

Linear A as a Transitional Writing System: Linguistic Evidence for Proto-Doric Greek in Minoan Crete

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Abstract

Linear A has often been regarded as an undecipherable script, yet this assessment has largely stemmed from the application of interpretive criteria unsuited to its graphic nature. This study offers a systematic reassessment of the mixed formations of Linear A—ligatures, hybrid signs, and vocalic variants—through the analysis of 45 documents originating from various Minoan contexts. A combined examination of the signs, their functions, and their distribution shows that Linear A does not represent a confused or pre-phonetic system, but rather a coherent glottographic system endowed with its own rules and identifiable morphological mechanisms. The transliteration into Greek characters, carried out according to controlled criteria and compared with historical vocabulary, reveals a striking regularity in the reconstructible forms and a set of structural correspondences that point to an archaic Doric of Cretan provenance. Taken together, the data suggest a new perspective on the language of Linear A and on its place in the history of Greek, providing elements that call for a reconsideration of Greek prehistory and the linguistic role of Minoan Crete. This study argues that Linear A should not be regarded as an insoluble enigma, but rather as a readable and internally coherent testimony to an Aegean linguistic tradition that has until now been misunderstood.

Keywords

Linear A; Aegean scripts; Minoan Crete; Doric Greek; Greek dialectology; writing systems; glottography; historical linguistics; epigraphy.

Introduction

Writing may be defined as a complex system of heterogeneous signs whose interaction contributes to the formation of linguistic units. Linear A belongs to a stage in which the phonetic principle had not yet reached full stabilization: it represents a transitional phase marked by the coexistence of iconic and phonetic components, which attest to the persistence of a figurative dimension within the glottographic system.

The sign repertoire includes not only phonograms and logograms—already endowed with a relatively stable phonetic value while denoting a lexical referent—but also pictograms and ideograms, the latter interpretable as stylized or simplified forms of originally iconic representations. The combination of these signs gives rise to two main types of lexical units:

- a) ligatures, consisting of the graphic fusion of two or more signs into a single configuration;
- b) hybrid forms, which appear as autonomous words but derive from the aggregation of signs of different types.

The presence of such hybrid forms reflects the gradual nature of the evolutionary process—common to many ancient glottographic systems—in which the transition from iconic representation to phonetic writing unfolds through long-lasting intermediate stages. From this perspective, Linear A represents an earlier phase than Linear B, in which the phonetic principle is more fully stabilized.

The apparent undecipherability of Linear A can be understood in light of the structural differences that separate it from Linear B. A recurring error lies in applying to Linear A the same interpretive criteria used for Linear B: although the signs of the two systems coincide formally and display analogous phonetic values, they do not necessarily perform equivalent functions. This results in the inadequacy of any attempt at interpretation based on direct analogy. As shown in my previous studies, only the precise identification of the lexical units of Linear A, together with an analysis of the morphological and phonological processes that govern their formation, makes it possible to outline with accuracy the language underlying the system.

From this perspective, Linear A may be interpreted as an archaic form of Cretan Doric, whose phonetic and morphological structure displays features consistent with historical Doric. The correspondences observed find parallels in the Doric varieties of the classical period and are compatible with the evidence provided by the Greek grammatical and lexicographical tradition.

The syllabic configurations, the processes of word formation, and the vocalic variations attested in the texts point neither to a pre-Hellenic idiom nor to Mycenaean; rather, they outline a variety of early insular Doric whose features later reappear in the mainland dialects. The diffusion of this variety, following the transformations brought about by the collapse of Minoan civilization, accounts for the presence of Doric elements in Mycenaean and for their full re-emergence in the period traditionally referred to as the “return of the Heraclids.”

Materials and Methods

The aim of this study is to identify, quantify and interpret mixed formations in Linear A documents and to determine their Doric character. The analytical section comprises 45 documents selected to ensure balanced representativeness of different areas of provenance and of the various textual typologies. These are followed by five synoptic tables devoted to the principal glottographic categories identified: hybrid forms, ligatures, and vocalic variations. The analysis of these elements is developed in the Discussion section.

The documents, which contain economic and religious material, were subjected to a preliminary normalization intended to standardize recurring graphic variants and to eliminate inconsistencies arising from the state of preservation of the supports or from divergences among editions. This study is grounded in direct familiarity with the graphic practices of Aegean scripts, including the ability to read and reproduce Linear A signs in their original form. This competence allows the identification of structural features of the writing system that are frequently obscured by standardized transliteration practices. Transcription was carried out according to the principle of internal coherence within the system and within the individual documents.

Each occurrence was examined both in its own context and in parallel contexts in order to ensure interpretive consistency and to avoid arbitrary reconstructions. Rather than pursuing isolated lexical correspondences, the analysis focuses on recurrent morphological and phonological patterns across the corpus, enabling the identification of systematic regularities and converging isoglosses. This approach prioritizes internal coherence, graphical behaviour, and the structural distribution of signs as primary analytical criteria.

A central methodological aspect concerns the verification of word dividers. For this reason, the readings of the GORILA edition and of derivative editions (SigLA, Younger) were carefully compared with those of earlier editions (Pugliese Carratelli, Brice, Raison–Pope) in order to check spacing, sign dimensions, and the actual presence of word dividers, thereby excluding editorial interventions that are not universally accepted.

Transliteration was carried out by assigning to the signs the phonetic value they possess in Linear B and by rendering the resulting forms in Greek characters according to coherent and systematic criteria. Since the aim of the study is to demonstrate the Greek nature of the language expressed by Linear A, all transliterated forms—presented in italics—are written in Greek and, as such, are attested in the principal dictionaries of ancient Greek (Rocchi, GI, LSJ), ensuring comparability with the historical lexicon. Certain discrepancies, however, may concern the accentuation of Greek words, which is sometimes inconsistent even within the lexica themselves, where the same entry may appear with differing accents, particularly in Hesychius and in older lexical sources.

For each document, the transliteration and its contextual notes are followed by a section of Observations, on the basis of which the lists of hybrid forms, ligatures, Doric forms, vocalic variations, and Cretan words were compiled. In total, 53 hybrid forms were identified and analyzed according to a consistent set of established analytical criteria. Ligatures were examined in a systematic manner, with the temporary exclusion of those related to oil (16 cases), which involve logograms and metrograms and therefore require separate treatment. In order not to overburden the discussion, only one reference has been provided for each term discussed.

The overall analysis has also made it possible to define with precision the function of the signs A and I when used as determinatives. These determinatives, attested in Egyptian and Sumerian writing systems but absent from Linear B, confirm the graphic and structural autonomy of Linear A with respect to the Mycenaean syllabary.

Analytics

HT1

The tablet has no indication of the commodity. For this reason, it must be the continuation of a preceding tablet on which the commodity was recorded.

It begins with the term *qe-ra₂-u*, immediately followed by the word meaning “deficit” (*ki-ro*).

The normalisation is as follows:

qe-rja-u . ki-ro 197

dja-su 70[

]di-rjo-ke 52
ku-pa₃-nu 109
Ara-naRE 105

Translation

Τηρέυς (Qe-rja-u) owes (*χῆρος*, ki-ro = deficit) 197 units of a commodity recorded on a preceding tablet.

Since the deficit follows only *Τηρέυς*, we must deduce that " *Ἴσος* (Dja-su),]di-rjo-ke, the *κάβαρνοι* (ku-pa₃-nu) and the attendant (RE) of the royal (A) *Ρήνη* (a nymph) have respectively given 70[, 52, 109 and 105 units of the unknown commodity.

Notes

Τηρέυς < *Τηρήυς* (cf. also *Τελέυς*).

Ki-ro, *χῆρος* = devoid.

Dja-su, " *Ἴσος*, man's name (cf. Il 15, 332 etc.).

]di-rjo-ke, in my opinion, is complete. Could be the equivalent of *Δρίοξ* (see *Δρύοψ*, Il. 20, 455 etc.).

Ku-pa₃-nu, *κάβαρνοι*, a kind of priests of *Δημήτηρ* (cf. Hsch.: *κάβαρνοι* . *ἱερεῖς Δήμητρος*).

Observations HT1:

- A hybrid word Ἀρα-ναRE (determinative + phonetic part + logogram).
- Doric form: Ra-na for Ρήνη (a deity).
- Variation i/η: ki-ro / *χῆρος*.

HT2

Normalisation

A ka-ru uOLE 20[
]aOLE 17
 eOLE 3[
Ki-re-ta-na uOLE 54[
 aOLE 47

Translation

Available (ka-ru = *καίρουν*) for the Palace (A): 20[units of uOil, 17 of]aOil and 3[of eOil.

Belonging to (-na) *Κυρίτα* (a name of *Δημήτηρ*): 54[units of uOil and 47 of aOil.

Notes

Ka-ru (*καίρουν*) is a term related to transactions. It designates an available quantity. Here the term is preceded by the sign A, which denotes 'royal'. This means that the quantity is available for the Palace. Elsewhere (HT97a,1) it occurs without the determinative A, in reference to the transaction sign A638, which refers to men.

Ki-re-ta-na is formed from ki-re-ta plus the suffix '-na,' which is present in many Indo-European

languages, including Greek, with the meaning ‘belonging to’.

Ki-re-ta corresponds to *Κυρίτα*, a name of *Δημήτηρ*. The variation *i/u* is very frequent in Linear A (see below). The variation *e/i* is also common (cf. ki-ri-tja on HT114 and ki-re-tja on HT85b).

Observations HT2:

- A hybrid word: Aka-ru (determinative + phonetic part).
- Variations: *i/u* and *i/e* (ki-re-ta /*Κυρίτα*).

HT6a

The record contains two lists that begin with the same initial term (*ka-pa*).

Normalisation

Ka-pa DAta-ra .TE. FIC 15, pi-ta-ja 24, RU+JA Lm23², ma-dja 10, [. .]di-jo 2, ka-paQE 5+Lm8
DAqe-ra . QEpi-ta 22+Lm8, FIC 15+ Lm9.

Translation

They have been collected (ka-pa):

from DA of plenty (DAta-ra = DA *θηλή*, a religious confraternity), as tribute (TE), 15 units of figs (FIC), 24 trees (pi-ta-ja = *φντεία*), Lm23² of a unit of pomegranate (RU+JA = *ροία*), 10 barley buns (ma-dja = *μαζα*), 2 of [. .]di-jo, 5 and Lm8 units of the spice QE in *σκάφη* (ka-pa) vessels;
from DA of the hunting (DAqe-ra = DA *θέρα*, another confraternity): 22 and Lm8 units of QE in flatbreads (pi-ta = *φυστή*) and 15 and Lm9 units of figs.

Notes

The initial term ka-pa (from *καρπώω*, to collect) refers to both the records, which are respectively referred to DA *θηλή* and DA *θέρα*, two confraternities devoted to DA. The transaction sign TE follows only DAta-ra but it probably refers also to DAqe-ra.

Pi-ta-ja = *φντεία* (trees, probably of figs), with the variation *i/u*.

RU+JA, *ροία*, *ροίη*, pomegranate.

DAqe-ra = DA *θέρα*, i.e. of the hunting, a confraternity of hunters devoted to DA.

QEpi-ta = QE, a spice plus pi-ta = *φυστή* (buns of QE). QE occurs elsewhere ligatured with wheat and PU (*πυρός*). It can also indicate a kind of measurement.

Observations HT6

- Hybrid words: DAtara, DAqe-ra (monosyllabic word+phonetic part), QEpi-ta (logogram+phonetic part), ka-paQE (phonetic part+logogram).
- Ligature: RUJA (phonogram+phonogram).
- Doric forms: pi-ta = *φυστή* and ta-ra = *θηλή*.
- Variation *i/u*: pi-ta = *φυστή* and pi-ta-ja = *φντεία*.
- Omography: ka-pa from *καρπώω* and ka-pa = *σκάφη*.

HT12

The tablet records a debt (da-no = *δάνος*, in the last line) amounting to fifty units of different commodities. This debt falls into two categories: two commodities (*diOLE* and *304) are missing as part of the tax payment (TE), while another six commodities must be paid in full.

Normalisation

qa-tiDA TE *diOLE* 5
 *304 5
qe-tu-jo *40¹+PU 1
 *38 30
 MA+RU *118 5
 HORD+Lm1 3
 FIC 1
 *40+PU+RE Lm18
da-no 50

Translation:

Lack (*χᾶτις*) of a part (DA=*δαίς*) of the tax (TE): 5 units of *diOLE* and 5 units of *304;
Must be paid in full (*θετέον*, qe-tu-jo) : 1 unit of *40+PU; 30 of *38; 5 *118 of *μαλλός*
(MA+RU= wool); 3 units of LM1HORD; 1 unit of figs; Lm18 of a unit of *40+pu-re for a total
debt (*δάνος*) of 50 units.

Notes

Χᾶτις, Doric form for *χῆτος* (lack).

DA is here the Greek word *δαίς*=part, portion. In initial position it always refers to the great goddess and is almost always preceded by the determinative *I*.

Qe-tu-jo > qe-twjo > qe-tjo = *θετέον*, verbal adjective from *τίθημι* or = *τειστέον*/*τιτέον* verbal adjective from *τίνω*; Linear B qe-te-jo (variation i/e)².

*40+PU and *40+pu-re, since PU= *πυρός*, wheat, and since pu-re= *πυρήν*, seeds of wheat (or grape), it is almost certain that *40 is a corn.

Δάνος, the scribe has forgotten Lm 18, a fraction. It is not rare that a scribe makes errors in totaling units.

