

Cretan Protolinear Syllabary: Two consonantal sets of signs mostly absent from Linear B

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Abstract

This paper presents ten signs of the Cretan Protolinear syllabary that render phonetic values mostly absent from Linear B syllabary. The latter syllabary remains comparatively the most studied, conveying the oldest known written form of Greek language, since Bronze Age. The depicted by these signs themes reveal important cultural aspects of the Minoan Civilization in everyday life and economy.

1. Introduction

The signaries (/syllabaries) developed in Minoan Crete (2nd and 3rd millennia BCE) include Linear A (henceforth LA), Linear B (henceforth LB) and Cretan Hieroglyphic (henceforth CH) syllabaries ^[1]. Their signs are called “syllabograms” because most of them render a syllabic phonetic value of the Consonant-Vowel (CV) pattern. Only LB has been indisputably deciphered, conveying the oldest known form of Greek language (Mycenaean/Achaean Greek) ^[2]. It has been demonstrated that all three syllabaries (LA, LB and CH) evolved from a common ancestor: the Cretan Protolinear (henceforth CP) syllabary ^[3]. The linguistic affinity of CP to a dialect very close to Archaic Sumerian has been suggested by Kenanidis, since 1992, as the language spoken by the predominant ethnic group of Minoan Crete: the Eteocretans ^[4]. In this respect, the phonetic value of every CP sign (/syllabogram) corresponds to the whole Eteocretan (Archaic Sumerian) name of the object depicted by this sign, according to the rebus principle ^[5].

Excluding CH that is the ornamental and ritual version of CP ^[6], LA conventionally comprises around 100 signs ^[7], LB comprises 88 signs ^[8] (considering signs *34/*35 as the mirror images of a single one), while CP comprises 120 signs ^[9]. LA and LB share 82 similar or identical signs ^[10], since they convey different languages ^[11]. In this paper, ten signs will be presented that are mostly absent from LB, because they rendered phonetic values unknown to the Achaean Greek language, as listed by Kenanidis ^[9].

2. Presentation

Half of the presented below signs (5) belong to the B-set, namely signs that (according to the CV phonetic pattern) have {b} as the preceding consonant (C-), followed by the five standard vowels (-V) of CP: {a, e, i, o, u}. Equivalently, the rest five signs belong to the θ-set, where the preceding consonant is the Greek “theta”. Each set is complemented by a sign rendering the vowel “schwa” {ə}, being the sixth member of the complete set that has been already presented ^[12]. The presented signs are herein denoted by their corresponding phonetic value

in capital letters, as it happens in other works too ^[13]. Finally, a predominant rule of Sumerian phonology is that the closing consonants of words were silenced, unless followed by vowels (in affixation) ^[14]. Thus, the closing consonants are enclosed in parentheses.

2.1 Sign BA

This sign is found in LA with a few forms (Fig. 1a). It is clear that depicts a kind of rattle. There is a vertical handle from below and metal discs that struck between them. It served either as a musical instrument or as a toy. The corresponding Sumerian word was basically “ba(l)”, along with corresponding signs (Fig. 1b), and with the addition of affixes: “balaĝ” and “bal-tag”. The conclusion is that the sign BA was a rattle, called “ba(l)” in Eteocretan language, conveying syllable “ba”.

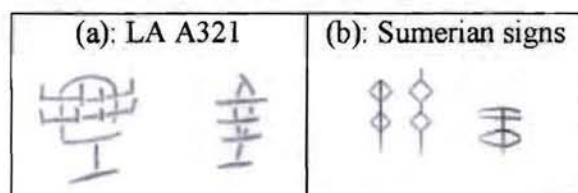


Fig. 1: Signs for rattle ^[9].

2.2 Sign BE

This sign is known from LA, where it was found a few times (Fig. 2). It depicted a sickle that was called “be(r)” in the Archaic Sumerian, which later became “gœr” (“gur₁₀”) due to standard phonological rules ^[14]. This change is confirmed by the word ^[15]:

wr. buru₁₄; gur₇; gur₁₆ = Akk. *ebûru* = “harvest”.

