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## REFLECTIONS ON LINEAR B, (part 1): AN EGYPTIAN HIEROGLYPHIC COMPONENT

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# COMMENTS ON ETYMOLOGY

January-February 2024





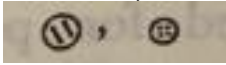


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Gerald Cohen

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### PREFACE




The first reaction when looking at many of the signs of the ancient Greek writing known as Linear B (ca. 1450-1200 BC) and its predecessor, the still undeciphered Linear A (ca. 1800-1350 BC), might well be: What in the world were they intended to portray? What lies behind their creation? The apparent strangeness of it all (or at least much of it) brings to mind the German expression ‘*ein Buch mit sieben Siegeln*’ (‘a book with seven seals,’ i.e., an impenetrable mystery).

And yet, I believe I see a partial solution, viz., that Linear B has an Egyptian hieroglyphic component; at least some of its signs derive (directly or ultimately) from Egyptian hieroglyphs. This particular suggestion is not entirely original on my part; the possibility of the Egyptian hieroglyph for ‘life’ showing up in Linear B has already been noticed; see the References below; Mosenkis item). But otherwise the above suggestion about an Egyptian hieroglyphic component seems to be largely absent from the extensive research on Linear B and its antecedents. The closest I find is the comment in Ventris & Chadwick (1973: 29):


‘In their shapes the Cretan “hieroglyphs” probably show some influence from Egyptian models... There are few specific identities, however,...’

The present article (actually, a working paper) is an initial attempt to compile material on the subject.

### SUGGESTED INSTANCES OF EGYPTIAN HIEROGLYPHIC INFLUENCE ON LINEAR B (DIRECT OR VIA LINEAR B'S ANTECEDENTS)



LINEAR B SIGNS 43, 52 (  ,  ) IN LIGHT OF THE EGYPTIAN HIEROGLYPH  'ALTAR'

Budge (1971: 81, item #2) presents the following Egyptian hieroglyph:

 *χaut* [heading: 'Temple Furniture']: altar.

Two Linear B signs seem quite similar in shape to this Egyptian hieroglyph:

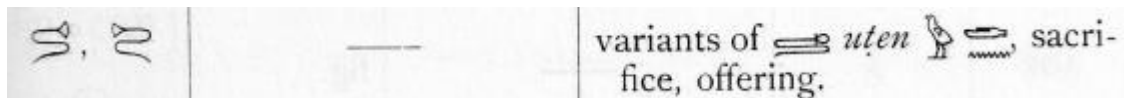
Linear B sign 43 designated *a*<sub>3</sub> (pronounced /ai/): 


Linear B sign 52 pronounced /no/:  , also rendered 


Is it not possible, perhaps even probable, that one or both of these two very similar Linear B signs (43, 52) also originally represented an altar (with flames rising)? And is it not possible, perhaps even probable, that one or both of these two similar signs arose directly under the influence of the Egyptian hieroglyph? I believe the answer to both questions is yes.


And here are a few more observations:


1. Note the mini-design on the right of Linear B sign 52. It looks like a slightly tilted, tiny letter S. What purpose could it possibly have? Interestingly, there might be an answer; see in this regard Budge's 1978 book on Egyptian hieroglyphs (page cxxiii; listed items #62, 63):



The first of these two variants, , looks roughly like our letter S and (like its counterpart facing in the other direction) means ‘sacrifice, offering.’ So if this S-looking Egyptian variant does in fact turn up in

Linear B , this sign (52) would present an original picture of an altar with a sacrifice/offering next to it. Linear B sign 52 would actually have a rationale to it.



As for the origin of  we find it in Alan Gardiner’s list of Egyptian hieroglyphs, item M11 in its variant facing the other way:



[https://en.wikipedia.org/wiki/List\\_of\\_Egyptian\\_hieroglyphs#M\\_HIEROGLYPH \[M11\]](https://en.wikipedia.org/wiki/List_of_Egyptian_hieroglyphs#M_HIEROGLYPH_[M11]): 

‘DESCRIPTION: flower on long twisted stalk’


‘NOTES: an offering, gift; make a gift’


Evidently the meaning ‘sacrifice’ (as an offering) developed from the more general meaning ‘gift.’