Observations HT12:

¹ The numbering adopted for this sign follows the system of Raison–Pope. The identification proposed in *GORILA* is uncertain.

² The term raises the same issues as in Linear B. It may represent a conservative form of the verbal adjective of the verb *τίνω* (*τιτέον*/*τειστέον*), which is also independently attested. Alternatively - more probably, in my opinion- given the q/t alternation also present in Linear B, it can be the verbal adjective of *τίθημι* (*θετέον*), or, possibly, of *ἵσθημι* (*στατέον*, root *steh). Both, *τίθημι* and *ἵσθημι*, are also attested elsewhere (see below).

- Ibrid words: qa-tiDA (phonetic part+logogram).
- Ligatures: MA+RU (two fonograms), *40+PU and *40+pu-re (respectively ideogram+logogram and ideogram+phonetic part).
- Doric form: $\chi\tilde{\alpha}\tau\iota\varsigma$ for $\chi\tilde{\eta}\tau\omicron\varsigma$; verbal adjective in tjos (qa-tjo).
- Omography: DA= $\delta\alpha\acute{\iota}\varsigma$ / $\Delta\tilde{\alpha}$.

HT14

The tablet records two separate lists, both of which refer to the same man. The normalized text may be translated as follows:

Pu-*131 is required to pay, as tax (TE): 30 units of wheat, 3 of *miOLE*, 3 of *diOLE*, 9 of *304, and 13 of *OLIV*. In addition, he must provide, as Apu-naDU—that is ‘donation’ (DU = $\delta\acute{\omega}\varsigma$) functioning as a fine (pu-na = $\pi\omicron\iota\nu\eta$) to be delivered to the Palace (A): 45 units of GRA, 5 of *miOLE*, 4 of *diOLE*, 6 of 304, and 14 of *OLIV*.

Note

The contributor is Pu-*131, Linear B $\Pi\acute{\upsilon}\rho\rho\omicron\varsigma$, who is required to pay two kinds of contributions, $\tau\acute{\epsilon}\lambda\omicron\varsigma\epsilon\delta\acute{\omega}\varsigma$. The latter, in this case, represents a fine ($\pi\omicron\iota\nu\eta$) owed to the Palace (A).

Observations HT14:

- A hybrid word: Apu-naDU=determinative+ phonetic part+ monosyllabic word.

HT23a

The side a of the tablet contains two lists.

Translation

First list: vessels $\kappa\alpha\nu\tilde{\alpha}$ (ka-na= $\kappa\acute{\alpha}\nu\nu\alpha$, $\kappa\acute{\alpha}\nu\epsilon\omicron\nu$) containing: Lm19 of barley, Lm7 of *308, Lm7 of *joOLE*, Lm7 of *tuOLE*, Lm7 of *riOLE*, Lm7 of 96+RU, 10 units of wine, 10 units of the corn *40+PU, 10 units of the corn 40, 17 units of *38.

Second list: *21^f+ri : Lm18 of a unit of $\tau\acute{\upsilon}\phi\eta$ (tu-qa, a plant), Lm18 of a unit of $\sigma\eta\sigma\acute{\alpha}\mu\eta$ (sa-sa-me), 10 $\nu\acute{\epsilon}\omicron\nu\mu\tilde{\eta}\lambda\omicron\nu$ (young sheep, ME+NE, a ligature), 1 little pig (ko-ru= $\chi\omicron\iota\tilde{\rho}\omicron\varsigma$).

Notes

Almost all the signs are ligatures.

96+RU, in my opinion, FAR+RU.

The first term of the second list is very difficult to read.

Observations HT23a

- Ligatures (not concerning OLE): *40+PU and FAR+RU (ideogram+logogram), MENE (logogram+logogram).

HT28a

The tablet contains five lists concerning various substances, especially perfumed oils. The initial word, a-si-jaKA, refers to all the lists.

Normalisation

a-si-jaKA	ja-wo ₂	qeGRA 5
		roOLE 2
		kiOLE Lm9
		miOLE 1
		tuOLE Lm26 ²
sa-rja	diOLE 1	
	FIC 2	
	VIN 3	
HOMO+KA	VIN 6	
A-ru-da-ra	GRA 5	
	*304 2	
	diOLE 3	
I-ta-ja	diOLE 10	

Translation

Offerings (KA) for 'Ασία (a divinity). 'Ιάων (a man) must pay: 5 units of qeGRA, 2 of roOLE, Lm9 of a unit of kiOLE, 1 unit of miOLE, Lm26² of a unit of tuOLE; the stoks (σάλία) are: 1 unit of diOLE, 2 of figs, 3 of wine; the carriers of offerings (HOMO+KA, a class of men) must pay: 6 units of wine; 'Αριδήλα (a woman's name) must pay: 5 units of wheat; 2 of *304, 3 of diOLE; Itea (a woman's name) must pay: 10 units of di OLE.

Notes

KA is in my opinion the logogram of *κάννα*, offering vessels.

A-ru-da-ra with the variation i/u = 'Αριδήλα, a woman's name, see Hsch: 'Αριδήλαν. τήν 'Αριάδνην. Κρητες.

I-te-ja, see 'Ιτέα. In Linear B i-ta-ja= woman's name. It is possible that its etymology is "sacred (I) to Τηά".

Observations HT28a:

- A hybrid word a-si-jaKA (phonetic part+logogram).
- A ligature: HOMO+KA.
- Doric forms A-ru-da-ra / 'Αριδήλα and σάλία for θαλία.
- Variation u/i : A-ru-da-ra / 'Αριδήλα.

HT28b

It is very similar to the side a but there is a further evidence of the reason for the offering (u-mi-na-si = ὕμνησις = hymns of praise, celebration).

Normalisation

a-si-jaKA	u-mi-na-si	sa-rja	GRA 20
			diOLE 5
			FIC 2
			VIN 4
	pu-rja		FIC 6
	ja-wo		diVIN 6
	wi-di-na		diOLE 3
			VIN 3

[

Translation: hymn of praise (u-mi-na-si=ῥμνησις), offerings (KA) for the goddess Ἀσία: σάλια (stocks): 20 units of wheat, 5 of diOLE, 2 of figs and 4 of wine; πολιάς (pu-rja, a class of men): 6 units of figs; ἰάων (man): 6 units of diVIN, Ὑδνη (wi-di-na, a woman's name): 3 units of diOLE and 3 of wine.

Note

Pu-rja, Hsch: πολιάς=γῆρας, here to indicate a class of persons.

Observations HT28b:

- A hybrid word: a-si-jaKA.
- A Doric form: wi-di-na for Ὑδνη.
- Graphic anaptyx rendered with the vowel i: u-mi-na-si /ῥμνησις; wi-di-na /" Ὑδνη.

HT 31

Although damaged along its left side, the tablet preserves a series of records pertaining to vessels of various shapes and sizes. The last of these is associated with the unusually high numeral 3000.

Although fragmentary, the heading is present, confirming that this text is self-contained and not the continuation of another tablet.

Three elements, in particular, merit close attention. Firstly, despite the damage, the presence of a heading confirms that this is a stand-alone document. Secondly, the word *karopa₃* is of considerable significance, appearing in line 3 above a vessel pictogram. The scribe renders this term with striking precision as *KA.ro-pa₃*: the separating point between *KA* and *ro-pa₃* is noteworthy, since the other signs placed above the remaining vessels are consistently spaced without any internal division. Thirdly, the exceptionally high figure of 3000, inscribed above the vessel pictogram in the final line, also deserves attention.

Based on the principles governing word formation in Linear A, the following translation is proposed for the existing portion of this text.

line 1:]ti-sa Πύργος (Pu-ko, a proper name) TRIPOD[

line 2: 10 vessels QA containing corn PA₃ (σπέρμα, seed), 10 vessels SU containing corn PU (πυρός);

line 3: 10 vessels KA containing ἀλοιφή (ro-pa₃), 30[(vessels of the same type) containing σάαμον i.e. an ointment of sesame;

line 4: ki-de-ma-*09-na[

line 5: 400 vessels, the content of which is lost, and 300 SU vessels containing pa₃-ra= πέλλα, bowls, buckets;

line 6: 3000 VAS, on the upper part of which the hybrid word pa-taQE, i.e. all (πάντα) the qe units, is written.

Notes

For QA, see σκύφος (root (s)qap). For PU as logogram, see the ligature *40+PU on HT23a,3.

SU denotes a type of vessel. On MA10a it is inscribed in a vessel. It most likely pertains to its intended function, as KA, denoting an ‘offering vessel,’ rather than to its exterior shape, since it also recurs in SUpa-ra, which exhibits a different configuration.

KA.ro-pa₃: offering vessels (KA) containing rop₃, ἀλοιφή (ro-pa₃, without the initial ἄ, according to the rules that govern the Greek words beginning with a liquid consonant).

Σάμμον is not written on the symbol of a vessel. Since there is no doubt of its meaning, the type of vessel which contained it must be the preceding one (KA)³, the same which contained ἀλοιφή.

ki-de-ma-*323-na[, unfortunately the fourth sign has an unknown value and the word could be incomplete, that makes it difficult to read and consequently to understand its meaning.

pa-taQE. The figure that follows this entry (3000) is strikingly high, but it cannot be understood as referring to the totality of the preceding vessels, for three reasons:

a) although many numerical indications are missing, they cannot reasonably amount to the equivalent of 2300 units;

b) despite its fragmentary condition, the tablet possesses a heading, and thus does not appear to be the continuation of another record, where other entries were recorded, whose figures had to be added to those of this tablet.

c) the vessels enumerated are of different shapes and sizes.

In my view, two considerations emerge:

a) since line 5 records 300 vessels SU containing pa₃-ra (=πέλλα, “bowls, buckets”), it is likely that the preceding 400 vessels—whose content is now lost—also contained bowls, buckets, or similar goods;

b) these 700 vessels in total (400 + 300) are to be understood, added to the other quantities, as containing the 3000 qe-units mentioned.

The logogram QE, besides denoting a substance, also functions as a metrogram, designating a unit smaller than the largest standard measure. Like other ancient peoples, the Minoans engaged in the trade of vessels, transporting them within larger containers.

Observations HT31

- Hybrid words: QAPA₃ and SUPU (logogram+logogram), KAro-pa₃ and SUpa-ra₃ (logogram+phonetic part), pa-taQE (phonetic part+logogram).
- Doric word: πέλλα (cups).

³ For this reason, the scribe employs the point after KA. The logogram KA is extensively attested as designating a category of offering vessels (cf. *κάννᾱ* or *κανᾱ*. See Hesychius: *κανᾱ* · *κανῖσκια*).

HT32

The tablet contains three lists. The transaction sign is *307, which is generally associated with men.

Translation:

First record: the reserve (sa-ra₂) for the aim *307 is of Lm 9 of a unit of *308, Lm9+Lm18 of a unit of *joOLE*, 1 unit of *40 and 1 unit of FAR+RU.

Second record: of SU vessels, the men RE have given 108 units and the men DI have given 65 units.

Third record: of the commodity *joOLE* [, the men RE have given 104 units and the men DI 53 units.

Notes

The second and third lists also refer to the initial transaction sign. It is likely that RE and DI have yet to provide their assigned products.

There is a punctuation mark, after the first RE, in third line before the figure.

FAR+RU, see HT23a,2.

Observations HT32

- 1) Ligature FAR+RU.
- 2) RE plus a dot.

HT85a

An interesting tablet which contains a list of men.

The translation is:

Donation (DU=δῶς) to the Palace (A) of men (HOMO) for the procession (pi-pi = πέμψις): 12 from DAῦδης (Δᾱ ῦδης= Δᾱ of the family, a confraternity), 12 from Φάνης (pa₃-ni, man), 6 from u-de₂-rjo, 24 from DAsιτίον (Δᾱ σιτίον, a confraternity), 5 from ku-dja-ni, 3 from Θήχης (te-ke), 4 from the RE of Δᾱ, for a verified total (κῦρος) of]66 men.

Notes

PIPI, a transaction term, the doubling of *307.

Δᾱ ῦδης, see Hsch: ῦδης . οἶκος.

Δᾱ σιτίον= Δᾱ wheat (σιτίον=wheat).

Observations HT85a

- Hybrid words: ADU (determinative plus monosyllabic word); DAwe-da and DAsi-tjo (monosyllabic words plus phonetic part); DARE (monosyllabic word plus logogram).
- Doric forms: pa₃-ni/ Φάνης.
- Final variation te-ke/ te-ki (HT13,3) ; variation u-de₂-rjo /u-de-rjo(HT122a,1).

HT86a

The tablet is divided into two entries, separated by a horizontal stroke. Both deal with the same commodity—wheat—and each begins with a term specifying the nature of the transaction (Aka-ru and ADU). The difference lies in the formulation: the first states that the wheat is an agreed quantity (*καιρός*) allocated to the palace (A) while the second records wheat given as a donation (*δῶς*) to the palace (A). In both cases, the grain is measured in submultiples of the standard unit (the first is $Lm18+Lm23^2$ GRA; the second is $Lm19$ GRA).

Translation

First record: $Lm18+Lm23^2$ fractions of a unit of wheat must be available (*καιρός*) for the Palace (A): *Κνωσός* (ku-ni-su), *Σάρος* (sa-ru) and di-de-ru each must give 20 units of them while *Τηλέας* (qe-rja-wa) must give 10 units of them.