In conclusion, the sickle was called “be(r)” in Eteocretan, so the sign BE recalled syllable “be”.

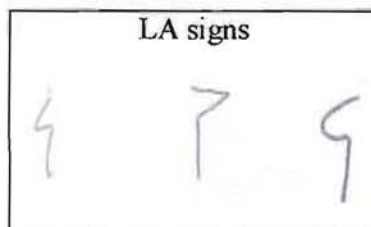


Fig. 2: Signs for sickle ^[9].

2.3 Sign BI

This sign is found in CH (Fig. 3a) and probably in LA, numbered 133 and 620. It depicted a reed, also found in Sumerian Pre-cuneiform as ATU 96 to 103 (Fig. 3b), depicting reed leaves down and blossoms on top. In Sumerian Cuneiform ^[15], the reed is called:

wr. gi “reed, cane; a unit of length” Akk. *qanû*.

Of course, the older form was “bi”, due to a standard phonological rule ^[14]. The reed was of great importance to Sumerians, especially in Mesopotamia, where wood (whether for construction or burning) was rare, while reed was plentiful on the banks of the rivers and canals. Therefore, an Eteocretan instantly recognized sign BI as a “reed”, called “bi”, so recalling syllable “bi”.

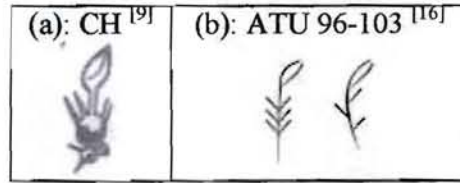


Fig. 3: Signs for reed.

2.4 Sign BO

This sign (AB 56) was found only a few times in LB but it was usual in LA (Fig. 4). It obviously depicted a ladder. There are many words for the ladder in Sumerian Cuneiform [15], but one describes the pronunciation of the word as “gu-ug” (i.e., “goĝ”):

[[^{giš}kun₄]] = gu-ug = GIŠ-LLU = *si-mi-il[#]-tum[#]*.

In fact, “kun₄” represent the pronunciation “go(n)” or “go(ĝ)”. In other words, the ladder in Mesopotamia was called “go(n)”, originating from the older “bo(n)”, due to a standard phonological rule [14]. Therefore in Eteocretan, the ladder was called “bo(n)”, thus sign BO was immediately recognized as a ladder, recalling syllable “bo”.

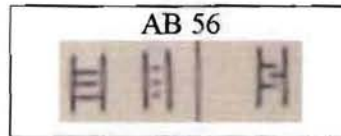


Fig. 4: Signs for ladder [2].

2.5 Sign BU

This is a sign of the CP’s B-set (AB 50) found in LB, as well as in LA (Fig. 5a). It depicted the standard dress of the men of Minoan Crete (Fig. 5b), but also and mainly the relevant part of the body, namely the buttocks and the upper thighs. In the Archaic Sumerian, the corresponding word was “bu(d)”, that later on in Mesopotamia became “gu(d)” and even later “gu(z/θ)” [9], due to standard phonological rules [14]. Therefore by seeing sign BU, each Eteocretan immediately recognized the part of the body that was called “bu(d)”, thus recalling syllable “bu”.

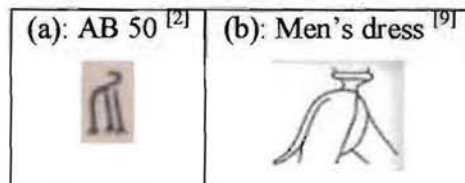


Fig. 5: Images for men's dress.

