

# AN INTERPRETATION OF THE MALIA STONE INSCRIPTION IN TERMS OF THE CRETAN PROTOLINEAR SCRIPT

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**Abstract.** *The Malia Stone Inscription is an extraordinary inscription in the Cretan Hieroglyphic script, which is the only one known engraved on stone, excavated in 1937 at Malia, Crete. Because of its cuplike cavity on top, the stone is thought to be a Minoan altar. The inscription has drawn the attention of numerous archaeologists and researchers of the Aegean scripts who have attempted to read the entire inscription or the separate signs on it. This study has been conducted according to the theory of the Cretan Protolinear script, which is considered herein as the original script that all the Aegean scripts evolved from. The proposed interpretation concludes that the whole phrase is an invocation by a worshipper of his/her personal deity for the bringing of wealth and happiness.*

**Keywords:** *Malia Stone altar, Malia Stone inscription, Cretan Hieroglyphics, Cretan Protolinear script.*

## Introduction

The Malia Stone Inscription is an extraordinary inscription in the Cretan Hieroglyphic (CH) script,<sup>1</sup> the only one known engraved on stone, excavated in 1937 at Malia, Crete.<sup>2</sup> Because of its cuplike cavity on top, the stone is thought to be a Minoan altar. The inscription has drawn the attention of numerous archaeologists and researchers of the Aegean scripts who have attempted to read the entire inscription or the separate signs on it (**fig. 1**).

Unfortunately, the inscription has been circulated in a slightly distorted form as copied firstly by Chapouthier,<sup>3</sup> and then recopied by other researchers such as Ridderstad,<sup>4</sup> in the form shown below (**fig. 2**).

In his publication, Chapouthier<sup>5</sup> numbers the inscription's signs from right to left, which is surely wrong, as we know that the main way of writing

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<sup>1</sup> In this paper we used the following specific abbreviations: AHW - Akkadisches Handwörterbuch; CH - Cretan Hieroglyphic; CP - Cretan Protolinear; LA - Linear A; LB - Linear B; PSD - Pennsylvania Sumerian Dictionary, available online at: <http://psd.museum.upenn.edu/epsd/index.html>, accessed 20 April 2017.

<sup>2</sup> Ridderstad 2007, p. 1.

<sup>3</sup> Chapouthier 1938.

<sup>4</sup> Ridderstad 2007, p. 1.

<sup>5</sup> Chapouthier 1938.

the Minoan scripts was from left to right. Indeed, CH is often written in different fanciful ways, for example, in vertical columns or around an image, but never in a row from right to left. Right to left would surely confuse the reader, as the ordinary Minoan script, Cretan Protolinear (CP),<sup>6</sup> was always written from left to right. Moreover, writing from right to left would be considered inauspicious, if we judge from the fact that already in Homer the rightward movement was considered the auspicious one. For example, when a servant was serving food or wine, he/she had to do that starting from the person on the left and moving on in a row to the right; also the ancient Greek diviners would observe the birds while facing to the north, and they interpreted rightward flying as auspicious, while leftward flying birds were considered inauspicious. Alphabetic Greek was originally written “επι τα λαια” (leftwards, continuing the Phoenician tradition), but later, under the instruction of Pythagoras, it was stabilised as rightward, and the reason was not only practical; the rightward movement was also considered auspicious and that idea must have started from the Minoans - they would not write their CP rightwards if that was not auspicious in their eyes.



Fig. 1. Photograph of the Malia Stone inscription<sup>7</sup>



Fig. 2. The CH inscription on the Malia Stone according to Chapouthier<sup>8</sup>

### Presentation

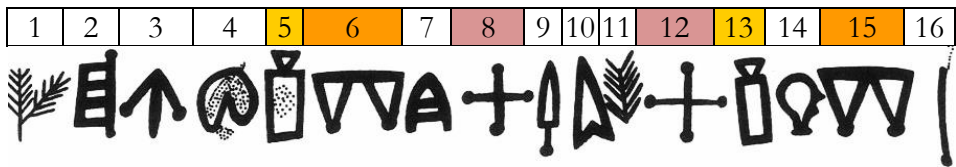
Before interpreting the signs on the Malia Stone inscription, it is necessary to present a more accurate image (fig. 3). The signs are numbered from left to right, while the numbers of the repeated signs are highlighted in the same colour. The inscription contains 13 different signs, three of which appear twice (5/13, 6/15, 8/12), thus giving a total of 16 signs.

<sup>6</sup> Regarded herein as the script that all the Aegean scripts evolved from: Willetts 1977, p. 100; Papakitsos, Kenanidis 2016.

<sup>7</sup> Olivier, Godart 1996.

<sup>8</sup> Chapouthier 1938.

It is only common sense to accept that the inscription conveys nothing other than a dedicatory ritual phrase, accomplishing the offering of drink and food to the deity that the stone altar was dedicated to. All attempts to assign a different role to the stone and the inscription have resulted in ludicrous assumptions, such as that it served as a board game<sup>9</sup> or a measure for agricultural goods.<sup>10</sup> To measure agricultural goods, any bucket would be appropriate and would not require an inscription. It was not necessary for that purpose to devote hours to carving a stone that could not be carried and whose cup could hold no more than a handful of goods. As to a board game, any wooden board would be suitable. Again it was not necessary to devote so many hours of work to cutting, smoothing out and inscribing a stone. A board game should have some geometric pattern for placing the game's pieces. Instead, the Malia Stone has only this inscription, which could not serve the purpose of any game. We do not know of any Minoan game board found, and this is not the only stone offering table known in Minoan Crete: many analogous stone tables have been discovered there, all having both a shallow cavity for holding the ritually offered food and drink and a dedicatory inscription.



**Fig. 3.** Accurate depiction of the Malia Stone inscription  
(after L. Godart, J.-P. Olivier)

This inscription is most interesting to us because of its affinity to CP. Most CH inscriptions have their signs fancifully turned in different directions, often in very manneristic forms, and arranged in such a manner that it is difficult to know the order in which the signs are to be read. In contrast, this CH inscription clearly follows the arrangement rules of the CP, which are well known from Linear A (LA) and even better from Linear B (LB).<sup>11</sup> We shall interpret the inscription's signs,<sup>12</sup> numbered as shown in **fig. 4**. So, according to CP,<sup>13</sup> the whole inscription is read:

<sup>9</sup> Hillbom 2005.

<sup>10</sup> Ridderstad 2007, p. 1.

<sup>11</sup> See below the discussion of sign #3.

<sup>12</sup> Marked by “#”.

<sup>13</sup> Kenanidis 1992; Kenanidis 2011; Kenanidis, Papakitsos 2015; Papakitsos, Kenanidis 2015.

“pu de ti ηə hi ho e lo pi po(s) te lo hi so ho wə!”