Second record: $Lm19$ fraction of a unit of wheat is the donation (*δῶς*) due to the palace (A): *δάμος*, people (da-me = δᾶμος) must give 20 units and the servants, *μνοίτης* (mi-nu-te = μνοίτης), must give 20 units.

Notes

In the absence of transaction terms, the transfer of goods must be understood as not yet having taken place. *Κνωσός* and *Σάρος* are, in my opinion, proper names perhaps indicating clans. *Μνοίτης* or *μνωίτης* is a Cretan name meaning ‘servitude’ or ‘servant’. It is noteworthy that here *δάμος* and *μνοίτης* are recorded together.

Observations HT86a:

- Hybrid word Aka-ru and ADU (determinative+ monosyllabic word).
- Doric form *δᾶμος* for δῆμος.
- Doric word *μνοίτης*.
- Linear A/ Linear B final variation e/o: da-me/*δᾶμος*.
- Graphic anaptix with *i* (ku-ni-su/ *Κνωσός*).

HT90

Two records with the same transaction sign (I= for sacred aims).

Normalisation

I ku-ri-na sa-rja GRA 20, FIC 10, diOLE 3
si-ru ma-ri-tja GRA 1, FIC 1, miOLE 1, *304 1

Translation

First list: *σάλῖα* = stocks for sacred purposes (I): 20 units of wheat; 10 units of figs and 3 units of diOLE belong (-na) to the goddess *Κύρη*.

Second list: division (ma-ri -tja = *μεριτεῖα*) of the confiscated goods (si-ru = *σῦλον*): 1 unit of wheat, 1 of figs, 1 of the perfumed oil miOLE, 1 of *304.

Notes

Ku-ri-na: *-na* = belonging to, also elsewhere. For *Κύρη*, see Hsch: *Κύρη. ἡ Δημήτηρ*.

Σῦλον, spoils, confiscated goods. The structure of the sentence is “confiscated goods, the division is...”.

Observations HT90:

- Doric word: *σάλια* from *σάλλω* (doric form of *θάλλω*). Suffix *ja/ia*.
- Variation *i/u* (*si-ru/σῦλον*) and *i/e* (*ma-ri-tja/μεριτεῖα*).
- Possessive suffix *-na*.

HT91

Two records of agricultural commodities. The transaction sign *326 indicates a religious aim.

Translation

First record: sacred (I) offering (KA) for religious aim (*326): Lm5 of a unit of wheat, Lm20 of a unit respectively of *304, of *kiOLE*, of *uOLE*, of *miOLE*, oliv, ficus and vin, 5 units of the substance E.

Second record. Te-mi: Lm20 of a unit of *miOLE* [

Notes

The transaction sign *326 also occurs on HT35,1, where it is associated to the word *ti-ti-ku*, (*θυτικός*), which means “sacrificial” or “concerning the sacrifice”.

The reading of the initial term of the second record is very uncertain. Perhaps TE (tax) of MI.

Observation HT91

- The commodity *E*, here as in all the other records where it occurs, is followed by numbers notably higher than those of the other items.

HT102

The tablet contains two entries that are totalled together. The main difficulty it presents lies in the fact that the scribe denotes tens by means of dots, which consequently tend to be indistinguishable from one another. Indeed, after the word *Di-we-na* there is a dot rather than a numeral.

Normalisation

Ka-pa sa-rja GRA 976

pa₃-ni GRA 33[

]HOMO GRA 33

Di-we-na . ma-dja 3

WI 10

IKA 5

Ku-ro 1060

Translation: (first record) 976 units of wheat have been collected (ka-pa) for the reserve (sa-rja = *σάλῖα*); *Φάνης* (pa₃-ni, a man) has provided 33[units of wheat; the class of men [I]HOMO has provided 33 units of wheat.

(second record) 3 *μαῖζα* (ma-dja), 10 WI and 5 sacred offerings (I+KA) belong (-na) to *Diwe*;

the verified total (κυρος) of both the records is of 1060 units.

Notes

The reserve is very high since it amounts to more than ninety three thousand liters, corresponding to about 740 quintals, which, however, are fine for a reserve. Also, the units of *Φάνης* and of the priests are high (a little more than 25 quintals).

All the substances can be traced back to wheat, except *μαῖζα*, which we know from classical Greek refers to a flatbread made primarily of barley.

Ku-ro=κυρος, check, ratification (see *κυρώ*= to check, to confirm).

1060 Minoan units correspond to about 80 tons.

Observations HT102:

- Ligature IKA (determinative +logogram). The two signs are clearly in ligature, with KA written, as here, in a smaller form than *I* on HT91.
- Doric words: ka-pa and *σάλῖα*.
- Variation *i* / *η* (pa₃-ni/ *Φάνης*).
- Possessive suffix *Diwe-na*.

HT103

The tablet contains two lists: the first is the continuation of some other tablet and has only one item; the second begins in the second line. It has PA₃ as heading and concerns, in my opinion a distribution. The normalization of this list is:

PA ₃ . DAku-se-jo [	]6+Lm9
*87	13
DAku-na	1
DAkusejo	1 Ki-ra 5+Lm9

With the following translation:

of the commodity PA₃ (a corn, probably *σπέρμα*= seed),]6+Lm9 units must be paid (for analogy with HT104,1-2 the lost term is, in my opinion, TI) to the confraternity *DAχύσεως*], 13 to *87 (a class of men), 1 to *DAγυνή* (another confraternity). *DAχύσεως* has received one unit and the rest of 5+Lm9 units is now required (ki-ra = *χρή*).

Notes.

PA₃ is a corn (*σπέρμα*= seed, see Linear B) which occurs in ligature with wheat on HT93a,1. The sign is recognizable here by analogy with HT8a and HT8b, both of which contain two lists referring

to the same commodity.

DAku-se-jo[], TI can be the lost sign (see DAku-se-joTI on HT104,1-2). In this case, the repetition of the term in lines 4-5 would indicate that, out of the total distribution of $\underline{6}$ +Lm9 units of PA₃, the confraternity DAΧύσεως has received 1 unit, but is still to receive the remaining 5 + Lm9 units.

*87, here and elsewhere, a class of men.

DAku-na = DA γυνή= young bride, a confraternity.

Ki-ra = χρή.

Observations HT103

- Two hybrid words: Δᾱχύσεως and Δᾱγυνή (monosyllabic word + phonetic part).
- Doric form: ki-ra=χρή.
- Anaptixis rendered with the vowel *i* (ki-ra=χρή).

HT104

The tablet records a distribution of a grain (TE+RO=θέρος) All the terms referring to those who received the grain rations are followed by the logogram TI, which shows that the payment had already taken place. The grain is stored in τάρπη (ta-pa) baskets. The validated total (κῦρος) amounts to 95 units.

Normalisation

ta-pa TE+RO DAku-se-joTI 45+Lm9
IDUTI 20+Lm9
[pa-da-su-TI] 29
ku-ro 95

Traslation

Baskets, (ta-pa=τάρπη) containing grain (TERO=θέρος), payment (TI) to the confraternity DAΧύσεως: 45+Lm9 units; payment (TI) to the sacred (I) donation (DU=δῶς): 20+lm9 units; payment (TI) to [Πήδασος] 29 units. Verified total (κῦρος): 95 units.

Note

TE+RO, Hsch, θέρος . σίτος.

Observations HT104:

- Hybrid words: DAku-se-joTI (Monosyllabic word+phonetic part (Χύσεως)+logogram), IDUTI (determinative+phonetic word (δῶς)+ logogram,
- A ligature, TE+RO, composed by two phonetic terms.
- Doric form (ta-pa for τάρπη).
- Lm9=1/2 (45+20+29+2Lm9=95) .

HT117a

Two records separated by a horizontal segment.

Normalisation of the first record:

MAka-ri-te	ki-ro	u-mi-na-si	u-su 1
		mi-tu 1	
		ku-ra-mu 1	
		ma-ru 1	
		ku-pa ₃ -nu 1	
		tu-ju-ma 1	
		u-di-mi 1	
mi-ru-ta		raRE 1	
		te-jaRE 1	
		na-daRE 1	

Translation:

Hymns of praise (u-mi-na-si = ὕμνησις), offerings in thanks (χάριτες) to MA: ἵσος, (u-su, Il. 11,101 etc.), Μέντωρ/Μυττών (mi-tu), Κάλαμος (ku-ra-mu), Μάρων (ma-ru Od. 9.197), the κάβαρνοι, i.e. the priests of Δημήτηρ (ku-pa₃-nu), Θώνυμας (tu-ju-ma), Idmη (u-di-mi, the female of Ἰδμων) are all debtors (ki-ro=χῆροι) of one offering; they are also included (mi-ru-ta = μερίτης, nom.pl.) the RE of Ῥῆ (RA, a goddess), the RE of Θεᾶς (te-ja, a goddess), and the RE of Νέδα, (Na-da, a nymph), each of whom in turn owes one offering.

Translation of the second record.

Units of wheat (σάτα): ku-ku-da-ra must give one unit, Ko-sa-no (Κόρσανος) has already paid (TI) one unit, DA_{mi}-nu (ΔΑΣΜΗΝΟΣ= DAbeehive, a confraternity) must give one unit, Da-jo-ku (Δήιοχος) has already paid (TI) 1 unit, Ki-da-ro (perhaps the name of a group of men) must pay 1 unit.

Notes

In the first list the specific nature of the offering is not given, whereas it is explicitly indicated in the second. It is plausible that the type of offering had already been specified in a preceding tablet, which has not survived.

RA, Ῥῆ, Ρέα. It should be noted that in this case the logogram RE is preceded by the names of three divinities (Ῥῆ, Θεᾶς and Νέδα).

Mi-ru-ta, see also μεριστής = divisor.

For sa-ta (second list) see Hsch. σάτον . σιτικόν μέτρον (or, also, σάτα . μόρια, sacred olive trees).

- Observations HT117a
- Hybrid words: MAka-ri-te (Logogram+phonetic part); RaRE, Te-jaRE, Na-daRE (phonetic part+logogram), DA_{mi}nu (monosyllabic word+ phonetic part) Ko-sa-noTI e Da-jo-kuTI (phonetic name followed by logogram TI).
- Doric forms: RA / Ῥῆ (Ρέα.), Na-da / Νέδα.

- Variation s: *i/η* (mi-nu/σμη̃νος and ki-ro=χη̃ροι); variation *i/e* and *u/i* (mi-ru-ta/μεριστήσ n.p); variation *u/i* (ῥ /σος / u-su); final variation Linear A *u/* Linear B *o* (Κά/αμος /ku-ra-mu).

HT120

The tablet contains a record which refers to various amounts of wheat that the δᾱμος (Da-me= people) must give to several associations. To make the normalization clearer, the word *da-me* is repeated on each line.

Normalisation:

DAqe-ra	.	Da-me	Lm18+Lm26 ² GRA 74,	paGRA 62+Lm9+Lm20
DAu-pu ₃	.	Da-me	Lm20IGRA 20	
Ki-re-ta-na		Da-me	Lm19GRA 60,	Lm20GRA 48
PA		Da-me	IGRA 3+Lm23	

Translation

The people (da-me = δᾱμος) must give wheat to several confraternities:

to DA of hunting (DAqe-ra=Δᾱ θῆρα): 74 units of the fractional units Lm18+Lm26² of wheat and 62+Lm9+Lm20 units of *pa*wheat;

to the confraternity Δᾱ ὄπιον (DAu-pu₃): 20 units of the fractional unit Lm20 of *I*wheat;

to Ki-re-ta-na: (Κυρίτα+na) 60 units of the fractional unit Lm19 of wheat and 48 units of the fractional unit Lm 20 of wheat;

to PA: 3+Lm23 units of *I*wheat.

Notes

Da-me = δῆμος, people.

The last term is not *pa-i-to*, but should be read as *PA* and *IGRA*. Both notions (*PA* and *IGRA*) are attested in the records and are consistent with the content of the tablet.

Observations HT120

- Hybrid words: DAqe-ra and DAu-pu₃ (monosyllabic words+phonetic part).
- Ligature: IGRA (determinative+ideogram).
- Doric word: da-me = δᾱμος.
- Variation i/u (Ki-re-ta/Κυρίτα).
- Final variation e/o (Linear A da-me /Linear B da-mo).
- Possessive suffix –na (belonging to Κυρίτα).

KN1

side a) ja-ku TI *38 240

side b) ja-du-ra TI *38 105

Translation

- a) Ἰακουγος, payment (TI) of 240 units of the commodity *38.
- b) Ἰαδύλη, payment (TI) of 105 units of the same commodity.

Notes

Ja-ku and, possibly, ja]-du-ra also occur together elsewhere (see respectively MA2b,2 and 2a,1).
Ἰακουγος represents a man whose name could also be Ἰακων or Αἶγων.

*38 designates a commodity that appears frequently and is always followed by higher figures compared with all the other commodities in the record. Since its phonetic value is *e*, it could stand for ἐλαία= olives, ἐρέβινθος= chickpeas , ἐλάττη= dates, which are all bulkier than the other commodities.

Observations KN1:

- Hybrid words: Ja-kuTI and Ja-du-raTI (phonetic part +logogram TI, meaning payment).
- Variation *ja/η* (Ja-du-ra/Ἰαδύλη).

MA1

The tablet contains no figures. On side A it begins with the sign X, which in Linear B indicates that the scribe has checked the entry.

