très certainement deux graphies différentes du nom d'un même individu par deux scribes n'ayant pas fréquenté la même école" (Karetsou, Godart and Olivier 1985, 128) might be over-optimistic (the interpretation of these sign-groups as PNs is contextually plausible, but hardly appropriate as a basis for further hypotheses). Even if all the above evidence is considered as meaningful, where do we go from there? Our ignorance of "Minoan" phonology and morphology creates an unsurpassable barrier. We have no positive clues as to the possible significance of any "alteration" in Linear A (except perhaps from the seemingly phonetic variation between initial AB 08- <†a-> and AB 57- <†ja->: Olivier 1975, 447). In the case of signs AB 10 and AB 54, we may have a negative clue, namely their differing position frequency in Linear A (AB 10 < +u> occurs 55.26% as initial, 36.84% as medial and 7.89% as final; AB 54 <†wa> occurs 26.92% as initial, 50% as medial and 23.07% as final: actual counts from Facchetti 1999, 5-7 based on GORILA V, but note that position can only be identified in -at least partly- complete grapheme-sequences). For our purposes, fortunately, we may be even more dismissive: an "alteration" between AB 10 <†u> and AB 54 < would imply that AB 10 < u> rendered occasionally a consonantal glide and that AB  $54 < \dagger wa$  in these "variants" contained an orthographic vowel. At least this is our hint from a similar ulwa alteration in Linear B, between Pylian ra-u-ra-ti-jal-jo and ra-wa-ra-ti-jal-jol-ta2 that renders a u-dipthong (cf. Morpurgo-Davies 1972, 100-101). All this, of course, is part of a complex dossier of spelling variations (-u- vs. -wV-) that would have nothing to do with wa-na-ka.

<sup>&</sup>lt;sup>321</sup> For the type and function of this distinctive class of these documents see Duhoux 2012.

documents to the LM II or LM IIIA1 phases.<sup>322</sup> Although this position has been attacked in lengthy reviews mainly directed at demonstrating the inconclusiveness of some of the arguments regarding the architectural phasing and stratigraphy,<sup>323</sup> we may confidently state that Driessen's proposal can account for a number of "idiosyncrasies" regarding the palaeography and epigraphy of the RCT documents.<sup>324</sup> A most important positive argument suggesting the earlier date of the RCT assemblage is provided by the sealings recovered along with the tablets there, which belong to a variant of the Neopalatial "flat-based nodules", so far only paralleled in a nodule from Khania dated to LM IIIA1.<sup>325</sup>

Before we use Driessen's proposal as evidence that the title *wa-na-ka* had been already in use in LM II-IIIA1 Knossos, we need to discuss the possibility that *wa-na-ka*, in these particular contexts, could be a PN, as suggested originally by Lejeune on the basis of its "contextual interchangeability" with the other sign-groups on documents of the same sets.<sup>326</sup> Although such an interpretation might be acceptable in theory, paralleled in the modern usage of terms for "king" as European surnames/ family names (not first names),<sup>327</sup> we should observe that such a "anthroponymisation" of a title should be most anticipated in contexts where it would be politically tolerable, where the relevant office has undergone considerable decay or has ceased to exist in contexts quite unlike that of the Third Palace period Aegean. Lejeune's (and now Duhoux's) suggestion is also entirely unnecessary: the contextual interchangeability of a title and a PN is perfectly explained by the plain fact that they are both nouns used to indicate unequivocally specific individuals. Moreover, the very existence of