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
pu	de	ti	ηə	hi	ho	e	lo	pi	po	te	lo	hi	so	ho	wə



**Fig. 4.** The Malia Stone inscription with the phonetic values of signs

The “(s)” and the exclamation mark “!” of the above Latin-alphabet transliteration will be explained later. Some possible doubts need to be cleared. A Minoan writing sign is not identified until its pictorial origin is known, because every Minoan phonetic sign represented an object, which was explicit to the users of the script. Therefore, in identifying the signs of this inscription, the object that each sign represented should be identified firstly.

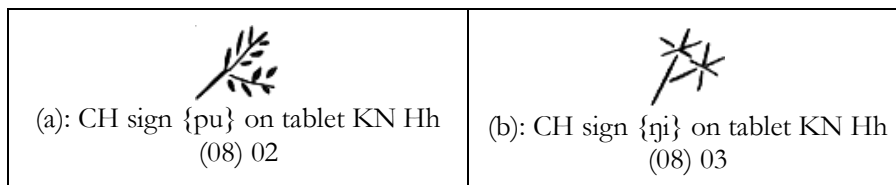
### Identification

SIGN #1:

This is {pu} and not {ηi}. CH should well differentiate {pu} from {ηi}, as we see for example on the tablets designated KN Hh (08) 02 (**fig. 5a**) and KN Hh (08) 03 (**fig. 5b**), written by the same hand. The differentiation is due to the fact that {pu} represented a cultivated tree reproduced by asexual means, while {ηi} any tree found in the wild, reproduced by seeds, was represented by the fig tree with its characteristic big leaves sketched in the sign for {ηi}.

SIGN #2:

This is clearly the sign {de}, representing a metal ingot; one of the commonest signs on CH inscriptions.



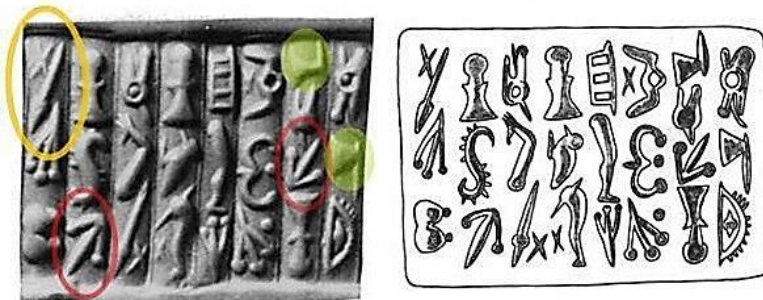
**Fig. 5.** CH signs {pu} and {ηi} by the same hand

SIGN #3:

Again one of the commonest CH signs, this sign is {ti}, representing an arrowhead. It should not to be confused with the spear {šo}, because CH clearly differentiates between the two, as the spear ({šo}) is depicted with a long shaft, while the arrow ({ti}) is represented by its metallic head alone. For example, on the prism of **fig. 6** we see the spear ({šo}) on the upper left, marked in yellow, while two occurrences of {ti}, which was much more common than {šo} in the inscriptions, are marked in red. In the same inscription, we can clearly see how each sign used to be drawn, facing in different directions, according to favourite habits of CH. For example, the axe sign {to}, seen twice on the right, is highlighted in green. The Malia Stone inscription is clearly differentiated from that habit, as we see the signs arranged in the mode of CP, which is:

- all signs are written on a straight (drawn or notional) line, from left to right;
- all signs are made as thin as possible (more tall than wide);
- all signs are shown standing upright, with pointed (or thinner) side up.

#314 [1] NEAPOLIS S (8/8) 01 / CMSVI, \*



AM 1938.1166. Prisme à 8 faces (0.4 x 1,9 cm; Ø 0,9 cm). Agate veinée

**Fig. 6.** Prismatic seal with 8 rows of CH text<sup>14</sup>

This does not only show an influence from CP, which was the main mode of writing for the Minoans, but also helps us to identify and ascertain the pictorial origin of the signs.

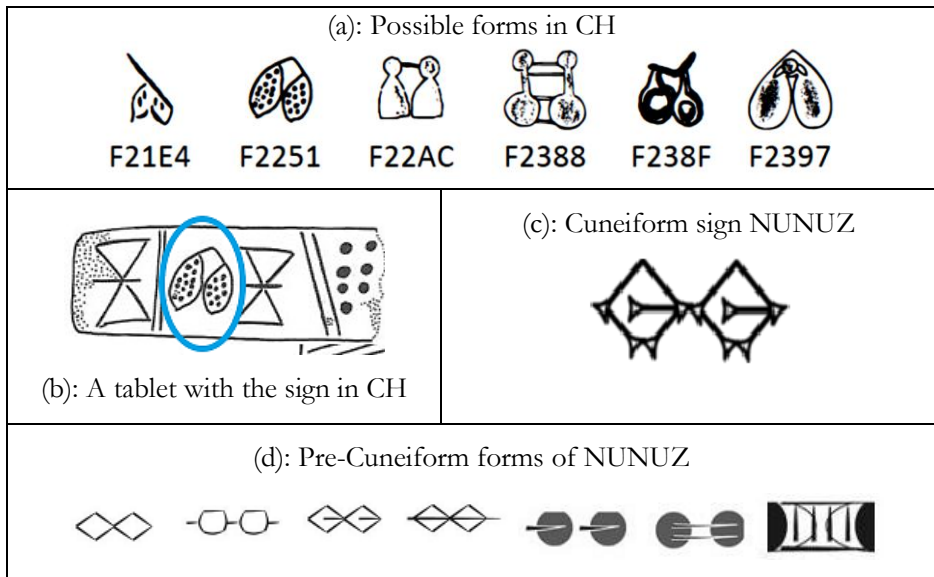
SIGN #4:

This sign was badly copied by Chapouthier<sup>15</sup> and the researchers who immediately followed, so it was previously impossible to correctly identify. As we can see in **fig. 3** and the photograph (**fig. 1**), the sign cannot be taken

<sup>14</sup> Olivier, Godart 1996.

<sup>15</sup> Chapouthier 1938.

for anything suggested by its form as copied (**fig. 2**). Sign #4 cannot be interpreted unless in the light of the discovery that every Minoan written sign was used for the Sumerian<sup>16</sup> name of the object represented by it. The CP syllable {ηə} was certainly not used in Achaean Greek (i.e., LB), and generally not in languages conveyed by LA. So, it may be attested only in CH (**fig. 7**), where some signs seem to depict “eggs.” The word for “egg(s)” is found in Cuneiform as “nunuz” (basically “egg,” metaphorically “ovoid beads”). In AHW,<sup>17</sup> “nunuz” is also glossed with the Akkadian *lipu(m)*



**Fig. 7.** About #4; CH and Mesopotamian Sumerian signs for eggs or testicles

“descendant.” This “nunuz” has been formed by reduplication (as apart from compounds and suffixed forms, all Sumerian nouns were monosyllabic); the sign NUNUZ (**fig. 7c**) was also read as “nuz,” “nus,” and “nunu.” So, the original Sumerian word for eggs must have been “ηə(θ);” the coda consonant is not very clear, but Cuneiform “z” stands for Sumerian /θ/.