2.6 Sign ΘA

We presume that this sign (AB 66) depicted a leaf, with the ivy leaf as model, being the sacred plant that the Greeks admired for its lustrous leaves. There was a sign in LA that obviously depicted a leaf (Fig. 5). The leaf was called *θa(p) in Sumerian [9], while in Sumerian Cuneiform the word should be found as *za(b), *zi(b), *za(g) or *zi(g), although

we cannot find any word in a Sumerian dictionary that literally meant “leaf”. Therefore in Eteocretan, the leaf was called “θa(p)”, so by seeing sign ΘA, each person recalled syllable “θa”.

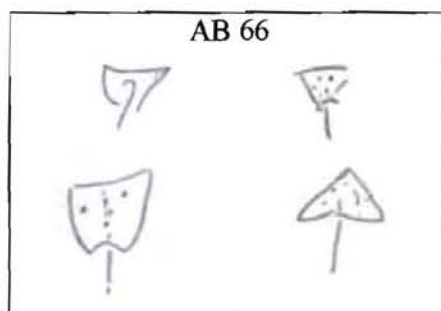


Fig. 6: Some signs for (ivy) leaves ^[9].

2.7 Sign ΘE

This sign is not found in LB as a syllabogram but as an ideogram (Fig. 7a), which is likely to depict “cyperus”. Yet in combination with the sign of perfume “šə” ^[12], it is certainly considered to mean “cyperus” (Fig. 7b). More forms of ΘE are found in LA (Fig. 7c). This sign was a sketch of a plant, but as an ideogram was used for all herbs and all vegetables that have a strong taste or intense aroma (spicy). Which plant exactly the ideogram meant was made clear either by the context or by adding another sign ^[9]. Such spicy plants for the Minoans were many, but the predominantly spicy one for them was the rock samphire (*Crithmum maritimum*). This sign was created having the rock samphire as a model ^[9]. In Sumerian Cuneiform, this word is found as “sullim”, pronounced “θəlim” from an older “θeliĝ”. This “θeliĝ” contains the basic word θel- and a determinant -iĝ, being some kind of definition for spicy herbs ^[9]. Consequently by seeing sign ΘE, an Eteocretan immediately recognized a spicy herb, which was called “θe(l)”, thus recalling syllable “θe”.

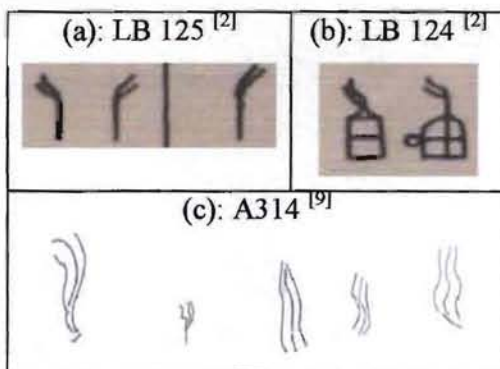


Fig. 7: The signs for spicy herbs.

2.8 Sign ΘI

This sign (LB 65) is considered of unknown use in LB (Fig. 8a), although it is identical to the LB ideogram that denoted “flour” (Fig. 8b). In LA (AB 65), the sketches have been moved off far from the original one (Fig. 8c). This sign depicted a grinding machine; that is an old mill (Fig. 8d), which are still preserved in Greece as a decorative element in tourist areas ^[9]. Their millstone is rotated around a rotating pillar, attached to it via an iron bar. The pillar is

connected to a horizontal rod, moved either by animals, by the wind (windmill), or by running water (watermill). So we can be sure that the name of the sign was the word for “flour”, which in Eteocretan was “ $\theta i i d$ ”^[9]. This word is well-known in Sumerian Cuneiform^[15]: “ zid wr. zid_2 “flour”; Akk. *qēmu*”. It was also used as a taxonomic element in words related to types of flour. Of course, “ zid_2 ” (“ $\theta i i d$ ”) alone was pronounced “ $z i_3$ ” (“ $\theta i i$ ”), while the Cuneiform sign ZI_3 is used only for the meaning of “flour” (with a single exception that is used vocally)^[9]. Therefore, sign ΘI was recognized as the flour, called “ $\theta i i(d)$ ”, thus recalling syllable “ θi ”.