- <sup>323</sup> Warren 1992 and Popham 1993 were quite critical; Bennet 1993 has been quite positive. It seems prudent to admit that the complex architectural history of Knossos and the poor (even if understandably so to some degree) original excavation records do not provide clear clues, but this is different from demonstrating the impossibility of Driessen's proposal.
- <sup>324</sup> Olivier 1967, 121; Driessen 1988; 2000.
- <sup>325</sup> For the RCT nodules: CMS II.8 (references in parentheses refer to HMs inventory numbers), nos. 307 (253); 460 (111); 467 (110); Add. 6 (1243). See also CMS II.8, 42-43, fig. 11a-e. HMs 1650 is not included in CMS II.8. Hallager suggests that CMS II.8, nos. 129 (=HMs 1621 from unknown findspot) and 691 (=HMs 1546) are also "flat-based nodules" (Hallager 2005, 252, n. 21) [not autopsied]. The Khania sealing (CMS V S3, no. 103) is illustrated in Hallager and Tzedakis (1988, 26-27, fig. 12) and its LM IIIA1 date is given in Hallager (2005, 252-253).
- <sup>326</sup> "il arrive même que, devenu sobriquet, puisse être le nom d'un individu quelconque" (Lejeune 1969, 179; cf. Lejeune 1962, 15), followed by Wundsam (1968, 19). Duhoux has recently adopted this view as well: "Comme *wa-na-ka* est strictement symétrique d'anthroponymes avérés, il est impensable qu'il puisse représenter le nom du 'souverain', *wanax*. Il doit donc s'agir d'un anthroponyme, *Wanax*. Comparer l'anthroponyme alphabétique grec Bασιλεύς" (Duhoux 2012, 211, n. 15, cf. also *ibid*., 210-211, 217, 221, 223).
- <sup>327</sup> Lejeune himself cites French Leroy, and we could add English/American King, German König, Spanish Rey, Italian Re, modern Greek Βασιληάς/ Βασιλιάς.

<sup>&</sup>lt;sup>322</sup> Driessen 1990a; 1990b (advocating a LM II date); 2008, 71-72 (preferring a LM IIIA1 date).

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the derivative adjective *wa-na-ka-te-rol-ra* (in use at Knossos –even if in deposits later that the RCT– and West Crete *inter alios*) demonstrates quite conclusively that *wa-na-ka* was understood as a title. We may still adhere to Carlier's observation: "Dans le grec homérique et classique, ǎvaξ est toujours un titre, jamais un anthroponyme".<sup>328</sup>

9.4. On the basis of the above discussion, we may propose that  $\langle wa-na-ka \rangle$  was probably adopted from the "parent" Cretan writing system that was used as a basis for the formation of the basic Linear B phonographic signary, apparently Linear A. In this way, it is possible to argue indirectly –yet positively– that Fávač (a word of no convincing IE Greek etymology) had entered into Greek vocabulary from a language represented in the "parent" Cretan system (which we may call *a* -or *the-* "Minoan" language). This adoption must be associated with the formation of the Linear B writing system and, in agreement with the significance of the adopted term (a title for a ruler), the formation of the administrative system that made use of this script. In this way, and despite the lack of this grapheme-sequence in Linear A, we may argue that Fávač was adopted in the place and time of the genesis of these systems, most plausibly at Knossos during the LM IB-II period.

# 10. Concluding discussion

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The main historical conclusion reached so far, that  $F\dot{\alpha}\nu\alpha\xi$  is a word of "Minoan" origin has been anticipated by past scholarship. It is telling that such views were often expressed with regard to the religious aspects of this office.

Despite his insistence on an unconvincing IE etymology of Fáva $\xi$  (see *supra*  $\xi$ 7.1), Puhvel had captured quite perceptively the "Minoan" component of what he considered a predominantly "Helladic" institution. Pointing *inter alia* to the paradigm of fusion of IE and non-IE elements in shaping the Hittite kingship institution, he specifically advanced an exegesis of Fáva $\xi$  as formulated under considerable "Minoan" influence.<sup>329</sup> Van Effenterre, explicitly accepting Fáva $\xi$  as

<sup>&</sup>lt;sup>328</sup> Carlier 1984, 47. This has nothing to do with the fact that Fάναξ might have been used in compound PNs already in LBA (*supra* n. 28) That a mythical ruler of Miletos was named Ἄναξ (Pausanias I.35.6, VII.2.5; Stephanus Byzantius s.v. Μίλητος) should better be seen as a later invention, intending to explain the toponym Ἀνακτορία in the environs of Miletos (quite tellingly, this Milesian Ἄναξ is mentioned as a son of Ouranos and Gaia, reflecting his archetypal properties).