<sup>16</sup> The affinity of the Aegean scripts to Sumerian has been attested by: Kenanidis 1992; Fischer 2004, p. 34-40; Szalek 2008; Davis 2011, p. 65-68; Kenanidis 2011; Kenanidis, Papakitsos 2015; Papakitsos, Kenanidis 2015; Szalek 2015; Kenanidis 2016; Papakitsos, Kenanidis 2016.

<sup>17</sup> von Soden 1958-1981.

SIGN #5(/13):

This sign has been shown in Kenanidis<sup>18</sup> to depict a writing tablet that was called “hi(m)” in Sumerian (found as “im” in Cuneiform), so the sign had the phonetic value {hi}. Note here that by “h” we represent, for convenience, the sound /x/, traditionally rendered as “ḫ;” the same convention is used in PSD.

SIGN #6(/15):

This sign has been shown in Kenanidis<sup>19</sup> to depict a woman’s breasts, named “ho(p)” in old Sumerian. It is found in Cuneiform as “ubur” where -ur is a common noun-suffix, something analogous to a definite article. It was not a taboo in Sumerian language and script - where even signs representing male and female genitals were common. Far from being obscene, the female breast inspired respect and honour, presented even in public: noble ladies with bare breasts were often depicted in Minoan art. In Mesopotamia there was the same attitude, as can be seen in literature and art. In Sollberger,<sup>20</sup> there is also found a nobleman named “sur-ubur” (“The Hero of the Breast”). This Malia Stone inscription is particularly useful for ascertaining the pictorial origin of this sign: although there is a clear tendency, following the CP script, to make all signs slim and tall rather than wide, and to draw them with their pointed or thinner side up, this sign is drawn (both times) with the pointed side down, and significantly more wide than tall. The reason is obvious: a woman’s breasts could not be depicted apart from as normally seen in reality. They could not be depicted with the nipples upwards or both pointing to the right, for example, because the natural image of a woman’s breasts is this, with nipples hanging downwards. Other CH inscriptions show the signs turned in various directions, so they are not helpful in this aspect, but this particular inscription, which has the signs as ordinarily written (in CP), does reaffirm to us that the sign depicted is a lady’s breasts.

SIGN #7:

This sign is obviously the same as the sign “e” of LB (LB38); it represented a 3-storey building (an administrative or religious one, not a private house). The word is found in Cuneiform as “eš<sub>3</sub>” (also note that the syllabic coda consonants were not pronounced in Sumerian, unless followed by the vowel of a suffix).

SIGN #8(/12):

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<sup>18</sup> Kenanidis 2011, p. 99-100.

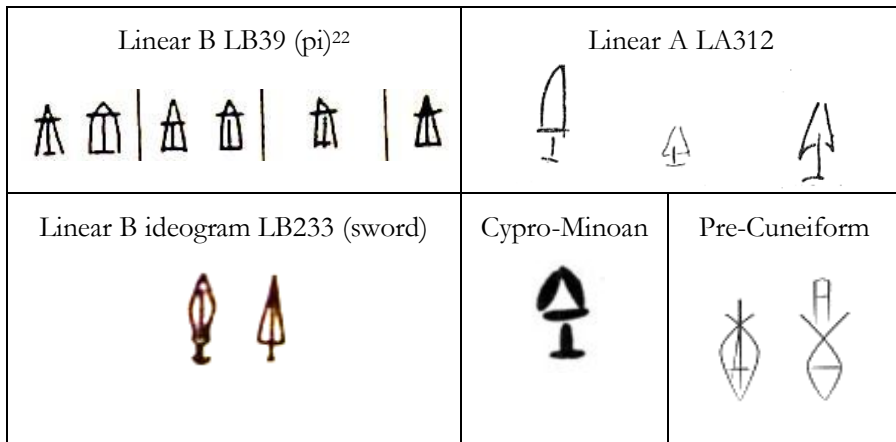
<sup>19</sup> Ibid., p. 124-125.

<sup>20</sup> Sollberger 1966.

This is obviously homomorph to the sign “ro/lo” of LB (LB2) and the sign “LO” of the Cypriot Greek syllabary. In Kenanidis,<sup>21</sup> it is explained that its CP phonetic value was LO, not RO, and that it represented a gazelle, called “lo(h)” in Sumerian.

SIGN #9:

This clearly depicted a sword or knife, so it is homomorph to LB39, with phonetic value {pi}. More than the forms of LB39, the homomorph in LA and in Cypro-Minoan is close in shape to the sign on the Malia Stone. In Mesopotamian Sumerian script, the sign for sword/knife is depicted with its point down (**fig. 8**).



**Fig. 8.** The signs for sword/knife (pi)

SIGN #10:

This sign, more than all other signs in the inscription, calls for particular attention. We know that the CP sign for {po} depicted a vine, called “po(s)” in old Sumerian. However, the Minoan sign for vine (po), as we know it from LB, LA and Cypro-Minoan, was of a totally different image than that in the Mesopotamian Sumerian Script: while “vine” was represented in Minoan Linear scripts by a sketch of a vine supported by props, in the Mesopotamian script (Cuneiform and Pre-cuneiform) “vine” was represented by a sketch of the vine’s leaf, with point down (**fig. 9**). Such differences between the two types of script (Aegean on the one hand and Mesopotamian on the other) are many. But what is exciting here, is that the Malia Stone’s scribe chose a sign for {po} which is essentially the same as the Mesopotamian sign for vine, and not the sign we know for vine in

<sup>21</sup> Kenanidis 1992, p. 23; Kenanidis 2011, p. 121-123.

<sup>22</sup> Ventris, Chadwick 1956.



the Aegean Linear scripts. This means that the knowledge of the Mesopotamian sign for vine, as a sketch of the leaf, still survived in Minoan Crete at the time of the inscription. According to the tendencies of the CP script (see above, under SIGN #3), the vine-leaf sign was used with point up, and was made more slender than the corresponding Mesopotamian sign.

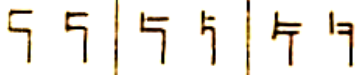





<p>Linear B LB11 (po)<sup>23</sup></p> 	<p>Linear A LA312</p> 	<p>Pre-Cuneiform</p> 
<p>Linear B ideogram LB131 (wine)</p> 	<p>Cypriot Greek PO</p> 	<p>Cuneiform</p> 

Fig. 9. The signs for vine/wine (po)

The phonetic changes from “pos-tan” to “ḡeš-tin” are easily explained by very common phonetic laws in the different dialects of Sumerian.<sup>24</sup> We said previously that the inscription is read:

pu de ti ḡə hi ho e lo pi po(s) te lo hi so ho wə!

and now it is the time to explain why the sign {po} might have been read as “pos” (and not simply “po”) in this text. It can be seen that the phrase is full of assonance characteristic of a poetic or a ritual/magical style of speech. The phrase can be divided into smaller parts as:

pu detiḡəhiho elopipo(so) telohisoho wə!

not that these were exactly the text’s words, but only to show the word-play and assonance. In particular, “elopipo(so)” corresponds in sound to “telohisoho;” this assonance would be even stronger if the sign {po} was here read “pos,” which would in fact sound “poso” because the Sumerian

<sup>23</sup> Ibid.