Normalisation

Side a) X IDu-wi *47 qe-de-mi-nu
Side b) AMA *47 qe-de-mi-nu
Side c) TI

Translation

Side a: the check mark (X) confirms that the offering (*47) to the sacred (I) divine pair (I) Δύῖ (duwi) has been obtained with profit (qe-de-mi-nu = κερδημένος).

Side b: the same offering (*47) has likewise been obtained with profit (qe-de-mi-nu = κερδημένος) for the royal (A) Mother (MA, an epithet of the Great Goddess).

Side c: payment (TI).

Notes.

Du-wi = Δύῖ is the dative-locative form of δύο (“due”). Here referred to divinities.

*47 stands for an offering, but, although the symbol is very similar to the symbol for KA, it probably indicates a different type of offering although it is unlikely to refer to gold.

Qe-de-mi-nu = κερδημένος, past participle middle of κερδαίνω ‘to obtain with profit.’ One would expect a dental outcome of the labiovelar; however, also in Linear B a velar outcome is not rare. For *mi* instead of *me*, see the Linear A alternation *i/e* (for instance, ki-ri-ta₂ / ki-re-ta₂, etc.).

Observations MA1

- Hybrid words:AMA (determinative+logogram, IDuwi(determinative+phonetic part)).

- Doric form and variation e/i: (qe-de-mi-nu = κερδημένος).

PA1

Normalisation

a-ku YU pa-tjo 35

Translation

"Αργος must produce (pa-tjo= σπαρτέον) 35 units of FAR (YU).

Notes.

"Αργος represents a man whose name could also be Ἀλκων or Αἶγων.

The third sign indicates a commodity which, as can be verified from the photograph, is FAR (or, less likely, IFAR, i.e. FAR intended for sacred purposes).

Pa-tjo= σπαρτέον from σπείρω to sow, or also = πατέον from πάομαι, must receive.

Observations PA1

- Variation i/e (pa-tjo= σπαρτέον/πατέον).
- Doric form: verbal adjective in tjon (pa-tjo= σπαρτέον).

PK1

The heading is unfortunately damaged, but a lengthy sequence of SI⁴ (the sign is marked with a horizontal stroke at the bottom) can be identified. SI functions as a logogram, as it is repeated also on side c of the tablet, where it is, however, damaged. The tablet records personal names, which the scribe groups according to the initial sign, (almost in alphabetical order). It most probably concerns a distribution.

Translation:

SI[]-jo Payment (TI): Χάβης, (ka-qa), 2 units; Αἶδωλιος (a-du-rjo), 1; the τηρός of Θεά (Tja ta-re), 1; the θυτήρ of Θεά (Tja ti-te), 1; o-ka-mi-rjo-i-na, 1; 'Ορθεία (o-te-ja), 1; ra-na tu-su, 1; ni-mi tu-su, 1; ma-ti-rjo-i-te, 1; the μαθητής (ma-te-ti), 1; the sacred (I) θής of Μάχα, (Ma-khaITA) 1.

Note s

For ti-te see Hsch θύτες·μάντις (Minoan variation i/u).

O-ka-mi*23-i-na, perhaps two words. The sign *si* is not part of this group of signs but, as also happens in MA1, it is inscribed on side c of the tablet and recalls the initial *si* sign.

Tu-su has the same potential energy o RE. It stands in my opinion for a kind of men.

For Ma-kaITA, see Hsch μαχητής·στρατεγός.

⁴ The sign *41 has two values, *ne* and *si*. The scribe distinguishes the two by placing a dot or a short stroke at the lower part of the sign when it has the value *si*. However, since he knows the intended value, he does not always respect this rule. In ligatures the sign almost always has the value *ne* and is equivalent to νέος, young.

Observations PK1:

- Hybrid words: *Tja ta-re*, *Tja ti-te* (monosyllabic word + phonetic part). Ra-na tu-su and Ni-mi tu-su are not hybrid words; they are compound words formed by a divinity name (Ῥήνε and Ni-mi) plus the noun tu-su.
- Doric proper name: *Ορθεία*.
- Doric forms: ka-qa for *Χάβης*, ra-na for *Ρήνη*; ta-re for *τηρός*.
- Variation u/i (ti-te for *θυτήρ*) and final variation e/o (ta-re for *τηρός*).

PH2

The tablet records two entries concerning distinct types of oil. The first pertains to *aOLE*, denoting oil of first quality (with A to be understood as the ‘royal’ designation), while the second refers to common oil. There can be little doubt that *aOLE* represents the ligature OLE + A, here written in full.

Normalisation

aOLE tu-me ra-o-di-ki 60
pi-ru-qi-ju 60
OLE sa-pa₃ 60

Translation

Oil of royal kind (A) for the homage (tu-me = τιμή): *Λαοδίκη* (woman’s name) 60 units;
Φιλοίτιος (man’s name Od.20) 60 units.
Oil: *Σέβης* (man’s name) 60 units.

Notes

The scribe writes the point after *tu-me* as a vertical stroke. It can be mistaken for the digit 1, but in my opinion it is not a numeral, because the quantity is too low compared to the other ones.
Tu-me, the second sign is uncertain. It could also be wo₂ (*21^f).
Pi-ru-qi-ju, the third sign is *301.

ObservationsPH2

- A ligature: *aOLE*= oil of royal type (A).
- Doric form: sa-pa₃=*Σέβης*.
- Variation i/η Ra-o-di-ki/*Λαοδίκη*.

ARKH2

The tablet contains a record referring to wine in the form of *131b, probably must. The last line is illegible. The scribe employs the ideogram for wine only after the first item; for the sake of clarity, in my normalization of the tablet, I will reproduce it on each line.

Normalisation

Si-da TE ku-ra VIN 5

Asi-da-to-i VIN 12
Dja-*161-se-de wo₂-tjo VIN 6
Asu-pu-wa VIN 4

Translation

Tribute (TE) of wine-must at Σίδα: 5 units to Κύρη; 12 units to the royal (A) σὺνδείοις = relatives; 6 units must be carried (οἰστέον) to Dja₂-*161-se-de; 4 units to the royal (A) larder (σιπύη).

Notes

Σίδα = Σίδη, place name attested also in Linear B. The stroke inside the sign “si” is well evident. So it is certain that here it has not the value of ‘ne’.

Κύρη = Δημήτηρ (Caeres).

Asi-da-to-i: dat. m. pl. of σὺνδετος, relative.

Dja-161-se-de: Dja could be a divine name; the suffix -de may be allative, but the value of *161 remains unknown.

Observations ARKH2

- Two hybrid words, both with the determinative A: (Asi-da-to-i and Asu-pu-wa (determinative+ phonetic part (royal σὺνδείοις and royal σιπύη).
- Doric forms: Σίδα = Σίδη, ku-ra= Κύρη, si-pu-a= σιπύη.
- Dative case Asi-da-to-i: dat. m. pl. of σὺνδετος.

ZA6b

Translation: Κοῖος (Ku-ju) must pay (TI), for sacred aims (I): 50 units and Lm1 of sacred (I) GRA of the kind PA; 40 units of raVIN, 10 units of kaVIN;

*36-tja (must pay): 40[units of paGRA[

The rest of the tablet is very damaged.

Notes

I is transaction sign. It is well separated from the following sign and is not even on the same line.

RaVIN= ῥάξ.

KaVIN, see καρύινος or wine for offering.

*36-tja has the position of a transaction terms, see e-tjo on ZA4a.

Observations ZA6b

1. Hybrid word : Ku-juTI (phonetic part +logogram).
2. Ligatures; Vin+RA and Vin+KA (ideogram+logogram)

ZA10a and b

The tablet is inscribed on both sides and, since side a has no heading, it is the continuation of another tablet. It contains five lists distributed over the two sides. The scribe, as he does also in other tablets, writes the point as a vertical dash which is confusable with the units. This happens twice after the word ku-mi-na (κύμινον), which is certainly a spice. It is important to observe the

following detail: on two occasions—line 2 of side a and line 3 of side b—the sign TE, which indicate a tax, is found in ligature with the sign TI, the latter appearing as a small appendage beneath. This ligature indicates that the tax had already been paid, for, whenever the sign TI occurs, it serves as a marker that a payment has taken place.

Side a

First list (continuation of another record):

ta-na TE 2

PA 1

Second list (third pattern⁵):

A-ku-mi-na A-ta-na TE+TI 1

A-mi-da-u 1

Third list (fourth pattern):

ADU ku-mi-na Da-i-pi-ta 1

Du-re-rjoSE 2

Side b

Wa-ri 2

Fourth list (first pattern):

Du-re-rjo SE VIN 5

u-pu₃ 6

ma-dja 2

ma-ki-de TE+TI 5

sa-ma 5

a-de 4

a-mi-ta 3

rja-ro-re 2

Fifth list (perhaps first pattern)

PA ia-[] 1

ka-ku-jo TE Lm9

TA 2

DU 1[

Translation - **side A:**

first list: ta-na (a kind of men) must pay the tax (TE) of 2 units of a commodity that was indicated in a preceding tablet; PA (another kind of men) must pay 1 unit of the same commodity.

second list: of the spice *κύμινα* reserved to the Palace (A), the rojal (A) ta-na (a kind of men) have already paid the tax of 1 unit; A-mi-da-u has paid 1 unit of the same substance;

third list (fourth pattern): donation (DU) to the Palace (A) of the spice *κύμινα*: Da-i-pi-ta , Du-re-rjo SE and Wa-ri?_ must respectively give 1, 2 and 2 units.

Fourth list: du-re-rjoSE must give 5 units of wine, 6 of *ὄπιον* (u-pu₃), 2 *μαῖζα* (ma-dja), he

⁵ For the patterns of the records, see “The Ideophonetic System of Linear A” www.enricapatria.com.

has already paid the tax of 5 *μαγίδες* (ma-ki-de), 5 σέλμα⁶ (sa-ma), 4 (*αίδης*) a-de, 3 *αμιθάς* (a-mi-ta) and 2 ra₂-ro-re.

Fifth list: it cannot be normalized with certainty because the second and the third sign of the first group are not visible. It probably refers to a series of items that PA, the same term as in the first list, must give as a tax. Among these there are two TA-workers and, possibly, a donation (DU).

Notes

Ta-na, a category of men, See also "Adu FIC ta-na 41[" on ARKH5, which can be translated: donation (DU=δῶς) of figs to the Palace (A), the men ta-na must give 41[units of them.

A-mi-da-u, royal (A) *μεδέων*, protector.

Da-i-pi-ta, Δηίοπιτης.

WA-ri, the second sign is very difficult to understand. It could also be qi or a ligature.

Du-re-rjoSE= SE *δουλεῖος*, perhaps the administrator of the slaves.

U-pu₃ = ὄπιον.

Ma-dja = *μαῖζα*, a flatbread.

Ma-ki-de TE+TI, nom. pl. of *μαγίς*, a kind of flatbread. TI ligatured with TE means that the tax has been already paid.

A-de, *αίδης*, a kind of food, see Hsch. Αἶδης· πλακοῦς τις.

A-mi-ta, *αμιθάς* a kind of food, see Hsch. ἄμιθας· πλακοῦς τις. But also *μίνθη* of high quality (A, i.e. reserved to the Palace) might be possible.

Observations ZA10

- Hybrid words Aku-mi-na (determinative +phonetic part); AtanaTE+TI (determinative+phonetic part+ligature); Ami-da-u (determinative+ phonetic part *μεδέων*); Du-re-rjoSE= SE *δουλεῖος* (Phonetic part+ logogram).
- Doric words: *αίδης* and *αμιθάς*.
- Ligature: TE+TI .
- Variation i/η (mi-da-u/ *μεδέων*).
- Omography ta-na meaning men and tana meaning *θέναρ* (sacrificial table).
- Grammatical notes: *μαγίδες* n. pl of *μάγισ*.

KH7a

Lines 3–4

The list shows a deficit. What is especially striking is the sign KI, written smaller than the others, both before the man symbol and in the first line of the tablet. There is no doubt about its logographic use. The scribe renders the separating point as small vertical strokes.

Normalisation

Ija pa-me . ta-ta . qa-ti kiHOMO 4, Lm23HORD Lm19

⁶ See Hsch: Σέλμη· μύρον

Translation

For the sacred (I) voice (*ἰά*) of the oracle (pa-me=*φήμη*) has been confirmed (ta-ta = *ἐτέθην*) a lack (*χᾶτις*) of 4 kimen and Lm 19 of an Lm23 fraction of HORD.

Notes

On line four, the list is followed by another record.

Ija could also be the equivalent of ja-ja, the female of ἰήϊος= invoked. In this case, the phrase would be translated as: for the invocation of the oracle.

Ta-ta = *ἐτέθην* (from *τίθημι*) without the temporal augment of the aorist passive.

Ki, (also on HT118, a tablet concerning pigs. See *κίρων*, castrated, Hsch.).

Observations KH7a

- Hybrid words: Ija (determinative+monosyllabic word).
- Doric word: qa-ti (*χᾶτις*).
- Doric form: pa-me for *φήμη*.
- Verbal indication: ta-ta for *ἐτέθην*.
- The record also provides a numerical indication. Since the quantity of Lm 19 is missing of the amount of Lm 23, Lm 19 must be a smaller fraction than Lm23.

KH10a

Lines 3–4

Normalisation

Ipa-sa-ja . qa-tjo [] a-ki-pi-e TE GRA 90

Translation

'*Αλκιβίη* (a-ki-pi-e) must pay (qa-tjo=*τετέον*) the tax (TE) of 90 units of wheat to the sacred (I) *Περσαία*.