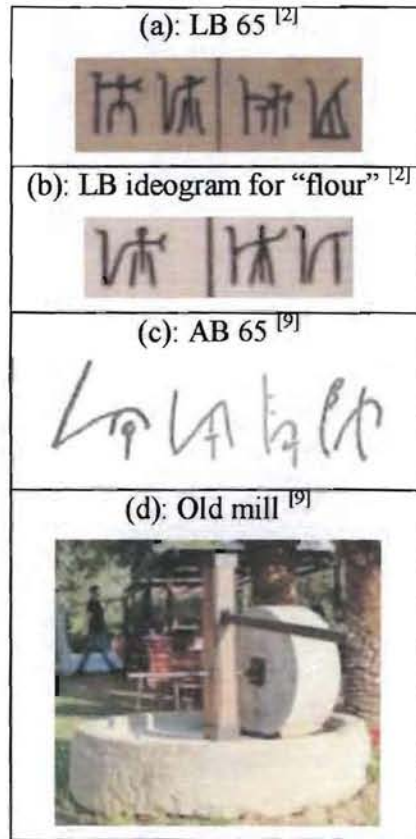


Fig. 8: The signs for flour.

2.9 Sign ΘO

This sign is known only from CH, where it depicts the teeth of a beast (Fig. 9). The word “tooth” in Sumerian Cuneiform appeared as “ zu_2 ”, which was pronounced “ θo ”^[9]. Consequently, sign ΘO was pronounced “ θo ” in Eteocretan.

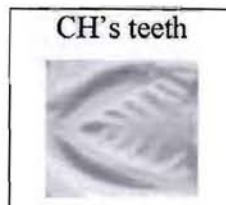


Fig. 9: The sign for teeth^[9].

2.10 Sign ΘU

This sign is not found in LB as a syllabogram (Fig. 10a), while in LA (Fig. 10b) it is wrongly classified with other signs. It depicted a Minoan blanket, often identified by several syllabograms, especially PA (Fig. 10c) then being read PhARWOS (= a type of thick cape that was also used as a blanket). It is also found in CH (Fig. 10d). The blanket in Sumerian was called “θur” (“zur” in Cuneiform spelling), found in various forms with various affixes^[9]. Therefore, sign ΘU was recognized as a “blanket”, called “θu(r)”, thus recalling syllable “θu”.

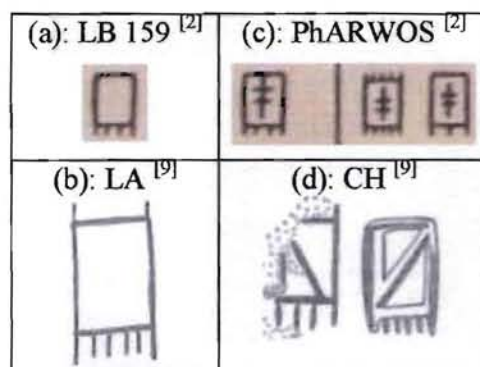


Fig. 10: The signs for blanket.

3. Conclusions

Generally, the CP signs depicted easily recognizable by the Eteocretans themes of daily life. Ten of those signs have been presented herein that are mostly absent from LB, mainly because they rendered phonetic values unknown to the Greek language of Bronze Age. The depicted themes denote in these cases a rural society. We may see tools (sickle, ladder and a mill for representing flour), themes of nature like plants (reed, leaves and spicy herbs) or animals' body-parts (teeth), clothing items (men's dressing and blanket types) but also items for recreation (rattle). Two of them could be specialized with the addition of auxiliary signs (spicy herbs and blanket), for denoting a whole range of similar goods, thus revealing important cultural aspects of the Minoan Civilization in everyday life and economy.

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