<sup>&</sup>lt;sup>329</sup> "It is both likely and obvious that Helladic kingship underwent similar influences, most probably Minoan during its early formative period [...] *wa-na-ka* as a royal title has its basis in the divine sanctioning of monarchy, and more specifically in the fusion of Indo-European and Minoan religious elements" (Puhvel 1958, 328 and 331).

a loanword, also suggested a similar combination of influences on the formation of the institution.<sup>330</sup> Melena had also speculated on the possible Minoan origin for the "sacral" character of early Greek kingship.<sup>331</sup> However, it was Palaima that suggested squarely and most explicitly that "the term wanax and what Kilian properly calls the *wanax* ideology were introduced from Minoan culture".<sup>332</sup> His point of departure had been the widely recognised non-IE etymology of the term (like βασιλεύς) through the exploration of possible provenances, he conlcuded ad absurdum to the "Minoan solution": "We should also note that other 'high cultures' with whom the Mycenaeans were in contact do not offer, among their terms for elevated rulers, any that could be the source of the Mycenaean term. For now, this leaves Minoan culture and the undeciphered and poorly documented Minoan language as a last resort".<sup>333</sup> An analogous approach is seen in Renfrew's consideration of a list of "Aegean" lexemes, ἄναξ among them, for which he has collectively suggested an origin from a "Minoan" adstrate. 334 His argumentation is also *ad absurdum*,<sup>335</sup> although he aptly assesses the sociolinguistic context in which the borrowing of Fάναξ would have taken place, as suggestive of the "pervasive quality of the "Versailles effect" at a crucial time in Mycenaean social development".336

While Palaima was at the time moving largely against a scholarly current that preferred to analyse Mycenaean kingship as a primarily IE institution,<sup>337</sup> his viewpoint has been quite influential. Most recently, Maran and Stavriannopoulou,

<sup>330</sup> "Nous sommes convaincu, certes, du rôle considérable qu'ont du jouer les modèles orientaux à l'origine des 'royautés' crétoises. [...] ces modèles n'ont pu faire connaitre aux Minoens qu'un système de domaine royal, *téménos*, de droit divin [...] Si le *wanax* n'avait pas été solidement enraciné [...] dans le substrat préhellénique, avec telles figures religieuses qui passèrent en même temps que lui dans la tradition hellénique, croit-on qu'il aurait pu effacer en grec le nom indo-européen commun de la fonction royale? Comment ne pas penser au poids différent des traditions spécifiques qui s'attacheraient, d'une part, au chef de bande achéen victorieux au terme d'une longue errance, et d'autre part, au roi-prêtre minoen enregistrant depuis des siècles, en caractères hiéroglyphiques, puis en linéaire A, les actes et les comptes de l'administration palatiale?" (van Effenterre 1967, 20-21).

<sup>332</sup> Palaima 1995, 127. Cf. his view that "*wa-na-ka* might have derived from Minoan high culture which the Mycenaean elite clearly used as source for prestige borrowing in the spheres of ritual, ideology and material culture" (Palaima 2006, 54).

<sup>337</sup> Palaima's critique against such approaches is highly useful and constructive (Palaima 1995, 120-122); Renfrew advances a more "partisan" critique on such notions (Renfrew 1998, 251-252).

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<sup>&</sup>lt;sup>331</sup> "En Grecia quedan restos de esta primitiva figura del rey sacro, tal vez pertenecientes al acervo minoico" (Melena 1972, 346).

<sup>&</sup>lt;sup>333</sup> Palaima 1995, 128.

<sup>&</sup>lt;sup>334</sup> Renfrew 1998, 244, Table 1, lexeme no. 3; adopted from Hester 1965, 349-368 [Section D].

<sup>&</sup>lt;sup>335</sup> "Where else could Bronze Age Greece find a nearby and civilised contemporary [...] where a non-Greek and probably non-Indo-European language was spoken?" (Renfrew 1998, 243).