Notes

A-ki-pi-e = '*Αλκιβίη*.

Ipa-sa-ja = *Περσαία* is a Nereid, just like '*Ρήνη*. Both are attested in Hesiod as sea nymphs, protectresses of fishermen and seafarers.

qa-tjo = verbal adjective (see note 2).

Observations KH10a

- Hybrid word: Ipa-sa-ja (determinative+name of deity).
- Doric form: verbal adjective qa-tjo.

PE 1

The tablet appears to preserve two distinct lists; however, it is damaged immediately after what would have been the initial word of the second list (e-ka[]), preventing any definitive confirmation

of this assumption. The following is the normalisation of the first list.

u-ka-re ASENE-na ku-pa-ri HOMO 50 paGRA 26 and Lm9 etc.

Translation

Ὀγκαλη, belonging to (-na) to the royal (A) SENE (a clan), Κυβελίς (ku-pa-ri): 50[men, 26 units of *pawheat*, etc.

Notes

Ὀγκαλη was the name of the nurse of Demeter. Here Ὀγκαλε must have been an important woman, since she is associated with at least fifty men and 26 units of *pawheat*.

The association of ku-pa-ri with Κυβέλη also leaves me perplexed; nevertheless, the lexical correspondence is immediate (also for the well attested final variation i/η) and I have to report it for the sake of accuracy. Moreover, on HT88,4, the proper name Ku-pa₃-pa₃ (Κυβήβη), which is even older, occurs. The word may represent a religious and linguistic loan, carrying a general meaning such as “lady” or “master,” and revealing the intense cultural interactions that the Minoans maintained with the wider ancient world.

SENE= SE+NE since it occurs ligatured on HT116a,3; HT99b,1, etc.. It refers to a class of persons, in my opinion a clan (SE=a type of men, NE=νέος), which in this case has the appellation of royal (A). It occurs also on PKZb19.

Observations PE1

- Hybrid words: ASE+NE-na (determinative+ligature (logogram plus logogram) +suffix-na).
- Doric form: ku-pa-ri/ Κυβέλη.

PEZb3

A-ka-ra ki-ta-na ne-ja-se HOMO+RJO.

Translation

Ἑκάλη, belonging to (-na) to the clan of Ki-ta (Κίτας), filled (ne-ja-se 3rd sing. aor. from νηέω, to fill). HOMO+RJO.

Notes

Given that the inscription appears on a vase, the term ‘filled’ is especially apt. It is also found on another vase (HTZb159).

The sign which is ligatured with HOMO is *17 and not *79. Therefore, reading it as *za* is unjustified, since it is the sign *79 (dja) that bears this value, not the sign *17.

HOMO+RJO is emblem of the clan to which Ἑκάλη belongs.

Ki-ta occurs also on PKZb21 and on HT123a,1. On PKZb21 the text reads: ki-ta-ni-te=ki-ta FIC TE=Κίτας, figs, tax (TE). It may also be the equivalent of the proper names Γέτας or Σκύθης or derive from χύται nom. pl. of χύτης, (variation i/u) meaning ‘smelters’, the guild clan of which Ἑκάλη is a member and whose trademark is HOMO+RJO.

Observations PEZb3

- Ligature: HOMO+RJO (pictogram+logogram).

- Doric form: A-ka-ra for *Ἑκάλη*.
- Variation *ja/η* (ne-ja-se/*νήησε*).
- Verbal form: *νήησε* (3rd sing. aor. from *νήέω*).
- Possessive suffix *-na*.

KIZa2

DA ma-te = *Δᾶ μήτηρ*

Observations KIZa2

- Hybrid word DAma-te (a monosyllabic word+a phonetic group).
- Doric word: *Δᾶ*.
- Doric form: *μάτηρ* for *μήτηρ*.

KNZb5

Atu-ri-siTI = Payment (TI) to the royal (A) *θυρίσι*, dat pl. from *θύρις*.

Observation KNZb5

- A hybrid word: Atu-ri-siTI (determinative +phonetic part+logogram).

PHZb4

Ne-ma . Ija-te

Translation

Sacred (I) healing (*ιάτήρ*) water (*νήμα*).

Note

Hsch: *νήμα* . *ύδωρ*, *ύφασμα*.

Observation PHZb4

- Hybrid word: *Ιιάτήρ* (determinative + phonetic part).

ARZf1

IDAmate = sacred (I) *Δᾶ μήτηρ*

Observations ARZf1

- Hybrid word: IDAmate (determinative +monosyllabic word+phonetic group).
- Doric word: *Δᾶ*.
- Doric form: *μάτηρ* for *μήτηρ*.

PRZa1

Ta-na su-te-[i]-ke se-to-i-ja a-sa-sa-ra-me

Translation: Siteia (Se-to-i-ja, a Linear B place name) put (συνέθη[ι]κε) this libation table (ta-na=θέναρ) for the good omen (a-sa-sa-ra-me).

Notes

Su-te-[i]-ke. In Linear A, as in Linear B, the temporal augment in the aorist is not noticed. The final *v* of *συν* falls. Another translation could be, however, possible: Σύς (man's name) έθη[ι]κε. In this case Siteia is the place in which the altar has been dedicated.

Tana=θέναρ. It alternates with a-ta = ἄντην (prayer, supplication) in the religious inscriptions. However also the meaning of “this” could be possible since τήνος is the Doric form of the demonstrative pronoun of the object.

Observations PRZa1

- Doric form: ta-na for θέναρ.
- Verbal form: συνέθη[ι]κε.
- Omography: ta-na/θέναρ and ta-na/people.

SYZg1

A[QI] da-tjo

Translation: [QI] of first quality (A), which must be distributed (δατέος, verbal adjective from δατέομαι).

Notes

The inscription appears on an ovoid stone, which might also have served as a weight, and would therefore indicate the quantities of [QI] that were to be distributed.

Perhaps [QI], if the reading is correct, is the same substance as IQI in the religious texts.

Observations SYZg1

- Hybrid word: A[QI] (determinative+logogram).
- Verbal form: δατέος from δατέομαι.

ZAZb3

VINUM 32. DI di-kaSE . Asa-me-jo . ASE . a-ta IQI de-ka . a-re _ pi-re-na . ti-ti-ku

Translation: 32 units of wine. To DI, administrator (SE) of justice (δίκης), royal (A) emblem (σημεῖον), royal (A) guide (SE), for the supplication (ἄντη), I, Αλῆς (A-re), gave (de-ka) as sacred (I) offering (QI) grape (πυρῆνα) for the sacrifice (θυτικόν).

Notes

SE= possible logogram of Σημάντωρ, guide, administrator or of Σημαλέος, two terms that are widely used in the religious context.

The central group a-ta-i-qi-de-ka must be divided into a-ta IQI and de-ka. IQI must be considered a separate group since it appears unchanged even when the preceding term varies (See, for instance, PSZa2 where it is preceded by ta-na instead of a-ta) or when the following term changes, as in this case where *de-ka* occurs instead of *wa-ja*⁷, which also is a verb and occurs in the most part of the other religious texts. Moreover, the group also appears on its own in the economic documents (KN2,2) and once (HTWA1022) it is certainly written in ligature⁸.

De-ka = ἔδωκα⁹ aor. from δίδωμι (root de/do).

A-re also ARE= royal (A) attendant (RE).

Πυρῆν means seed, also grape. *Πυρῆνα* is acc. m. s. like *θυτικόν* which is an adjective (variation i/u) referring to it.

Observations ZAZb3

- Hybrid words: di-kaSE (phonetic group+logogram), ASE (determinative+logogram); Asa-me-jo (determinative + logogram).
- Ligature IQI (determinative+logogram).
- Doric forms: sa-me-jo for *σημεῖον*; di-ka for *δίκης*; a-ta for *ἄντην*.
- Verbal form: de-ka for *ἔδωκα* (root*de/*do), first person singular.
- Grammatical indications: accusative case *πυρῆνα* from *Πυρῆν*.
- Variation i/u pi-rena for *πυρῆνα* and ti-ti-ku for *θυτικόν*.

HTZb159

A-na-nu ne-ja-se[= "Ἀνανός (man) νήησε=Ananos filled.

Observation HTZb159

- Verbal form: ne-ja-se, the same variation, ja/e, η, as in wa-ja/wa-e.

HTZb160

Pa-ta DA du-pu₂-re [

Translation: Lady Δᾶ λάβρυς (i.e. of the double axe).

Observation HT160

- Hybrid word: pa-taDA (appellative+monosyllabic word).
- Doric word: pa-ta for *πάστας*.

⁷ Wa-ja is the present imperative form of the verb ἄω, which also appears in Aeolic and Doric dialects as οἶω. The imperative ending in -a is characteristic of Doric (see, for example, *φέρα* instead of *φέρε* from *φέρω* or *λῶα* instead of *λῶε* from *λύω* cf. Buck §84, etc.). Moreover, wa-ja is also attested in the variant form wa-e in PKZa11a.

⁸ Unfortunately, QI is a logogram that can have more than one meaning, since—when its occurrences are compared—in some contexts it definitely refers to men, in others it definitely refers to products. The translation could therefore also be “sacred suppliant,” or something of that kind. It alternates with ra-te (IOZa2a-b) = *ῥαντήρ*, “scent-sprinkler,” but I prefer to render it with the general sense of “sacred offering”.

⁹ De-ka= ἔδεκα, a Cretan variant of the aorist of δίδωμι.

The following three inscriptions (SYZa2, TLZa1 and IOZa2) exhibit a striking structural similarity. but the first seems an abbreviated form of the others.

All begin with the standard introductory formula (a-ta IQI waja), followed by the designation of the deity (JAsu-ma-tu, Osu-qa-re and JAdi-ku-tu respectively). The word ja-sa-sa-ra-me follows, which in the first inscription is replaced by the ideogram of the olive. The subsequent terms u-na-ka-na-si i-pi-na-ma si-ru-te, constituting the second section of the first part, are in SYZa2 reduced only to u-na-ka-na-si which is connected in ligature with the ideogram of oil.

Other two differences are clear: SYZa2 contains an additional group of signs, (A-ja), spatially set apart, which may reasonably be construed as the name of the dedicator or of the scribe, while IOZa2 continues with a second part.

A comparative analysis strongly confirms in my opinion that the first inscription represents a condensed or abbreviated version of the others. The ideogram for olives clearly replaces the word *ja-sa-sa-ra-me*, while the oil ideogram, joined to *na-si*, replaces the sequence *i-pi-na-ma si-ru-te*. It seems unlikely that the scribe's choice of the olive and oil ideograms was accidental. Both are endowed with a well-established symbolic resonance and were among the privileged offerings presented to the deity in supplications for peace and wealth.

The substitution of the oil ideogram for *i-pi-na-ma si-ru-te* appears particularly transparent and reinforces the hypothesis that this segment of the formula should be understood as “to conciliate the sacred spirit.” In this context, the offering of oil expresses the same ritual meaning as the verbal formula *I pi-na-ma si-ru-te*, that is, ‘the sacred (I) *πνεῦμα συλλύετε*’ (render the sacred spirit propitious).

More problematic is the replacement of *ja-sa-sa-ra-me* with the olive ideogram. It is well documented that in certain contexts divinities might be represented not by their written names but by their symbolic emblems¹⁰. This opens the possibility that, in the present case, the ideogram functions not merely as a reference to the offering but as a symbolic surrogate for the divine name itself. But, this seems impossible to me. If this is a deity, why doesn't it have a convincing translation into Greek? If we consider Dā, the Great Mother, not only does her name appear in the dictionaries, but also all the epithets (*Κύρη, Μάτηρ, Γυνή, Βαία, Κυρίτα, Μάχα*) with which she is invoked appear there as well. For what reason, then, is *ja-sa-sa-ra-me* missing?

Moreover, if we examine this word carefully, we can see that it varies and appears as *ja-sa-sa-ra* / *ja-sa-sa-ra-me* / *ja-sa-sa-ra-ma-na* / *ja-sa-sa-ra-jo* and once also as *ja-sa-sa-ra-325*. We are therefore justified in thinking that *ja-sa-sa-ra* is the original form, and that *me*, *ma-na*, *jo* and **325* represent additional forms.

However, in the accounting lists there also appear *ji-mi-sa-ra* and *jsa-raDI* on the same tablet (HT 27a, line 3 and 5), which are words that certainly refer to a type of men. There also appears *sa-ra-ra* (HT 30,3), which is certainly a product; and although it is difficult to read, *ADU-sa-ra* (HT 62, 1) could also be attested, where *ADU* corresponds to “royal donation,” so that the whole expression might mean “royal donation of/to/for *sa-ra*.” However, since the subject requires extensive discussion and falls outside the intended scope of this article, I prefer to postpone it and continue to

¹⁰ To make an example the Egyptian gods Ra and Isis were respectively represented by the hieroglyph of the sun and the hieroglyph of the throne. The Mesopotamian goddess Inanna, in turn, was represented by an eight-pointed star.

follow the approach I outlined earlier, translating it with the general meaning of “good omen”.

SYZa2

a-ta IQI wa-ja . JAsu-ma-tu OLIV. u-na-ka-na-si+OLE

A-ja

Translation: royal (IA) *Συμμήστωρ* (Su-ma-tu), hear (αἶε¹¹) the prayer (ἄντην) as sacred (I) offering (QI) for the good omen. *Οἶνη καὶ νῆσις*+oil (wine and oil-soaked thread, be a symbol of peace, that is the sacred (I) *πνεῦμα συλλύετε*).