<sup>24</sup> Kenanidis, Papakitsos 2013.

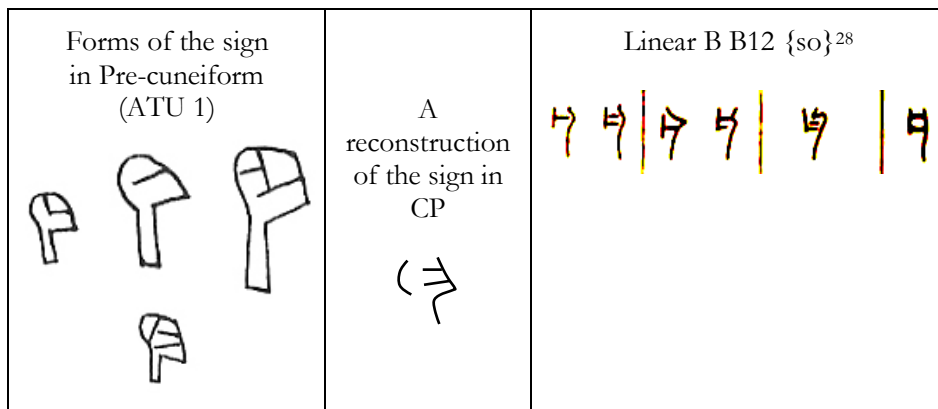
language always required an epenthetic vowel in order to be able to pronounce a coda consonant.

It was indeed possible in CH to read a syllabic sign with not only its proper syllable, but also with its full name (even if the full name required a suffix or an epenthetic vowel to be pronounced), and that happened especially when the sign meant the thing that it depicted.<sup>25</sup> Therefore, this means that the sign {po} (vine leaf) was probably read “pos(o)” here and was used for the word “pos” that meant “a grapevine.” It was not uncommon to use a plant’s name in an incantation or a religious formula. We know of a Mesopotamian Sumerian incantation<sup>26</sup> written “giššinig giš-gi giš-an ki-sikil-le mú-a” and pronounced approximately thus: “šenigi giŋi ŋi0-aan kee-segelee muda;” translated word by word as “a tamarisk of a canebrake, a tree of the sky (i.e., a tall tree), in earth pure (i.e., in a pure place) growing.” We could also refer to the importance of the vine as a symbol in the Christian religion. Although Christianity came much later, many Christian symbols have an ancient Mesopotamian origin, and the vine was important in religious contexts in Mesopotamia. We only mention here that Dumuzi’s sister’s name<sup>27</sup> was “ĝeštin-an-na,” meaning “the vine of heaven.”

SIGN #11:

The well-known sign for “te,” homomorph of LB4, depicted an ear of corn.

SIGN #14:



**Fig. 10.** The sign {so} (head)

<sup>25</sup> For more on this unusual mode of reading syllabic signs in CH, see: Kenanidis 2016.

<sup>26</sup> Bendt 1972, p. 92.

<sup>27</sup> Bendt 1972.

<sup>28</sup> Ventris, Chadwick 1956.

This is easily identified because it clearly depicts a human head in profile, facing rightwards. When a CH sign is of a known pictorial origin, then it is identified as a sign. The head sign is common in all types of Minoan and Mesopotamian writing. It is explained in full detail by Kenanidis<sup>29</sup> that the head sign stood for the syllable {so}, because “head” was “so(p)” in the old Sumerian that appears as “sa(ṭ)” in Cuneiform, according to the well known phonological correspondences between dialects.

SIGN #16:

It is questionable whether the sixteenth sign is really a sign. The photograph (**fig. 1**) shows that the stone is broken off right next to that sign, but, from what we can see, it does not appear that the sign continued onto the part that has been broken off. In other words, it appears that no part of that last sign is missing. Sign #16 is only a vertical line, quite a bit longer than the other, “ordinary” signs, and its bottom end is marked with a wide hole in the stone, as with the common practice in CH to mark the end of lines with holes. The top end, however, is not marked with any hole; it is, rather, tapering, as if the line was drawn from the bottom upwards and the chisel left the stone at the top of the vertical line, the way a stylus used to leave clay tablets. That vertical line, which is sign #16 of this inscription, is perhaps reminiscent of a line separating words. In LB, a small vertical line is used for the separation of words, but that is very short; even shorter than half of the sign’s height. In LA, there is often no word division mark used, while some tablets and stone inscriptions have words divided by small dots only. On the other hand, this final line of the inscription is about one-and-a-half times the height of the other signs. It is not really a word-dividing mark; if the scribe used a word division mark, that would also have been used within the text, not only at the end. In fact, LB (and LA, as explained) use word-dividing marks between words, but no such marks at the end of the text. The end of the text or of the phrase is only shown by an empty space at the end of the line or of the tablet. So it is clear that the sixteenth sign is not a word-dividing line, but works as a finalising mark.

A finalising mark pronounced as a syllable was necessary for every invocation, just analogous to pressing the “enter” key when we enter some words into the computer. Indeed, invocatory texts like this always have some finalising mark, orally given if not written. For example, Christian prayers end with “amen,” Muslim and Zoroastrian prayers end with “amin,” in Sanskrit there are several such finalising sacred words, such as “swāhā,” Vedic sacrificial formulas were concluded with “waṣaṭ” or “wāuṣaṭ,” on the hearing of which the performing priest would instantly immolate the

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<sup>29</sup> Kenanidis 1992, p. 22; Kenanidis 2011, p. 126-129.

sacrificial victim. Such words as “swāhā,” “waṣaṭ” and “wāuṣaṭ” do not belong to any part of speech, and they are not used in a language, unless to finalise an invocation. As such words extend beyond all borders, it is quite likely that the Malia Stone invocation also ended with an exclamatory sound, similar to analogous exclamations in Sanskrit and other languages. By its shape, this sixteenth sign indicates the end of the invocation: it is shaped like a long border that forces the “walking” signs, the whole phrase, to stop. In some way, it is also open to the sky but rooted in the earth, as symbolised by the finalising hole at the bottom of the line (“earth”), while there is no such finalizing element at the top (“heaven”). So, the sign’s shape in itself is a finalising mark of the invocation.

Additionally, the same shape indicates how the sign was to be pronounced as the concluding invocatory exclamation. It is the shape of a simplified and stylised sign {wə} which represents a penis. It is also explained in Kenanidis<sup>30</sup> that the CP sign {wə} has been found in LA inscriptions (six variant forms of the sign are known in LA; a seventh variant is this CH occurrence on the Malia Stone). The sign was found mainly in stone offering tables’ inscriptions, written in LA. The sign’s phonetic value {wə} came from the Sumerian word “wə(s)” (found in Cuneiform as “UŠ”), which meant “erection; male vigour,” by synecdoche “penis.” As nasalisation was not written in the Minoan scripts, it is possible that “wə” was nasalised, in the mode of the most typical Sanskrit “bija” mantras, which normally have a “nāda” (vowel lengthening) and a “bindu” (nasalisation).