<sup>336</sup> Renfrew 1998, 251.

using Palaima's argument as their starting point, have discussed in considerable detail the implications of the "Minoan" origins of the *wanax* ideology.<sup>338</sup>

Our analysis of the lexeme's spelling idiosyncrasies has hopefully strengthened the hypotheses underlying the masterful contributions by Palaima, Maran and Stavrianopoulou. In spite of Palaima's cautious (and, at this point, commendable) pessimism,<sup>339</sup> we have offered here a positive argumentation that suggests the adoption of Fáva& from a "Minoan" source. We consider it important that we have done so without hazarding assumptions or hypotheses about the structure or affinities of "Minoan".

We must consider that the adoption of the title was accompanied by an adoption or *adaptation* of its ideological connotations. Such a borrowing, surely a phenomenal upheaval in Aegean (particularly Helladic) political evolution, renders necessary an original semantic difference between Cretan and Helladic conceptualisations of rulership and the occurrence of components in the "*wanax* ideology" that must have been sufficiently attractive to the newly-formed "Mycenaean" elites. It is highly probable that Fáva $\xi$  represented a set of properties that the recipient-language could not satisfactorily associate with one of its own lexical items: a *novel* concept (cf. Croatian *kralj* "king" < *Karolus* (Charlemagne) or Russian *czar* < *Caesar*, the latter a Roman family cognomen used as a title).

A far more difficult question is whether the adoption of  $F\alpha\alpha\zeta$  fulfilled a complete semantic vacuum. It is well-known that most widespread IE root for "king", \**rēģ*- presents a curious distribution (Vedic *rāj*-; Latin *rēg*-; Gallic *rig*-), and is conspicuously absent from Greek.<sup>340</sup> While the origins of  $\beta\alpha\sigma\lambda\epsilon\omega\varsigma$  remain almost entirely elusive and since this term is not explicitly denoting a "ruler" or "king" in our LBA testimonia, we may offer the speculation that a composite Greek formation would have denoted the concept of a "leader" or "paramount chief" before Fαναξ was adopted: of the vocabulary attested on the tablets, *ra-wa-ke-ta*  $*\lambda\overline{\alpha}F\overline{\alpha}\gamma\acute{\epsilon}\tau\alpha\varsigma$  "leader of the armed folk/ $*\lambda\overline{\alpha}F\delta\varsigma$ " might have theoretically fulfilled this role. Although we need not accept an exclusively military function for this Mycenaean office during the palatial phases,<sup>341</sup> the possibility that *ra-wa-ke-ta* emerged in an ideological context of masculine –military and hunting– prowess is supported by the explicit advertisement of such values in the iconography and the rich mortuary assemblages of the final MBA and incipient LBA phases on the Greek mainland, and manifested

<sup>&</sup>lt;sup>338</sup> Maran and Stavrianopoulou 2007.

<sup>&</sup>lt;sup>339</sup> Palaima (1995, 127) characterised his own "Minoan" hypothesis as "unprovable".

<sup>&</sup>lt;sup>340</sup> Benveniste 1973, 307-312; Sihler 1977; cf. also Palaima 1995, 120-122.

<sup>&</sup>lt;sup>341</sup> Nikoloudis (2006) has intriguingly argued that *ra-wa-ke-ta* also mediated the integration of groups of outsiders (which, she argues, the concept of \*λāpóç also included) into Mycenaean palatial society.

in the Mycenae Shaft Graves. From another perspective, it is quite interesting that this distinct emphasis on mortuary expenditure begins to fade exactly after the Shaft Grave era and focus seems to shift on monumental architecture for the *living* elite members, indicating a certain discontinuity in the development of Helladic ruler ideology around the close of the LBA II period, when we independently argued that the adoption of the "*wanax* ideology" might have taken place.