Αἶα or *Αἶας* (possibly the name of the offerer, or, perhaps, of the scribe).

Notes

JAsu-ma-tu, royal (JA/A) *συμμήστωρ*¹², advisor, a term which is used as divine epithet.

The symbol that stands for OLIV is written ideographically. Offering olive branches to the gods meant invoking their benevolence.

Na-si = *νῆσις*¹³. Until now I have rendered *na-si* with the general meaning of “offerings.” Although *νῆσις* literally means “thread,” I had hesitated to use this translation because it seemed too trivial in connection with the thread of Ariadne. However, since remains of fibres and wicks—probably used to kindle a ritual fire in honour of the deity—have been found in the sanctuaries of Kofinas, Iouktas, Petsofas, and Tylissos, I now translate the expression as “wine and thread.”

In various ancient cultures, especially in the Greek world, people dedicated threads, ribbons, or strips of cloth to the gods. These were used to signal a supplication or a prayer, to decorate statues or altars as a votive act, and to offer a personal object of symbolic value, often associated with protection or healing. Votive ribbons were common in sanctuaries and in processions.

Significantly, in this instance the term appears in ligature with “oil,” which seems to support the interpretation of this practice as a symbol of peace.

Observations SYZa2

- Hybrid words: IAsu-ma-tu (determinative (JA/A)+ name of divinity) .
- Ligatures: IQI (determinative+logogram); nasi +OLE
- Initial variation A/JA.
- Verbal form: wa-ja for αἶε.
- Doric forms: Su-ma-tu for *Συμμήστωρ* and wa-ja for αἶε.

TLZa1

a-ta IQI wa-ja . O-su-qa-re . ja-sa-sa-ra-me u-na-ka[-na-si Ipi]-na-ma si-ru[-te

Translation: Osu-qa-re = *Ὀρσίφαλος* (the name of the divinity), accept (αἶε) the prayer (ἄντην) as sacred (I) offering (QI) for the good omen (ja-sa-sa-ra-me). *Οἶνη καὶ νῆσις* (wine and thread)

¹¹ See note n.7.

¹² *Μήστωρ* is a term regularly used in the *Iliad*, in reference to both gods and men.

¹³ See Hsch: *νῆσι · τὸ νῆμα*. In the economic documents there also appears the confraternity *ΔΑνησις* (HT126a,1), which was probably an association of spinners or textile workers.

‘συλλύετε (si-ru-te) the sacred (I) πνεῦμα (pi-na-ma).

Notes

Ὁρσίφαλος from ὀρσί- + φᾶλος: the One who brings forth the light, a divine epithet.

Συλλύετε: 2nd person plural imperative, without thematic vowel.

Observations TLZa1

- Hybrid word: Ipi-na-ma (determinative+phonetic group).
- Ligature: IQI (determinative+logogram).
- Doric forms: wa-ja=ᾗε.
- Variations i/u si-ru-te/συλλύετε and final variation e/o Osu-qa-re/ Ὁρσίφαλος.
- Conjunction kai.
- Absence of the thematic vowel: Si-ru-te/συλλύετε.
- Anaptyxis rendered with the vowel i: pi-na-ma/ πνεῦμα.

IOZa2

a-ta IQI wa-ja . JAdi-ki-tu . ja-sa-sa-ra[me . u-na-ka-na]-si _ i-pi-na-ma . si-ru-te . ta-na ra-te u ti-nu . IDA [

Translation: royal (JA) Δίκτυς (Di-ki-tu, the epithet of the divinity), accept (ᾗε) the prayer (ἄντην), as sacred (I) offering (QI) for the good omen (ja-sa-sa-ra-me). Οἶνη καὶ νῆσις, συλλύετε the sacred (I) πνεῦμα. I pay (ti-nu=τίνω) this (ῑ¹⁴ is the Cretan transcription of the doric form φος for ὅς) libation table (θέναρ) as scent spreading (ραντήρ) for the sacred (I) DA[

Notes

Ja-di-ki-tu = royal (IA) Δίκτυς, an epithet of DI.

Ti-nu=τίνω (root *ti). The final variation u/ω, is attested in Doric, especially in Laconian.

On PSZa2,2, the group u ti-nu is replaced by the logogram TI which means paid. This confirms the value attributed to it “to pay”.

Osservazioni IOZa2

- Hybrid word: JAΔίκτυς (determinative JA/A+ divine name).
- Doric form of the relative pronoun φος ; final variation -u / -ō (cf. ti-nu / τίνω).

KOZa1

The divinity is here Dᾱ, who is preceded by two appellative, Tu-ru-sa and Dupure.

Normalisation:

a-ta IQI wa-ja Tu-ru-sa Du-pu₂-re . IDAA u-na-ka-na-si . i-pi-na-ma . si-ru-te

¹⁴ In Ancient Greek, especially in the Doric dialects, the pronoun ὅς (‘who, which’) can appear in the variant φος, which reflects the preservation of the ancient labiovelar semivowel /w/.

Translation: Protectress (Tu-ru-sa), owner of the *λάβρυς* (du-pu₂-re), sacred (I) *Dã* of the Palace (A) accept (*ἄιε*) the prayer (*ἄντην*) as sacred (I) offering (QI). *Οἶνη καὶ νῆσις συλλύετε* the sacred (I) *πνεῦμα*.

But, given the *a/ja* alternation, the group IDAa could also correspond to IDAja, in which case the reading would be the following: “Protecting Double Axe” (Tu-ru-sa Du-pu₂-re) of the sacred (I) *Dã* (genitive), accept (*ἄιε*) the prayer (*ἄντην*) as sacred (I) offering (QI). *Οἶνη καὶ νῆσις συλλύετε* the sacred (I) *πνεῦμα*.

In this case, the supplicant would address the divinity by taking the sacred object as a manifestation of the divine presence. Such a mode of invocation is not unknown in the Greek world, where deities are sometimes addressed through their attributes or sacred symbols¹⁵.

Notes

A means royal i.e. belonging to the Palace.

Tu-ru-sa is an epithet of the goddess. I am somewhat reluctant to see place names on the tablets, unless they are securely attested in the lexicon. But I can see that here tu-ru-sa occupies the same position as *A-di-ki-te-te* on PKZa8, and therefore equivalence with the place name Tyliisos is possible. Moreover, the two sanctuaries of Kofinas and Tyliisos do not seem to be very far apart. The distance as the crow flies is not great, but on foot it would require covering around fifty kilometres, perhaps more.

But despite this, since I consider *A diki-te-te* to be formed from the determinative A, the toponym *Dicte*, and the suffix *-tēs* and since I interpret it as an appellative meaning ‘royal inhabitant of Dicte’, I am inclined to interpret *tu-ru-sa* as a form derived from the verb *θυρόω*, which means ‘to furnish with doors’ and thus, by extension, ‘to protect’. Perhaps it is a Doric feminine present participle (*θυροῦσα*), with the /ou/ diphthong rendered, according to Minoan orthographic practice, as *u*.

There is only one last point I would like to address concerning the religious texts. In several of them the terms I na-ja Pa-qa, I na-ja Re-ta recur. I translate them respectively as ‘Sacred (I) snake (*νάας*) *Φᾶβα*’ and ‘Sacred snake (*νάας*) *Λήθη*’, since Phebe and Lete were two goddesses, daughters of Ophion, the great primordial snake from whom everything was born.

Notes

Νάας is a Cretan word meaning snake, serpent.

Pa-qa= *Φᾶβα*/*Φαῖβα*, Doric form of *Φοῖβη* (see *Φαῖβος*). This is a typical phenomenon of the Doric dialects, which also occurs in other words, for example: Att. *μοῖρα* / Dor. *μᾶρα*, Att. *οἶκος* / Dor. *ᾶκος*, Att. *ποῖος* / Dor. *πᾶς*, etc

Observations

¹⁵See, for instance, “Ἄσπις, ἣν Ἡρακλῆς ἔφερε...” . Hesiod, *Shield of Heracles* 1–6.

- Hybrid word: Ina-ja (determinative+phonetic part).
- Cretan word: *νάας* (na-ja).
- Doric forms *Φᾶβα* (Pa-qa) and *Λήθη* (Re-ta).

TABLE n.1

Hybrid Words

Word	Composition	Translation	Reference
ADU	determinative + monosyllabic word	Palace (A) donation (δῶς)	HT85a,1
Aka-ru	determinative + phonetic part	Available (<i>καιρός</i>) for the Palace (A)	HT2,1
Aku-mi-na	determinative + phonetic word	Κύμινα (spice) for the Palace (A)	ZA10a 1-2
AMA	determinative + logogram	Royal (A) MA (Μάτηρ)	Ma1b,1
Apu-na DU	determinative + phonetic word +logogram	Δῶς (DU)due as <i>ποινή</i> (fine) to the Palace (A)	HT14,3
ARa-naRE	determinative + phonetic word + logogram	Attendant (RE) of the royal (A) <i>Ρήνη</i> (a nymph)	HT1,4
ASE+NE-na	determinative + ligature + suffix	Belonging (-na) to the royal (A) SE+NE (a clan)	PE1,1-2
Asa-me-jo	determinative + phonetic word	Royal (A) <i>σημεῖον</i> (emblem). Honorific title	ZAZb3
ASE	determinative + logogram	Royal (A) SE. Honorific title	ZAZb3
A-si-aKA	phonetic word+logogram	KA (offering) for Offering to' <i>Ασία</i> (a divinity)	HT28a,1

Asi-da-to-i	determinative+phonetic word	Royal (A) συνδέτοις	ARKH2,2-3
Asu-pu-wa	determinative+phonetic word	Royal (A) σιπύη	ARKH2,5
Ata-naTE+TI	determinative+phonetic word+ligature	Payment (TI) of the tax (TE) from the royal (A) ta-na (a class of persons)	ZA10a,2
Atu-ri-siTI	determinative + phonetic word+logogram	Payment (TI) to the royal (A) θυρίσι (gates)	KNZb5
DAkuna	monosyllabic word+phonetic word	Δᾱγυνή (a confraternity)	HT103,4
DAku-se-joTI	Monosyllabic word + phonetic word + logogram	Payment (TI) to Δᾱ χύσεως (a confraternity)	HT104,2-3
DAmate	monosyllabic word + phonetic word	Δᾱ μάτηρ (Demeter)	KIZa2
DAmínu	monosyllabic word + phonetic word	Δᾱ συμῆνος (a confraternity)	HT117a ,8
DAqe-ra	monosyllabic word + phonetic word	Δᾱ θήρα (a confraternity)	HT6a,6
DAu-pu ₃	monosyllabic word + phonetic part	Δᾱ ὄπιον (a confraternity)	HT120,3-4
DARE	monosyllabic word + logogram	Attendant (RE) of Δᾱ	HT85a,4
DAwe-da	monosyllabic word + phonetic word	Δᾱ ὕδης (a confraternity)	HT85a,2
DAsi-tjo	monosyllabic word + phonetic word	Δᾱ σιτίον (a confraternity)	HT85a,3-4
Da-jo-kuTI	phonetic word +logogram	Payment (TI) of Δηίοχος	HT117a,8-9
DAtara	Monosyllabic word +phonetic word	Δᾱ θηλή	HT6a,1

di-kaSE	phonetic word +logogram	SE of <i>δίκης</i> honorific title	ZAZb3
Du-re-rjoSE	phonetic word + logogram	SE <i>δουλειῶς</i> , a title	ZA10a,5
IDAma-te	Determinative +monosyllabic word+phonetic word	Sacred(I) <i>Δᾶ μάτηρ</i>	ARZf1
IDUTI	determinative + monosyllabic word + logogram	payment (TI) for the sacred (I) donation (DU= <i>δῶς</i>):	HT104,2-3
IDuwi	determinative + phonetic word	to the sacred (I) pair (<i>Δύῃ</i>)	MA1a,1
Ija	determinative + monosyllabic word	sacred (I) voice (<i>ἰά</i>)	KH7a ,3
Ija-tē	determinative + phonetic part	sacred (I) physician (<i>ἰατήρ</i>)	PHZb4
Ina-ja	determinative + phonetic part	sacred (I) <i>νάας</i> (snake)	PKZa11
IPa-sa-ja	determinative + phonetic name	Sacred (I) <i>Περσαία</i>	KH10a,3
Ipi-na-ma	determinative+phonetic part	sacred (I) <i>πνεῦμα</i>	TLza1
JADi-ki-tu	determinative + phonetic part	Sacred (I) <i>Δίκτυς</i>	IOZa2
Ja-du-raTI	phonetic part +logogram	<i>Ἡδύλη</i> (proper name) payment(TI)	KN1b,1
Ja-kuTI	phonetic part + logogram	Ἄργος payment (TI)	KN1a,1
JASu-ma-tu	determinative+phonetic part	Royal (JA) <i>Συμμήστωρ</i>	SYZa2
KA . ro-pa3	logogram +phonetic part	<i>ἄλοιφή</i> in KA vessels	HT31,3