2. There may also be a rationale to the pronunciation /ai/ of Linear B sign  $a_3$  () and the pronunciation /no/ of Linear B sign 52 (). Greek *aithomai* ‘to burn’ (intransitive) might have been logically applied to an altar whose sacrifices involved burnt offerings. And since *aithomai* begins with *ai-*, this would explain the pronunciation /ai/ of the sign  $a_3$ ,


() . In at least some writing systems it is traditional to apply the first sound of a picture to the letter derived from it – known as the acrophonic principle. But that principle is a guideline, not a law. As for the pronunciation /no/ of ,

I would very tentatively suggest that it came from the past participle of *aithomai*, specifically the *-no-* of *aithomenos* ‘having burned’ (intransitive). That would seem to explain the addition of the

sacrifice in Linear B sign 52 () , which was not present in sign  $a_3$

() . Still in full tentative mode I would suggest this might indicate that

the sign  (with no sacrifice directly indicated) preceded  (with sacrifice indicated directly) in the Linear B writing system. Perhaps a certain scribe (or his ruler) considered the altar itself to be insufficient tribute to the gods and assumed the gods would want to see specific evidence of the offering being made to them. Hence the addition of the sacrifice.

But (as a further speculation) in the spirit of compromise, the earlier sign (a<sub>3</sub>, ) was permitted to remain; hence two altars in the Linear B writing system.

3. Judson (2020: 47-48) comments on a sign that appears only once, on a bronze cauldron from Mycenae:

‘a<sub>3</sub> has no generally accepted Linear A correspondence, and so is usually regarded as being a Linear B creation. However, one possible example [p. 48] of a Linear A equivalent to this sign, which would be numbered as AB43, is incised on the handle of a cauldron from Mycenae’s Grave Circle A. ...’ [AB = both Linear A and Linear B]

Judson drew the following sign, based on a photograph taken of the vessel on display in the National Archeological Museum, Athens:



She also comments:

‘The sign... does appear closer in form to a<sub>3</sub> than to any other suggested possibility, with the only significant difference being the downwards direction of the stroke at the left.’

She then sets forth the very considerable uncertainty surrounding this sign. It could be either Linear A or Linear B. If it was Linear A, its

pronunciation might be different from that of Linear  $a_3$ . And the single attestation on the cauldron might be ‘a non-script sign bearing a chance resemblance to  $a_3$ .’

Despite the above uncertainty she concludes (p. 48): ‘In either case,  $a_3$  would still more likely be a Linear B creation.’

I will now sidestep this particular controversy and speculate on a related matter instead. If in fact the single attestation that appears on the cauldron is a Linear B sign related to  $a_3$ , the common denominator would be the concept of burning (*aitho-*). And this would make the sign’s appearance on a cauldron entirely appropriate.

Also, if the above speculation about the sign originally referring to an altar is correct, ‘the downwards direction of the stroke at the left’ might seem to refer to something falling off the altar. But the occurrence of something falling off an altar would be a rarity and therefore unlikely to be portrayed by the inscriber.

But let’s remember: We’re dealing with an inscription on the handle of a cauldron. Perhaps (and this is in full speculative mode) the downward stroke on the inscription was not intended to refer to something in connection with the altar, but rather to something in connection with the cauldron itself – specifically, to the pouring of boiling liquid from the cauldron. And this could be seen in a very positive light, viz., the culmination of the work involving the preparation of the liquid.

But I also see a variant possibility. Mishaps involving overflows and other inadvertent spills can occur with cauldrons, and perhaps the entire inscription was connected with superstitions to ward off such evil. If so, the altar would be a religious symbol (signaling an appeal to the gods), and the downward stroke would represent an inadvertent cauldron spill.

Cf. in this regard Wikipedia’s general comments:

[https://en.wikipedia.org/wiki/Apotropaic\\_magic](https://en.wikipedia.org/wiki/Apotropaic_magic)

‘**Apotropaic magic** (from Greek *αποτρέπειν* "to ward off") or **protective magic** is a type of magic intended to turn away harm or evil influences, as in deflecting misfortune or averting the evil eye... Many different objects and charms were used for protection throughout history.

‘**Ancient Greece**


‘The ancient Greeks had various protective symbols and objects, with various names, such as *apotropaia*, *probaskania*, *periammata*, *periapta* and *profylaktika*. The Greeks made offerings to the “averting gods” (*ἀποτρόπαιοι θεοί*,...), chthonic deities and heroes who grant safety and deflect evil.’

So, by putting the sign  $a_3$  on the cauldron with the additional (downward) stroke indicating inadvertent spillage, the inscriber might have been sending a message to the averting gods: Please avert this; please avert such mishaps.