## Interpretation

Now, to read the inscription as a whole, representing the nasalised “ə” as “ǣ” we have:

pu-de-ti-ηə-hi-ho e-lo-pi-po(so) te-lo-hi-so-ho wǣ!

We divide the text into three parts in assonance to each other:

[1]: pu-de-ti-ηə-hi-ho; [2]: e-lo-pi-po(so); [3]: te-lo-hi-so-ho.

In particular, [2] is in assonance to [3]. The whole phrase is concluded with the ritual exclamation “wǣ.” The whole phrase is an invocation to the worshipper’s personal deity to bring wealth and happiness. People in many parts of the world, at least in the eastern Mediterranean, honoured their personal deities; it is a concept similar to that of a guarding angel in Christianity. The concept is very clearly seen in the book of Jonah in the Bible: when the ship was in great danger due to the storm, every person in

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<sup>30</sup> Kenanidis 2011, p. 52-53.

the ship prayed to his own personal deity, but Jonah was sleeping and snoring; they woke him up, saying “how can you be snoring! Get up and pray to your personal deity, so we may be saved from the storm!” As something about Jonah appeared suspicious, they added a question: “Who is your deity?” Jonah answered that he worshipped the one God, who is the maker and lord of heaven and earth. The people in the ship were awed to hear that; not that they did not believe in that one God, but they did not know people who worshipped the one supreme God as their personal deity.

## Conclusions

It has been argued herein that the Malia Stone invokes the worshipper’s personal deity and not the universal God, which the Sumerians worshipped as An, because the symbol for God/An (the double axe) is not presented in the inscription. Furthermore, there is no symbol of the highest Goddess (her symbol being same as the sign {me}: LB13) nor even the symbol of union of the supreme forces, that being the same as the sign {pete} (LB62). Furthermore, it is estimated that the personal deity worshipped in this inscription was named after some plant(s), since we see the sign {po} (grapevine), probably used to mean “grapevine” in this text, and also the text starts with {pu} (fruit bearing tree). The part “te-lo” in the inscription might have been the Sumerian word “tel” (“complete”), written “til.”<sup>31</sup> From time to time, the person who set up this offering table offered some food (e.g., grains) or drink (e.g., wine; given the connection of the deity to the grapevine) in the shallow pit of the stone (which, being about 15 cm in diameter, could take about a handful) and recited the magic words, which stood permanently on the stone as a permanent prayer. The notion of permanent prayer is similarly found on Tibetan prayer wheels.<sup>32</sup>

## Bibliographical Abbreviations

- |                      |   |
|----------------------|---|
| Bendt 1972           | - Alster Bendt, <i>Dumuzi’s Dream</i> , Copenhagen, 1972.   |
| Chapouthier 1938     | - Fernand Chapouthier, <i>Inscription hiéroglyphique gravée sur un bloc de calcaire</i> , in <i>BCH</i> , 62, 1938, p. 104-109. |
| Davis 2011           | - Brent Davis, <i>Cypro-Minoan in Philistia?</i> , in <i>Kubaba</i> , 2, 2011, p. 40-74.  |
| Fischer 2004         | - Steven R. Fischer, <i>History of Writing</i> , London, 2004.  |
| Olivier, Godart 1996 | - Jean-Pierre Olivier, Louis Godart, <i>Corpus Hieroglyphicarum Inscriptionum Cretae</i> , Études crétoises, 31, Paris, 1996.   |

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<sup>31</sup> PSD also gives: “di-til-la,” completed court case; “inim-til,” concluding statement.

<sup>32</sup> Hunter 1985.

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- Hillbom 2005 - Niklas Hillbom, *Minoan Games and Game Boards*, PhD thesis, Lund University, 2005.
- Hunter 1985 - Alwin Hunter, *Tibetan Prayer Wheels*, in *Arts of Asia*, 15, 1985, 1, p. 74-81.
- Kenanidis 1992 - Ioannis K. Kenanidis, *Eteokreetes Megaletores*, Athens, 1992.
- Kenanidis 2011 - Ioannis K. Kenanidis, *Historical and Linguistic Studies: Cvepeker.doc*, Kavala, 2011.
- Kenanidis 2016 - Ioannis K. Kenanidis, *A 17th c. BC Minoan Votive Double Axe (Labrys): The Arkalochori Axe and Its Siblings*, in *Anistoriton*, In Situ, 15, 2016-2017.
- Kenanidis, Papakitsos 2013 - Ioannis K. Kenanidis, Evangelos C. Papakitsos, *Yet Another Suggestion about the Origins of the Sumerian Language*, in *IJL*, 5, 2013, 5, p. 30-44.
- Kenanidis, Papakitsos 2015 - Ioannis K. Kenanidis, Evangelos C. Papakitsos, *A Comparative Linguistic Study about the Sumerian Influence on the Creation of the Aegean Scripts*, in *SJAHSS*, 3 (1E), 2015, p. 332-346.
- Papakitsos, Kenanidis 2015 - Evangelos C. Papakitsos, Ioannis K. Kenanidis, *Additional Palaeographic Evidence for the Relationship of the Aegean Scripts to the Sumerian Pictography*, in *SJAHSS*, 3 (3C), 2015, p. 734-737.
- Papakitsos, Kenanidis 2016 - Evangelos C. Papakitsos, Ioannis K. Kenanidis, *Cretan Hieroglyphics: The Ornamental and Ritual Version of the Cretan Protolinear Script*, in *Anistoriton*, Essays 15, 2016, 2.
- Ridderstad 2007 - Marianna Ridderstad, *The Cretan Hieroglyphic Inscription on the Malia Stone Table*, in *Anistoriton*, In Situ 10, 2007, 3.
- von Soden 1958-1981 - Wolfram von Soden, *Akkadisches Handwörterbuch (AHW)*, Wiesbaden, 1958-1981.
- Sollberger 1966 - Edmond Sollberger, *The Business and Administrative Correspondence under the Kings of Ur*, Texts from Cuneiform Sources, 1, Michigan, 1966.
- Szalek 2008 - Benon Z. Szalek, *Eteocretan, Linear A, Etruscan, Lemnian, Carianan, Eteocyprriot and Related Problems in the Light of Heuristics and Cryptology*, Szczecin, 2008.
- Szalek 2015 - Benon Z. Szalek, *Tartessian, Etruscan, Linear A, Sumerian and Related Problems in the Light of Heuristics and Cryptology*, Szczecin, 2015.
- Ventris, Chadwick 1956 - Michael Ventris, John Chadwick, *Documents in Mycenaean Greek*, Cambridge, 1956.
- Willetts 1977 - Ronald F. Willetts, *The Civilization of Ancient Crete*, Oakland, 1977.