Ko-sa-noTI	phonetic part + logogram	<i>Κόρσανος</i> payment (TI)	HT117a,7-8
Ku-juTI	phonetic part+logogram	<i>Κοῖος</i> payment (TI)	ZA6b,1
MAka-ri-te	Logogram +phonetic part	<i>χάριτες</i> to MA	HT117a,1
Na-daRE	phonetic part + logogram	RE of <i>Νέδα</i> (a nymph)	HT117a,5
Pa-jaRE	phonetic word+ logogram	RE of <i>Βαία</i> (a deity)	HT8b,5
pa-taQE	phonetic word +logogram	<i>πάντα</i> (all) the QE units	HT31,6
QAPA ₃	logogram + logogram	Vessels QA containing <i>σπέρμα</i> (PA ₃)	HT31,2
qa-tiDA	phonetic word + monosyllabic word	Lack (<i>χᾶτις</i>) of a part (DA= <i>δαίς</i>)	HT12,1
RaRE	Monosyllabic word + logogram	RE of <i>Ῥῆ</i> , <i>Ρέα</i> (the goddess)	HT117,5
SUpa ₃ -ra	Logogram +phonetic word	<i>πέλλα</i> (cups) in vessels SU	HT31,5
SUPU	logogram + logogram	<i>πυρός</i> (PU) in vessels SU	HT31,2
Te-jaRE	Phonetic word+ logogram	RE of <i>Θεᾶς</i> (a goddess)	HT117a,5
Tja ta-re	Monosyllabic word +phonetic word	The <i>τηρός</i> of <i>Θεᾶς</i>	PK1,2
Tja ti-te	monosyllabic word + phonetic word	the <i>θυτήρ</i> of <i>Θεᾶς</i>	PK1,3

TABLE n.2

Ligatures

Ligature	Composition	Translation	Reference
FAR+RU	ideogram + logogram	Spelt of the type RU	HT23a,2
HOMO+KA	pictogram + logogram	Man bearing KA offerings	HT28a,4
HOMO+RJO	pictogram + logogram	The RJOmen (a clan)	PEZb3
IGRA	determinative+ideogram	Sacred wheat	HT120,4
IKA	determinative + logogram	Sacred (I) offering (KA)	HT102,,4
IQI	determinative + logogram	Sacred QI	ZAZb3
MA+RU	phonogram+ phonogram	<i>μαλλός</i>	HT12,4
ME+NE	logogram + logogram	<i>νέον μῆλον</i>	HT23a,5
Na-si+OLE	Phonetic group+ideogram	<i>νησις</i> +oil	SYZa2
RUJA	phonogram + phonogram	<i>ροία</i>	HT6a,3
SE+NE	logogram+logogram	young (NE) SE (a kind of SE)	HT116a,3
TE+RO	phonogram+phonogram	<i>θέρος</i> (wheat)	HT104,1
TE+TI	logogram + logogram	Payment (TI) of the tax TE	ZA10a,2
VIN+KA	ideogram + logogram	Wine KA (<i>καρύινος</i>)	ZA6b,2
VIN+RA	ideogram + logogram	Wine RA (<i>ράξ</i>)	ZA6b,2
*40+PU	ideogram + logogram	Corn (<i>πυρός</i>)	HT23a,3
*40+pu-re	ideogram + phonetic part	A kind of corn (<i>πυρήν</i>)	HT12,6

TABLE 3**Variation α/η, ε**

Linear A	Greek Form	Translation	Reference
A-ka-ra	Ἑκάλη	proper name	PEZb3,1
A ra-na-RE	RE of the sacred (A) Ῥήνη	a title or a proper name	HT1,4
A-ru-da-ra	Ἀριδήλα	proper name	HT28a,5
a-ta	ἄντη	prayer	TLZa1
da-me	δῆμος	people	HT120,1
Data-ra	Δᾶ θηλή	DA of the plenty (a confraternity)	HT6a,1
DA	Δᾶ/Γῆ	the great Goddess	KIZa2
Ipa-saja	I (sacred) Περσαία	a goddess	KH10,3
JA-du-ra	Ηδύλη	proper name	KN1b,1
Ka-qa	Κάβης	proper name	PK1,1
ka-pa QE	σκάφη (ka-pa)	vessel containing QE	HT6a,4-5
ki-ra	χρή	it is necessary	HT103,5
Ku-ra	Κύρη	the Lady (a goddess)	ARKH2,1
Ma-ri-tja	μεριτεῖα	division	HT 90,3
Ma-te	μάτηρ/μήτηρ	divine appellative	KIZa2
Na-da RE	the RE of Νέδα	a Nymph	HT117a,5
Ne-ja-se	νήησε	he filled	PEZb3I
pa-me	φήμη	oracle	KH7a,3
pa ₃ -ni	Φάνης/Φήνης	proper name	HT102,2

Ipi-na-ma	Sadred (I) πνεῦμα	sacred nod (of the divinity)	KOZa1
Pa-qa	Φᾶβα/Φαίβα/Φοίβη	a goddess	PKZa11
pi-ta-ja	φυτεία	a plant	HT6a,2
qa-ti	χᾶτις, Doric form for χῆτος	lack	HT12,1
QE pi-ta	(QE) φυστή	a flatbread of QE	HA6a,,6
RA RE	Ρέα (The RE of Ρέα)	a goddess	HT117a,5
Ra-ta	Λήθη	a goddess	APZa21
Ro-pa ₃	ἄλοιφή	ointment	HT31,3
Ru+JA	ροίη	pomegranate	HT6a,3
A sa-me-jo	Royal (A) σημείον	honorific title	ZAZb3
Sa-pa	Σέβης	proper name	PH2,4
Si-da	Σίδη	a place name	ARKH2,1
A su-pu-wa	σιπύη	royal (A) larder	ARKH2,5
JA Su-matu	Συμμήστωρ	Royal Advisor (a divine epithet)	SYZa2
ta-na	θέναρ	libation table	PRZa1
ta-pa	τάρπη	wicker baskets	HT104,1
Ta-re	τηρός	guardian	PK1,2 and 3
Ra-ta	Λήθη	a goddess	APZa21
u-mi-na-si	ῥμνησις	hymn of praise	HT117a ,1-2
u-na	οῖνη	wine	KOZa1
DA we-da	Δᾶῦδης	Δᾶ of the family, a confraternity	HT85a,2
wi-di-na	ῥΥδνη	proper name	HT28bE

Table n.4**Variation υ/ο**

Linear A	Greek	Translation	Reference
Ana-nu	Ἄνανος	proper name	HTZb159
DU	δῶς	donation	ZA10b,7
ja-ku	Ἄργος	proper name	KN1a,1
ko-ru	κοιρός	little pig	HT23a,5
ku-ju	Κοῖος	proper name	Za6b,1
ku-pa-na-tu	καρβανήτος	belonging to κάβαρνοι	APZa21
ku-pa3-nu	κάβαρνος	priest of Demeter	HT1,3
ma-ru	μαλλός	wool	HT12,4
DA mi-nu	Δᾶ σμήνος	DA beehive, a confraternity of beekeepers	HT117a,8
mi-tu	Μυτών	proper name	HT117a,1
pi-ru-qi-u	Φιλοίτιος	proper name	PH2,3
Apu-naDU	A ποινή DU	donation due to the Palace as a fine	HT14,3
si-ru	σύλον	confiscated goods	HT90,2-3
A Su-ma-tu	A Σύμμηστωρ	royal Advisor (an epithet)	SYZa2
ti-ti-ku	θυτικός	concerning the sacrifice	ZAZb3
tu-ru-sa	θυροῦσα	protectress	KOZa1
u-ka-re	Ὀγκαλη	proper name	PE1,1
u-na	οῖνη	wine	KOZa1
u-na-ru	οῖναρον	wine	PKZa12
u-pu3	ὄπιον	opium	ZA10b,2

TABLE n.5**Cretan words**

Linear A	Greek	Translation	Reference
a-de	αἶδης	a kind of food	ZA10b,4
a-mi-ta	αμιθάς	a kind of food	ZA10b,4-5
DA	Δᾱ	the Great Mother	KIZa2
mi-nu-te	μνωίτης	servants	HT86a,5
na-ja	νάας	snake	APZa21
ne-ma	νέμα	water	PHZb4
pa-ta	πάστας	owner	HTZb160
pu-rja	πολιάς	old people	HT28b,3
qa-ti	χᾱτις	lack	HT12,1
sa-lja	σαλία	stocks	HT102,1
sa-ma	σέλμα	a kind of food	ZA10b,3-4

Discussion

The first table concerns hybrid words, that is, lexical formations composed of signs which, although occurring within the same graphic system, are not functionally homogeneous. These signs may in fact be phonetic or logographic in nature, and they contribute in different ways to the construction of the word's meaning. Across the 45 texts examined, 53 hybrid words were identified, displaying a relatively regular structure.

Most of them consist of a determinative (A or I) followed by a phonetic group. In particular, 14 formations contain the determinative A, which denotes the Palace and is generally transliterated as “royal,” but when prefixed to names of commodities is rendered as “of prime quality,” precisely because such goods were destined for palatial administration. Since A may alternate with JA, an additional 4 words exhibit initial JA, generally in reference to personal names or divine names.

A further group of eight words displays the determinative I in initial position, with the value “sacred,” typically placed before divine names. The initial group DA is likewise highly productive, attested in eleven occurrences. As noted on several occasions, DA designates the Great Goddess (Δᾱ) and is normally preceded by the determinative I, which underscores its sacred character. In cases where DA contributes to the formation of hybrid words, however, the determinative *I* is absent, and the segments following DA exhibit a clear and recognizable Greek transparency. These formations, according to the contexts in which they occur, refer to various types of confraternities of workers, craftsmen, and religious functionaries—devoted to the Great Mother.

This phenomenon is fully consistent with what is attested in other cultures, where professional or religious groups organize themselves around the name of the principal deity, as occurs, for example, in the Anatolian world with the temple guilds dedicated to Kubaba at Karkemiš, in Mesopotamia with the confraternities of scribes connected with the cult of Nabu at Nineveh and Babylon, or in Egypt with the priestly groups associated with the temples of Amun and Ptah.

In initial position we also find the logogram MA, also attested in the form AMA (“Royal Mother”). The sequence MA-ka-ri-te, heading tablet HT 117a, must be read as MA *χάριτες*, that is, “thanksgiving to DA,” presumably the name of a religious festival. This reading is supported by the fact that the word is followed by *ὕμνησις*, “hymn of praise.”

In final position, by contrast, we observe the recurring presence of the element RE, attested four times and always preceded by the name of a deity. This suggests for RE the semantic value “attendant” or a similar function. The interpretation is strengthened by the fact that RE, which also appears frequently as an isolated logogram, occurs in contexts together with other categories of personnel and seems consistently to denote a high-ranking official.

The element SE, also attested in the form ASE (“royal SE”) referring to the supreme male deity (DI), presumably has the value “guide, leader.” This meaning is reflected in the hybrid word *δουλεῖος* RE, which may be interpreted as “leader of the slaves” or a comparable expression.

In final position, the logogram TI appears twice, with the meaning “paid.” This logogram is very frequent and is consistently used in the other lists, where it is always placed after the terms to which it refers, serving to distinguish those who have already made a payment from those who have not yet done so.

Lastly, two occurrences display the element DU, with the value *δῶς*, “donation,” normally preceded by A to indicate a donation owed to the Palace.

What stands out most clearly is the regularity that characterizes the formation of hybrid words. Only a limited number of logograms—mostly those well attested also in isolation—participate in their formation; once these elements are identified, the Greek-based phonetic correspondences emerge as clear, plausible, and fully consistent with the contexts in which they appear. The presence of such formations is moreover entirely compatible with the overall graphic system of Linear A, which displays close structural affinities with contemporaneous systems, particularly the Egyptian and the cuneiform ones. The determinatives A and I fit within a typological framework that finds fully compatible parallels in the Egyptian and Akkadian traditions, where determinatives play an important and integral role in the graphic system.

Naturally, the question of how these elements were actually read remains open; however, determining their functional value is crucial, since only through this step is it possible to identify and classify hybrid words. These, together with the ligatures, form the interpretive basis for understanding the nature of the Linear A writing system, which is not an entirely phonetic system, as has been maintained until now, but rather a “transitional” one, undergoing an evolutionary process toward full phoneticization.

In this respect, Linear A again appears consistent with the ideophonetic systems contemporary with it, as well as with Linear B itself, in which phonetic formulation is not yet fully stabilized and in which ideograms—and even pictograms—continue to play a significant role. The importance of pictograms and ideograms emerges with equal clarity in the second table, devoted to ligatures—that is, complex signs created by combining two or more graphic elements. The ligatures of Linear A in

fact involve all five types of signs that constitute the system: we find ligatures formed from pictogram + logogram (e.g., HOMO + KA), from determinative + logogram (as in IKA), from ideogram + logogram (e.g., VIN + RA), as well as ligatures composed of two phonograms, which may sometimes also be written in an unbound linear form (for example, RU + JA / ru-ja). The structural variety of the ligatures demonstrates the simultaneous and articulated use of all categories of signs present in Linear A.

The relationship between ligatures and hybrid words remains difficult to define; it is possible that the former represent primitive compounds from which fully developed hybrid formations later evolved, or alternatively that the two phenomena constitute two sides of the same coin. What is certain is that ligatures, too, represent transitional phenomena in which the ideographic component still plays a fundamental role. Their diffusion is not an isolated feature of Linear A: true types of ligatures appear in all major ancient writing systems and—although they represent different kinds of compounds and are often complex to interpret (the Egyptian cartouche itself could, functionally speaking, be classified among ligatures)—they provide highly significant evidence for the typological classification of the systems in which they occur.