That a borrowed lexeme was used for a figure of arguably unprecedented status (and could theoretically have topped a pre-existing title or office) may be indicative of the special sociolinguistic environment in which "Minoan" loanwords entered Greek. Renfrew has explicitly used Wiener's "Versailles effect" to describe the context of such borrowing.<sup>342</sup> Cautious enough to alert to the plausibly mutual interaction between "Minoan" and "Helladic" spheres,<sup>343</sup> he nonetheless notes that several of the supposed "Minoan" loanwords relate to prestige materials or social terminology in order to discern an equally plausible "asymmetry in Minoan-Mycenaean relations which is reflected in the Minoan iconography seen in the Shaft Graves and [...] in some linguistic borrowings from Minoan into Greek".<sup>344</sup> The possibility that certain "Minoan" lexical items were perceived as particularly prestigious would provide additional motivation for the adoption and preservation of a non-Greek title that became embedded within Greek vocabulary.

On the other hand, if the adoption of the term –which as we argued may have happened in late LM IB or LM II Knossos– was motivated by the wish to achieve legitimacy-via-continuity for a new administrative order on Crete (in a manner broadly parallel to the preservation of the Roman priestly title of *pontifex* for the Christian patriarch at Rome), we may explain the widespread adoption of the title by rulers based at Pylos or Thebes as triggered by the unprecedented political *success* that the Cretan "experiment" may have enjoyed.

We should be cautious not to assume lightheartedly that the adoption of the *wanax* ideology from a "Minoan" source would have preserved its original connotations unaltered. When crossing a cultural-linguistic frontier, the semantic content of a

<sup>342</sup> Renfrew 1998, 249-252, 260; 1999.

<sup>&</sup>lt;sup>343</sup> Naturally, we cannot properly assess any possible influence of Greek on "Minoan", until Linear A can be properly understood. Such a complex interaction is taken into consideration in Driessen's so-called "Theseus model" that assumes the peaceful arrival of a Greek-speaking elite group (through a dynastic marriage) towards the close of LM IB, and its gradual penetration into Knossian society that brought about important reforms that were supported by "a newly created elite, the membership of which required knowledge of Greek" (Driessen 1998-1999, 104). Although undoubtedly stimulated by a mythological narrative that was itself shaped in the context of Athenian state propaganda, Driessen's scenario is highly attractive, even if at the moment impossible to confirm.

<sup>&</sup>lt;sup>344</sup> Renfrew 1998, 251.

lexeme or idea may change in no predictable manner.<sup>345</sup> In this way, the properties and function of Mycenaean Fáva $\xi$  need not be projected uncritically onto any concept of Neopalatial kingship. Nonetheless, that a close approximation or imitation of the "Minoan" idea might have been *intented*, is precisely what would be predicted by Renfrew's interpretation of lexical borrowing as occurring within a linguistic "Versailles effect" and a key to the success of the Linear B administrations on Crete.

Abbreviations (non-bibliographic)

- <sup>†</sup> LA>B reading (based on the application of the conventional Linear B values on their homomorph Linear A graphemes, cf. Duhoux 1989, 65-76)
- AC "Archives Complex" (Rooms 7-8, Main Building, Ano Englianos/Pylos)
- ISJ inscribed transport stirrup-jar
- LBA Late Bronze Age
- LH Late Helladic

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- LM Late Minoan
- MBA Middle Bronze Age
- OAV Orthographic Arbitrary Vowel (e.g. *<to-ra-ka>* for /thōraks/)
- OCV Orthographic Copy Vowel (e.g. <a-re-ku-tu-ru-wo> for /Alektruwon/)
- PN personal name
- RCT "Room of the Chariot Tablets" deposit of Linear B documents (West Wing, Knossos)
- SCV phonetic cluster of S(top) + any C(onsonant) + V(owel)
- TN toponym

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<sup>&</sup>lt;sup>345</sup> "Because words are required to represent all of reality, or, better, all that we think and feel about reality, they change in every possible manner, and this is the reason why developing a useful, systematic way for categorizing and organizing these changes is, in fact, quite infeasible. It is often said that each word has its own private history" (Beekes 2011, 86).

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