## LISTA ABREVIERILOR

<b>AAR-SI</b>	- Analele Academiei Române. Memoriile Secțiunii Istorice. Academia Română. București.
<b>ActaArchHung</b>	- Acta Archaeologica. Academiae Scientiarum Hungaricae. Budapesta.
<b>ActaHASH</b>	- Acta Historica Academiae Scientiarum Hungaricae. Budapesta.
<b>ActaMN</b>	- Acta Musei Napocensis. Muzeul de Istorie a Transilvaniei. Cluj-Napoca.
<b>Adevărul</b>	- Adevărul. București.
<b>AÉ</b>	- Archaeologiai Értesítő a Magyar régészeti, művészt-történeti és éremtani társulat tudományos folyóirata. Budapesta.
<b>AF</b>	- Altorientalische Forschungen. Institut für Archäologische Wissenschaften, Abteilung Vorderasiatische Archäologie. Berna.
<b>AH</b>	- Archaeologia historica. Masarykova univerzita, Filozofická fakulta. Brno.
<b>AHY</b>	- Austrian History Yearbook. Center for Austrian Studies. Minneapolis MN.
<b>AIEFCB</b>	- Anuarul Institutului de Etnografie și Folclor „Constantin Brăiloiu”. Academia Română, Institutul de Etnografie și Folclor „Constantin Brăiloiu”. București.
<b>AIAC</b>	- Anuarul Institutului de Istorie și Arheologie Cluj-Napoca. (este continuat de AIIGB).
<b>AIIAI/AIIX</b>	- Anuarul Institutului de Istorie și Arheologie „A. D. Xenopol” Iași (din 1990 Anuarul Institutului de Istorie „A. D. Xenopol” Iași).
<b>AIIGB</b>	- Anuarul Institutului de Istorie „George Barițiu” Cluj-Napoca. (continuă AIAC).
<b>AIIN</b>	- Anuarul Institutului de Istorie Națională. Cluj-Sibiu.
<b>AISC</b>	- Anuarul Institutului de Studii Clasice. Cluj.
<b>AJPA</b>	- American Journal of Physical Anthropology. The Official Journal of the American Association of Physical Anthropologist. Baltimore.
<b>Alba-Iulia</b>	- Alba-Iulia. Alba Iulia.
<b>Aluta</b>	- Aluta. Studii și comunicări - Tanulmányok és Közlemények. Sfântu Gheorghe.
<b>AM</b>	- Arheologia Moldovei. Institutul de Istorie și Arheologie „A. D. Xenopol” Iași.
<b>AMM</b>	- Acta Moldaviae Meridionalis. Muzeul Județean Vaslui.
<b>Anatolia Antiqua</b>	- Anatolia Antiqua. L'Institut Français d'Études Anatoliennes d'Istanbul.
<b>AnB</b>	- Analele Banatului. Muzeul Național al Banatului (serie nouă). Timișoara.
<b>Anistoriton</b>	- Anistoriton / <i>Ανιστόριτον</i> . History and Archaeology Journal. Digital Journal (Grecia).

Lista abrevierilor

- Annales** - Annales. Économies, Sociétés, Civilisations. École des Hautes Études en Sciences Sociales. Paris.
- Antaeus** - Antaeus. Communicationes ex Instituto Archaeologico Academiae Scientiarum Hungaricae. Budapesta.
- AntAfr** - Antiquités africaines. Université de Provence. Paris.
- AnUB-ŞP** - Analele Universităţii din Bucureşti. Seria Ştiinţe Politice. Universitatea din Bucureşti.
- AO** - Arhivele Olteniei. Serie nouă. Institutul de Cercetări Socio-Umane. Craiova.
- Apulum** - Apulum. Acta Musei Apulensis. Muzeul Naţional al Unirii Alba Iulia.
- ArhMed** - Arheologia Medievală. Reşiţa. Cluj-Napoca.
- ArhVestnik** - Arheološki Vestnik. Institut za arheologijo. Ljubljana.
- Arts of Asia** - Arts of Asia. The Asian Arts & Antiques Magazine. Hong Kong.
- Astra Sabesiensis** - Astra Sabesiensis. Despărţământul Astra „Vasile Moga” Sebeş.
- AUASH** - Annales Universitatis Apulensis. Series Historica. Universitatea „1 Decembrie 1918” din Alba Iulia.
- Banatica** - Banatica. Muzeul de Istorie al judeţului Caraş-Severin. Reşiţa.
- BAR** - British Archaeological Reports (International Series). Oxford.
- BB** - Bibliotheca Brukenthal. Muzeul Naţional Brukenthal. Sibiu.
- BCH** - Bulletin de correspondance hellénique. L’Institut de correspondance hellénique d’Athenes. Atena.
- BCŞS** - Buletinul Cercurilor Ştiinţifice Studenteşti. Universitatea „1 Decembrie 1918” din Alba Iulia.
- BECh** - Bibliothèque de l’école des chartes. Revue d’érudition. Paris.
- BerRGK** - Bericht der Römisch-Germanischen Kommission des Deutschen Archäologischen Instituts. Frankfurt pe Main.
- BHAB** - Bibliotheca Historica et Archaeologica Banatica. Muzeul Banatului Timişoara.
- BJJS** - The British Journal of Sociology. London School of Economics and Political Science. University of London.
- BMA** - Bibliotheca Musei Apulensis. Muzeul Naţional al Unirii Alba Iulia.
- BOR** - Biserica Ortodoxă Română. Patriarhia Română. Bucureşti.
- Boabe de grâu** - Boabe de grâu. Revistă de cultură. Bucureşti.
- BR** - Budapest Régiségei. Budapesti Történeti Múzeum. Budapesta.
- Britannia** - Britannia: A Journal of Romano-British and Kindred Studies. Society for the Promotion of Roman Studies. Londra.
- Brukenthal** - Brukenthal. Acta Musei. Muzeul Naţional Brukenthal. Sibiu.
- BS** - Balkan Studies. Institute for Balkan Studies in Thessaloniki. Salonic.
- BSNR** - Buletinul Societăţii Numismatice Române. Bucureşti.
- BTh** - Bibliotheca Thracologica. Institutul Român de Tracologie. Bucureşti.
- BudRég** - Budapest Régiségei. Budapesti Történeti Múzeum. Budapesta.