## LINEAR B SIGN 118 /DWO/ ‘TWO’, WAS ORIGINALLY A PICTURE OF A PAIR OF SCALES


### THE STANDARD INTERPRETATION

Linear B sign 118 , pronounced /dwo/, means ‘two,’ and Linear B scholars trying to find a rationale for the shape of this sign, noticed a similar-shaped sign (pronounced /wo/), viz.:



And the question arose: Which sign came first: *dwo* or *wo*? The majority of Linear B scholars believe *wo* came first, and *dwo* was formed by putting two *wo* signs together; two (*duo*) *wo* = *dwo*.

For example, Judson (2020: 60) says:

‘Since the sign *dwo* consists of two signs (, with the second reversed, it is usually accepted that this sign was invented based on the sign *wo* in a Greek-speaking context, on the basis that ‘two ‘wo’s’ = /duo wo/ = *dwo*.’

[G. Cohen: ‘with the second [sign] reversed’ – the two triangles are identical but the little figure at the top is what differs; one is on the right of its triangle and the other is on the left.]

Similarly, Steele (2023: 15) comments:

‘...the Linear B *dwo* sign, traditionally understood as a Linear B innovation based on a ‘pun’ that brings two *wo* signs together in a single sign (2 x *wo* = *dwo*, Greek for “two”).’

### ALTERNATIVE VIEW (CONSANI 1996 AND DAVIS 2014)

Judson (2020: 60-61), citing Consani 1996 and Davis (2014: 195, note 1128), presents their alternative view that the *wo* sign derives from the *dwo* sign, not vice versa. But she happens to disagree with that view, based primarily on palaeographic evidence, and concludes:

‘It is more both more straightforward and more in accordance with the palaeographic facts to view *dwo* as a Linear B creation unrelated to AB118/L.’

### CLARIFYING COMMENTS

Judson’s last sentence calls for a brief clarification for readers seeing Linear B discussed for the first time:



1. AB = Linear A and Linear B.
2. L = logogram; here it refers to a metrogram, i.e., it was used for measuring).
3. ‘Linear AB118/L’ is written to indicate an earlier figure with a dual role:
  - a. as a syllabogram, i.e., consonant(s) + vowel (here: /dwo), and
  - b. as a metrogram (sign used in measuring).

THEN:

This earlier figure (so the theory goes) split:

- a. L (i.e., Linear B L) continues the metrographic use of its antecedent Linear AB118/L; and
- b. Linear B 118 continues the syllabic use of the same antecedent Linear AB118/L.

So, Judson’s last sentence quoted just above says in effect:

Do not consider Linear B sign 118  and Linear B sign L  as being essentially the same sign. Their shapes (‘the paleographic facts’) show some differences.


Cf. also Duhoux (1984: 26):

‘*Dwo* est inconnu du linéaire A, et sa structure (combinaison de deux signes avec légère modification d’un d’entre eux’ le dénonce comme le type même de caractère créé à date tardive.’

TRANSLATION:

‘*Dwo* is unknown in [the earlier] Linear A, and its structure (combination of two signs with a slight modification in one of them) reveals it as the very type of character created at a late date.’

## RETURN TO LINEAR B SIGN DWO

With the above clarification completed, I return to Linear B sign 118, , and to the general agreement among scholars of Linear B that this sign originated late (i.e., was not present in the earlier form of writing, Linear A). And the majority opinion sees this sign (118) originating by doubling the sign for /wo/.

But I find myself agreeing with the minority viewpoint (Consani, Davis) and believe a second look at the subject is in order. Here now is a relevant excerpt from Davis (2014: 195, n. 1128):

‘Palaima & Sikkenga (1999, 605) suggest that L[inear] B <d<sup>w</sup>o> was a Mycenaean invention, a Greek visual pun combining two mirror-image LB <wo> syllabograms into a new syllabogram for dwo (the Greek word for ‘two’). However, no counterpart of LB <wo> has yet been found in L[inear] A; thus it is just as possible that *the Mycenaeans invented LB <wo> by dividing in half the L[inear] A syllabogram for <d<sup>w</sup>o> based on the same Greek visual pun.*’ [G. Cohen: my italics]

And here are a few relevant excerpts from Consani (1996: 72, 76-77); he specifically derives Linear B *dwo* from the picture of a pair of scales (“bilancia”) and explains the triangular *wo* as deriving from them. A translation follows each of the Italian quotes:

**p. 72:**

‘...nella lineare B anche il sillabogramma 90/dwo rapresenta, sia pure in forma generalmente più calligrafica è meno stilizzata lo stesso oggetto di AB 118 (cioè una bilancia del tip a due piatti [fn# 1])...’