Tables 3, 4, and 5 are devoted to the principal phonetic features of the language—those recurrent phenomena which, by virtue of their frequency, seemed appropriate to gather systematically, thereby avoiding the need to cite each attestation individually. As in Linear B, Linear A exhibits marked vocalic fluctuation. All the variations attested in Linear B also occur in Linear A; however, the *i/u* alternation is considerably more frequent here. There are also certain distinctive phonetic features, among them the use of *a* in place of *e/ē*, which is sufficiently widespread to warrant separate tabular presentation.

The third table concerns the preservation of *α* where Attic has *η* or *ε*. The investigation shows that *α* not only tends to replace *η* in final position, but also predominates within words, often supplanting other vowels—including *ο*—and even diphthongs in *-οι*.

A first indication supporting the hypothesis that the Greek underlying Linear A might belong to a variety of Doric emerged from my interpretation of the word IDAma-te, which I read as sacred (I) DA mater, with I functioning as the determinative “sacred,” DA designating the Great Goddess Δᾱ, and ma-te constituting her appellation. The fact that Δᾱ is classified in the lexica as a Doric word and that μᾱτηρ is the Doric variant of μήτηρ prompted me—much to my own surprise—to explore this interpretive direction more deeply, where I subsequently found broad and consistent confirmation in a series of phenomena that I will list below.

It is also important to emphasize that, for the sake of clarity, I have treated only 45 texts here, and that the phenomena I have listed—first among them the preservation of *α*—are in fact far more numerous across the entire corpus.

Another phenomenon that seemed worthy of systematic documentation concerns the presence, in the Linear A lexicon, of numerous words that can be traced to Doric-Cretan forms. When consulting lexical repertoires, it is quite common to find annotations such as “Doric form for Attic

...” or “Cretan word” listed alongside certain entries. This made it advisable to gather such forms in a single table (no. 5) in order to assess their distribution across the texts under consideration.

The fourth table, by contrast, is devoted to a particularly widespread phenomenon: the obscuration of the vowel *o* to *u*. Although this type of variation also occurs within words, it is especially productive in final position and affects verbal forms as well. A significant example is *u ti-nu* for Attic *ὅν τίνω*. Since this sound change is typical of Doric varieties—in which endings in *-us* appear instead of *-os* and verbal forms in *-u* instead of *-ω* in the first person—I considered it appropriate to include a table recording its relative frequency.

In addition to these phenomena, examination of the 45 documents shows several Linear A words ending in *-e*, a form that alternates with *-o* in Linear B. This is a well-known phenomenon (e.g., *da-me / damos*), but one that is certainly more limited than the *o/u* variation. This, of course, does not imply the absence of the vowel *o* in Linear A. On the contrary, it is present and well attested. It is enough to consider the sign AB24 which—on the basis of the *ju/jo* alternation (e.g., *Da-jo-ku / De-ju-ku*= the proper name *Δηῖοχος*) and the interpretation of verbal adjectives in *-ios*—I have proposed to read as *jo*: its frequency in final position is fully comparable to that of the corresponding sign *ju*¹⁶.

The analysis of the documents also reveals additional patterns of vocalic fluctuation affecting various positions within the word. Among these is the *i/e* alternation, active not only within word stems but also in final position. Examples such as *Ra-o-di-ki / Λαοδίκη*, *Pa₃-ni / Φάνης* supported by the other alternations recorded, find internal confirmation within Linear A itself, as shown by the variation *Te-ke / Teki*= *Θήκης*.

Another noteworthy alternation is that between *ja* and *e/η*, which can plausibly be explained by considering that if *a* and *e* alternate with each other, and *a* in turn alternates with *ja*, then *ja* and *e* may also appear in alternating distribution. This variation is attested in two verbs: *ne-ja-se* and *wa-ja*. In the case of *wa-ja* (*αἰε*, hear, accept)—also documented in the form *wa-e*—we are very likely dealing with a phenomenon characteristic of the Doric system, in which the second person singular of the imperative regularly ends in *-a* rather than *-e*.

A particularly productive alternation is that between *i* and *u*, which appears very frequently in the Linear A corpus and is far less widespread in Linear B. However, all the vocalic fluctuations attested in Linear A can be coherently explained by the still strongly iconic character of the graphic system. In Linear A, being a transitional system, the symbolic value of signs sometimes outweighs the precision of vocalic representation. This accounts for the fact that signs may function both as logograms and as phonograms, and that a single sign may assume different values depending on the graphic context or the mode of writing.

¹⁶ See <https://doi.org/10.5281/zenodo.17072790>

Another phenomenon emerging from the analysis of the texts is that of graphic anaptyxis, represented by the vowel *i* (see *mi-nute* /*μνοίτης*, *u-mi-na-si* / *ὑμνήσις*) as well as by the following or preceding vowel. As in Linear B, Linear A also presents—though with low frequency—certain cases of homography. This is largely attributable to the logographic use of signs: a sign employed in word-initial position may represent different words even if they begin with the same syllable, a situation entirely predictable in a system such as that of Linear A.

A significant example is the sign DA, which may represent either the word Δᾱ, “Earth,” or the logogram corresponding to *δαίς*, “portion, share.” There is, however, no possibility of confusion, because when DA denotes the Great Mother Earth, it always appears in initial position and is preceded by the determinative I (“sacred”). When, instead, DA is used with the logographic value of *dais*, it occurs in final position.

Final considerations

The analysis of the texts under consideration shows clearly that, from a graphic standpoint, Linear A displays a set of features that bring it close to Linear B, while differing from it in fundamental respects.

Linear A shares with Linear B the following structural traits:

- the presence of pictograms, ideograms, logograms, phonograms, and numerical signs (both whole and fractional), all of which are fully operative and widely used within the graphic system;
- the use of ligatures, which combine different types of signs;
- a high number of vocalic fluctuations—a feature also found in Linear B, though in Linear A these alternations are more extensive;
- the absence of notation for final *m*, *n*, and *r*, as well as for these consonants in preconsonantal position within words. In Linear A, however, the cluster *mna* does appear both as an independent sign (AB34) and through anaptyxis (*u-mi-nasi* / *ὑμνήσις*);
- the omission of *s* in initial preconsonantal position and—especially in Linear A—in medial preconsonantal position (see ASumatu = royal *Συμμήστωρ*);
- the existence of a single liquid sign used for both *r* and *l*;
- the absence of notation for vowel quantity;
- the absence of differentiation among voiceless, voiced, and aspirated stops, all represented by a single sign, with the exception of *d/t*;
- the frequent omission of the *i* element in diphthongs;
- the presence of the digamma;
- the presence of adjectival suffixes in *-ja* and *-atos*.

Differences with respect to Linear B

Linear A diverges from Linear B in several essential respects, largely due to a greater productivity of certain iconic and transitional processes that are far less visible in the more fully conventionalized Linear B system.

- A high number of logograms, which may occur either on their own or together with one or more phonetic signs in ligatures and hybrid words
- the presence of numerous hybrid words—a phenomenon that is probably also attested in Linear B (see KUMA, KUMAPA in Of series), though not yet highlighted by scholars, perhaps owing to the relatively small number of occurrences compared with those identified in Linear A;
- the presence of numerous ligatures (those related to oil alone amount to sixteen in Linear A);
- the presence of the possessive suffix *-na*, of Indo-European origin;
- absence of the thematic vowel, not written in Mycenaean for graphic reasons and entirely lacking in Minoan;
- absence of the temporal augment, which may appear in Mycenaean but is, at present, wholly unattested in Minoan;
- greater vocalic fluctuation, especially in the *i/u* and *o/u* alternations;
- preservation of the vowel *α*, which tends to prevail over other vowel qualities;
- tendency to preserve Indo-European roots, as shown by the form *δέκα* (I gave) for *δῶκα*, with the choice of the stem **de-* for *δίδομι*;
- the frequent omission of the *u* element in diphthongs (QE-ra-wa=Τηλέας);
- graphic anaptyxis, also rendered with *i* (see Wi-di-na/Υδνη, pi-na-ma /πνεῦμα).

Indications on the Dialect: Toward a Protodoric Identification

The morphological and phonological analysis of the Linear A documents makes it possible to identify a set of features that confirm the Greek nature of the underlying language and place it at a prodoric stage. The principal elements are as follows.

1. Preservation of Proto-Greek *a*.
The vowel *a* is retained both in medial and final position (see Table 3), in contrast with the innovative developments of Attic–Ionic (*ā* > *ē*). This feature indicates a conservative phonological level consistent with early Doric varieties.
2. Second-person singular imperative in *-a* (< *-ā*)
The ending *-a* in the imperative, as in wa-ja (*αἶε*), reflects the preservation of the Proto-Greek ending *-ā*, which is maintained in historical Doric (cf. *φέρα*, *δόκα*, *ἄνα*) and replaced in Attic–Ionic by the innovative ending *-e*.
3. Middle–passive participles in *-minos*
Regardless of the preservation of alpha, the formation of middle–passive participles in *-minos* is observed, arising from the raising of the morpheme *-men-* > *-min-*. This development coincides with what is documented in Doric: Attic *φερόμενος* / Doric *φερόμινος*; Attic *εἰρημένος* / Doric *εἰρημινός*. The Linear A forms *qe-de-mi-nu* / *κερδημένος* and *pi-na-mi-na* / *πνεομένα* (without thematic vowel) clearly belong to this same morphological pattern.
4. Outcomes of *-tjos* > *-tios* in verbal adjectives
The transformation of the palatal cluster *-tjos* into *-tios* is a characteristic feature of Doric

and other pre-standardized stages of Greek. By contrast, the verbal adjectival formation in *-teos* represents a later, thematized development expressing necessity, whereas *-tios* preserves an older, non-thematized morphological stratum. Forms such as *Da-tjo* / *δατέος*, *pa-tjo* / *πατέος*, *e-tjo* / *έτέος*, *qa-tjo* / *θετέος*, *wo₂-tjo* / *οίστεος* belong to this morphological pattern.

5. First-person singular of the present indicative in *-u* (< *-ō*)
The ending *-u* in place of *-ō* reflects the vocalic raising typical of Doric (*ō* > *ū*). Forms such as Doric φιλοῦ / φιλῦ (Attic φιλῶ) and Doric ποιῦ (Attic ποιῶ) correspond perfectly to this development. Linear A τίνυ fits this pattern.
6. The aorist form *de-ka*.
The form *de-ka* / *ἔδωκα* exhibits features compatible with Doric or pre-Doric phonological correspondences, notably the preservation of the root *de-* rather than the Attic *do-*, and thus suggests the survival of a pre-Attic allomorph.
7. Relative pronoun *us* (< *-fos*).
The regular occurrence of the ending *-us* in place of Attic-Ionic *-os* represents one of the most firmly established Doric isoglosses and reflects the raising of final *o* to *u*.
8. Alternation *s* / *th*
The alternation *s* / *th* is visible, for example, in *sa-lja* / *σαλία*, reserve, stock from *σάλλω*, the Doric form of *θάλλω*.
9. Vocalic oscillation *o* / *u*
The frequent graphic alternation *o* ~ *u* mirrors the vowel raising documented in Doric. This phenomenon may be interpreted either as stable allophony or as a transitional stage within a chain of vowel-raising processes (see Table 4).
10. The suffix *-na* in relation to Cretan formations in *-inos*
The recurrence of the suffix *-na* shows clear affinities with archaic Cretan formations in *-inos*. Moreover, the forms *ku-pa-nu* / *ku-pa-na-tu* can be connected with derivational patterns in *-ātos* / *-atos*, which are characteristic of Doric. Interpreting *ku-pa₃-nu* as *κάβαρνος*, a cultic title, the form *καβαρνάτος* (*ku-pa₃-na-tu*) emerges as an agentive derivation meaning “a member of the group designated by *κάβαρνος*”.

Conclusion

The systematic analysis of the Linear A documents allows for a coherent interpretation of both the structure of the script and the linguistic features of the language it encodes. Two main conclusions emerge: the transitional nature of the writing system and the attribution of the underlying language to a proto-historical stage of the Doric branch of Greek.

Linear A displays a profoundly hybrid graphic system, combining pictograms, ideograms, logograms, phonograms, metrograms, numerical signs, and ligatures. The presence of hybrid words, polyvalent signs, vocalic oscillations, homography, and graphic anaptyxis indicates that the system had not yet reached full phonetic stabilization. In this respect, Linear A represents an intermediate stage in the evolution of writing, comparable to Egyptian writing and to certain phases of cuneiform, in which symbolic and iconic components continued to coexist with phonetic elements.

The linguistic features identified in this study form a consistent and convergent set of isoglosses that point to a proto-Doric variety of Greek. These features are systematic, recurrent, and difficult to reconcile with interpretations that posit a pre-Indo-European or non-Hellenic language. Linear A thus appears to encode an archaic stage of Doric, predating the historical dialects while already exhibiting their characteristic phonological and morphological traits.

Within this framework, Minoan civilization may be understood not as a pre-Greek phenomenon, but as the proto-historical expression of Greek-speaking communities that had already developed advanced administrative systems, extensive commercial networks, and a complex maritime organization. The decline of this civilization—due to geological events, internal crises, and increasing Mycenaean pressure—likely prompted a redistribution of populations toward the mainland, where these groups contributed to the formation of the historically attested Dorian communities. From this perspective, the so-called “Dorian invasion” may be reinterpreted as a later explanatory construct reflecting internal demographic and cultural transformations within the Greek world rather than a sudden external intrusion.

Seen in this light, Linear A can be understood not as an isolated or enigmatic anomaly, but as a structured and intelligible expression of the earliest stages of the Greek linguistic continuum, preserving a crucial yet long-overlooked component of Aegean cultural history.