<b>CAC</b>	- Central Asia and Caucasus. Institute for Central Asian and Caucasian Studies. Luleå (Sweden). Institute of Strategic Studies of the Caucasus. Baku (Azerbaijan).
<b>Carpații</b>	- Carpații: Vânătoare, pescuit, chinologie. Cluj.
<b>Castrum</b>	- Castrum. A Castrum Bene Egyesület Hírlevele. Budapesta.
<b>CCA</b>	- Cronica cercetărilor arheologice. București.
<b>Cercetări arheologice</b>	- Cercetări arheologice. Muzeul Național de Istorie a României. București.
<b>Chronica</b>	- Chronica: annual of the Institute of History. University of Szeged.
<b>Cibinium</b>	- Cibinium. Analele Muzeului Etnografic „ASTRA”. Complexul Muzeal „ASTRA”. Sibiu.
<b>CN</b>	- Cercetări Numismatice. Muzeul Național de Istorie a României. București.
<b>CNA</b>	- Cronica Numismatică și Arheologică. Foaie de informații a Societății Numismatice Române. București.
<b>CP</b>	- Classical Philology. A Journal Dedicated to Research in Classical Antiquity. Chicago.
<b>Crisia</b>	- Crisia. Culegere de materiale și studii. Muzeul Țării Crișurilor. Oradea.
<b>Dacia</b>	- Dacia. Recherches et découvertes archéologiques en Roumanie. Nouvelle série: Revue d'archéologie et d'histoire ancienne. București.
<b>Denarius</b>	- Denarius. Slovenské národné múzeum - historické múzeum. Bratislava.
<b>Der Unterwald</b>	- Der Unterwald. Sebeș.
<b>DolgCluj</b>	- Dolgozatok az Erdély Nemzeti Múzeum Érem - és Régiségtárából. Kolosvár (Cluj).
<b>EDR</b>	- Ephemera dacoromana. Annuario dell'Accademia di Romania. Roma.
<b>EHQ</b>	- European History Quarterly. Sage Publications. New York.
<b>EO</b>	- Etnograficheskoye obozreniye. Institut etnologii i antropologii RAN. Moscova.
<b>Erdély Múzeum</b>	- Erdély Múzeum. Erdélyi Múzeum-Egyesület. Cluj-Napoca.
<b>Études balkaniques</b>	- Études balkaniques. Cahiers Pierre Belon. Association Pierre Belon. Paris.
<b>European Archaeology</b>	- European Archaeology/online. București.
<b>FBW</b>	- Fundberichte aus Baden-Württemberg. Stuttgart.
<b>FI</b>	- File de Istorie. Muzeul de Istorie Bistrița (continuată de <i>Revista Bistriței</i> ).
<b>FolArch</b>	- Folia Archaeologica. Magyar Történeti Múzeum. Budapesta.
<b>FUrb</b>	- Forma Urbis. Roma.
<b>Gasyrlar avazy</b>	- Gasyrlar avazy. Ekho vekov. Kazan.
<b>Germania</b>	- Germania, Römisch-Deutscher Kommission des Deutschen Archäologischen Instituts. Frankfurt am Main.
<b>GM</b>	- Golos minuvshogo. Federal'noye gosudarstvennoye byudzhethnoye obrazovatel'noye uchrezhdeniye vysshego obrazovaniya Kubanskiy gosudarstvennyy universitet. Krasnodar.
<b>Godišnjak</b>	- Godišnjak. Jahrbuch Knjiga. Sarajevo-Heidelberg.

Lista abrevierilor

<b>HEI</b>	- History of European Ideas. International Society for the Study of European Ideas. Londra.
<b>Hierasus</b>	- Hierasus. Muzeul Județean Botoșani.
<b>Hiperborea Journal</b>	- Hiperborea Journal. Societatea de Istorie Balcanică. București.
<b>HOMÉ</b>	- A Herman Ottó Múzeum Évkönyve. Miskolc.
<b>HSCP</b>	- Harvard Studies in Classical Philology. Harvard University. Cambridge (SUA).
<b>IIER</b>	- Issues in Educational Research. Western Australian Institute for Educational Research Inc. New South Wales, Australia.
<b>IJESE</b>	- International Journal of Environmental & Science Education. Kazan.
<b>IJL</b>	- International Journal of Linguistics. Makrothink Institute. Las Vegas.
<b>IPH</b>	- Inventaria Praehistorica Hungarie. Budapesta.
<b>Istoricheskie</b>	- Istoricheskie, filosofskie, politicheskie i yuridicheskie nauki, kulturologiya i iskustvovedenie. Voprosy teorii i praktiki. Tambov.
<b>Izvestiya ASU</b>	- Izvestiya. Altayskiy gosudarstvennyy universitet. Barnaul.
<b>Jászkunság</b>	- Jász-Nagykun-Szolnok Megyei Tudományos Egyesület. Szolnok.
<b>JHE</b>	- Journal of Human Evolution. Elsevier.
<b>JRGZM</b>	- Jahrbuch des Römisch-Germanischen Zentralmuseums zu Mainz.
<b>Közlemények</b>	- Közlemények az Erdélyi Nemzeti Múzeum Érem - és Régiségtárából. Cluj.
<b>KST</b>	- Kazı Sonuçları Toplantısı. Ankara.
<b>Kubaba</b>	- Kubaba. Faculdade de Ciências Sociais e Humanas, Universidade Nova de Lisboa.
<b>Lumea nouă</b>	- Lumea nouă. București.
<b>Lupta</b>	- Lupta. Iași.
<b>Mannus</b>	- Mannus. Gesellschaft für Deutsche Vorgeschichte. Leipzig.
<b>Maqarnas</b>	- Muqarnas Online. An Annual on the Visual Cultures of the Islamic World. Cambridge.
<b>Marisia</b>	- Marisia. Muzeul Județean Târgu Mureș.
<b>MCA</b>	- Materiale și cercetări arheologice. București.
<b>ME</b>	- Memoria Ethnologica. Centrul Județean pentru Conservarea și Promovarea Culturii Tradiționale Maramureș. Baia Mare.
<b>MEFRA</b>	- Mélanges de l'École française de Rome - Antiquité. Roma.
<b>MEJSR</b>	- Middle-East Journal of Scientific Research. International Digital Organization for Scientific Information. Deira, Dubai.
<b>MFME</b>	- A Móra Ferenc Múzeum Évkönyve. Studia Archaeologica. Szeged.
<b>Mir nauki</b>	- Mir nauki, kulturni, obrazovania. Gorno-Altaysk.
<b>MN</b>	- Muzeul Național. Muzeul Național de Istorie a României. București
<b>Mots</b>	- Mots. Les langages du politique. ENS Editions. Paris.
<b>Muzeológia</b>	- Muzeológia a kultúrne dedičstvo. Univerzita Komenského v Bratislave.
<b>Múzeum</b>	- Slovenské národné múzeum. Bratislava.

<b>Natura</b>	- Natura. Revistă pentru răspândirea științei. București.
<b>NK</b>	- Národní knihovna: knihovnická revue. Národní knihovna České republiky. Praga.
<b>Numizmatika</b>	- Numizmatika. Slovenská numizmatická spoločnosť. Bratislava.
<b>PA</b>	- Patrimonium Apulense. Direcția Județeană pentru Cultură Alba. Alba Iulia.
<b>PBF</b>	- Prähistorische Bronzefunde. München.
<b>PolSci</b>	- Romanian Journal of Political Science. Societatea Academică din România. București.
<b>Pontica</b>	- Pontica. Muzeul de Istorie Națională și Arheologie. Constanța.
<b>PQCS</b>	- Philippine Quarterly of Culture and Society. University of San Carlos. Cebu.
<b>PZ</b>	- Prähistorische Zeitschrift. Deutsche Gesellschaft fuer Anthropologie, Ethnologie und Urgeschichte, Institut für Prähistorische Archäologie. Berlin.
<b>Rațiunea</b>	- Rațiunea. Revistă bilunară de liberă cugetare. București.
<b>RB</b>	- Revista Bistriței. Complexul Muzeal Bistrița-Năsăud. Bistrița (continuă File de Istorie).
<b>RES</b>	- Review of European Studies. Canadian Center of Science and Education. Toronto.
<b>RevHisto</b>	- Revista de Historiografia. Instituto de Historiografía Julio Caro Baroja. Universidad Carlos III de Madrid.
<b>RHA</b>	- Revue historique des armées. Ministère de la Défense. Paris.
<b>RHSEE/RESEE</b>	- Revue historique du sud-est européen. Academia Română. București, Paris (din 1963 Revue des études sud-est européennes).
<b>RI</b>	- Revista de Istorie (din 1990 Revista istorică). Academia Română. București.
<b>RIR</b>	- Revista istorică română. Institutul de Istorie Națională din București.
<b>RMM-MIA</b>	- Revista muzeelor și monumentelor. Monumente Istorice și de Artă. București.
<b>Romantisme</b>	- Romantisme. Revue du dix-neuvième siècle. Editeur Armand Colin. Paris.
<b>România liberă</b>	- România liberă. București.
<b>Rossiyskaya istoriya</b>	- Rossiyskaya istoriya. Akademicheskii nauchno-izdatel'skiy, proizvodstvenno-poligraficheskiy i knigorasprostranitel'skiy tsentr Nauka. Moscova.
<b>RRH</b>	- Revue Roumaine d'Histoire. Academia Română. București.
<b>RRSE</b>	- Revista română de studii eurasiatice. Centrul de Studii Eurasiatice, Universitatea „Ovidius” Constanța.
<b>SA</b>	- Sociological Analysis. Oxford University Press. Oxford.
<b>SAA</b>	- Studia Antiqua et Archaeologica. Universitatea „Alexandru Ioan Cuza” din Iași.
<b>SAI</b>	- Studii și articole de istorie. Societatea de Științe Istorice și Filologice a RPR. București.
<b>SArcheologiczne</b>	- Sprawozdania Archeologiczne. Instytut Archeologii i Etnologii PAN. Cracovia.

## Lista abrevierilor

<b>Sargetia</b>	- Sargetia. Acta Musei Devensis. Muzeul Civilizației Dacice și Romane Deva.
<b>SC</b>	- Studii și comunicări. Asociația Folcloriștilor și Etnografilor din județul Sibiu (din 1992 devine Studii și Comunicări de Etnologie).
<b>SCB</b>	- Studii și cercetări de bibliologie. Academia RPR. București.
<b>SCIV(A)</b>	- Studii și cercetări de istoria veche. București (din 1974, Studii și cercetări de istorie veche și arheologie).
<b>SCN</b>	- Studii și Cercetări de Numismatică. Institutul de Arheologie „Vasile Pârvan” București.
<b>SJ</b>	- Saalburg Jahrbuch. Bericht des Saalburg Museum. Mainz am Rhein.
<b>SJAHSS</b>	- Scholars Journal of Arts, Humanities and Social Sciences. Scholars Academic and Scientific Publishers (SAS).
<b>SlovArch</b>	- Slovenská Archeológia. Nitra.
<b>SlovNum</b>	- Slovenská numizmatika. Národný numizmatický komitet Slovenskej republiky a Archeologický ústav SAV. Nitra.
<b>SM</b>	- Svobodnaya mysl. Obshchestvo s ogranichennoy otvetstvennost'yu Politizdat. Moscova.
<b>SMIM</b>	- Studii și materiale de istorie modernă. Institutul de Istorie „Nicolae Iorga” al Academiei Române. București.
<b>SMIMed</b>	- Studii și materiale de istorie medie. Institutul de Istorie „Nicolae Iorga” al Academiei Române. București.
<b>Socialismul</b>	- Socialismul. București.
<b>SP</b>	- Studii de Preistorie. Asociația Română de Arheologie. București.
<b>SS</b>	- The Social Sciences. Western Social Association. Dubai.
<b>Stâna</b>	- Stâna. Revistă profesională și de cultură. Organ al oierilor din întreaga țară. Poiana Sibiului.
<b>Steaua</b>	- Steaua: literară, artistică și culturală. Uniunea Scriitorilor din România. Cluj-Napoca.
<b>StudiaTC</b>	- Studia Theologia Catholica. Universitatea „Babeș-Bolyai” Cluj-Napoca.
<b>StudiaUBBH</b>	- Studia Universitatis Babeș-Bolyai. Series Historia. Universitatea „Babeș-Bolyai” Cluj-Napoca.
<b>Studii</b>	- Studii. Revistă de istorie. (din 1974 Revista de istorie și din 1990 Revista istorică). Academia Română. București.
<b>Suceava</b>	- Anuarul Muzeului Județean Suceava.
<b>SUCH</b>	- Studia Universitatis Cibiniensis, Serie Historica. Universitatea „Lucian Blaga” Sibiu.
<b>Syria</b>	- Syria. Archéologie, art et histoire. Revue d'art oriental et d'archéologie. Institut français du Proche-Orient.
<b>Századok</b>	- Századok. A Magyar Történelmi Társulat folyóirata. Budapest.
<b>TAD</b>	- Türk Arkeoloji Dergisi. Ankara.
<b>Telegraphul</b>	- Telegraphul. București.
<b>Terra Sebus</b>	- Terra Sebus. Acta Musei Sabesiensis. Muzeul Municipal „Ioan Raica” Sebeș.
<b>Thraco-Dacica</b>	- Thraco-Dacica. Institutul Român de Tracologie. București.
<b>Transilvania</b>	- Transilvania. Centrul Cultural Interetnic Transilvania. Sibiu.

<b>Tyragetia</b>	- Tyragetia. Muzeul Național de Arheologie și Istorie a Moldovei. Chișinău.
<b>UPA</b>	- Universitätsforschungen zur Prähistorischen Archäologie. Berlin.
<b>Vestnik Moskovskaya</b>	- Vestnik Moskovskaya gosudarstvennaya khudozhestvenno-promyshlennaya akademiya imeni S. G. Stroganova. Moscova.
<b>Vestnik Omskogo</b>	- Vestnik Omskogo universiteta. Seriya Istoricheskiye nauki. Omskij Gosudarstvennyj Universitet. Omsk.
<b>Vestnik Tatarskogo</b>	- Vestnik Tatarskogo gosudarstvennogo gumanitarno-pedagogicheskogo universiteta. Filologija i kul'tura. Kazan.
<b>VI</b>	- Voprosy istorii. Institut russkoy istorii Rossiyskoy akademii nauk. Moscova.
<b>VF</b>	- Voprosy filosofii. Izdatel'stvo «Nauka». Moscova.
<b>VTT</b>	- Veszprémi Történelmi Társaság és Veszprém Megyei Múzeumi Igazgatóság kiadványa. Veszprém.
<b>WASJ</b>	- World Applied Sciences Journal. International Digital Organization for Scientific Information. Deira, Dubai.
<b>Xenopoliana</b>	- Xenopoliana. Buletin al Fundației Academice „A. D. Xenopol” Iași.
<b>Ziridava</b>	- Ziridava. Muzeul Județean Arad.