**Fn#1:**

‘Nel tentativo di identificare l’oggetto archeologico che sta dietro a questo segno della lineare B, Vandenabeele e Olivier (1979 154 ss.) hanno mostrato che un manufatto di questo genere (una bilancia a due piatti) era in uso sia a Creta che sul continente Greco... grosso modo, fra 1500 a 1200 a.C.’

TRANSLATION:

‘...in Linear B the syllabogram 90/*dwo* also represents, albeit in a generally more calligraphic and less stylized form, the same object as AB 118 (i.e. a two-plate tip scale)... [fn. #1 appears here.]

[Fn. #1]:

‘In attempting to identify the archaeological object behind this Linear B sign, Vandenabeele and Olivier (1979-154 ff.) have shown that an artifact of this kind (a two-plate scale) was in use both in Crete and on the Greek mainland...roughly between 1500 and 1200 BC.’

**p. 76:**

‘In un solo caso un segno della lineare B è ottenuto per così dire artificialmente da un altro segno dello stesso sistema per sottrazione di un element dal segno di partenza: si tratta del sillabogramma 42/*wo*, che, privo di confronti formali nella lineare A, si configura come la metà esatta del segno AB 118/*dwo*, cioè come un solo dei due piatti della bilancia. ...’

TRANSLATION

(**p. 76**) ‘In only one case is a sign of linear B artificially obtained from another sign of the same system by subtracting an element from the starting sign: it is the syllabogram 42/*wo*, which, devoid of formal sources in linear A, is configured as the exactly half of the [sign] AB 118/*dwo* mark, i.e. as only one of the two pans of the scale. ...’

(**p.77**): Una volta creato di un *wo* “semplice”, identificabile come uno dei due elementi costitutivi di una bilancia a due parti, la sua presenza all’interno dei sillabario B avrà potuto rappresentare un incentivo a vedere nel segno di partenza un *wo* “doppio”, il che ben si accorderebbe con la forma in cui \*90/*dwo* appare nella lineare B.’

TRANSLATION


**p. 77:** ‘Once a “simple” *wo* has been created, identifiable as one of the two constituent elements of a two-part scale, its presence within the B syllabary could have represented an incentive to see a “double” *wo* in

the original sign, which would fit well with the form in which [sign] \*90/*dwo* appears in linear B.'

## SIMILARITY OF LINEAR B *DWO* AND THE EGYPTIAN HIEROGLYPHS FOR PAIR-OF-SCALES

I must first anticipate here: Some Linear B signs may derive from ordinary, everyday items, e.g., a pair of scales (a 'balance'), but they may also have special importance in the context of ancient Egyptian religion/mythology. So, it is well known that the pair of scales played an important role in the process overseen by the god Osiris as to whether an applicant for entering the afterlife is worthy of being accepted. And more broadly the pair of scales was a symbol of truth/justice/balance in the universe.

And so, if it turns out that Egyptian religion/mythology does seem to be represented in Linear B, other Linear B signs may perhaps be justifiably viewed as also deriving from Egyptian religion/mythology. I believe the pair of scales belongs here.

Incidentally, to take just one more example, Linear B sign 74  is already recognized to represent a saw. And what could a saw possibly have to do with Egyptian religion/mythology? Well, the most famous story in ancient Egyptian mythology concerns the god Osiris, who was killed and dismembered by his brother Set, although Osiris was miraculously returned to life by his wife Isis; he then became the god of the underworld. So it's a story of death and resurrection, and a saw no doubt played a key role in the dismemberment part. And the dismemberment legend (but not a specific Egyptian hieroglyphic in this case) is very possibly the explanation for the appearance of sign 74 in Linear B.

\* \* \*

Now back to the scales: It seems difficult to look at the Egyptian hieroglyphs for a pair-of-scales (Balance) and not think that the very similar Linear B *dwo* originally represented the same object.

Note Budge (1971: 81), which presents the following Egyptian hieroglyph:





*māχa* ‘scales, to weigh’

Cf. also Gardiner’s determinative U38 in Egyptian hieroglyphics:



On an incidental note, judging from ancient Egyptian pictures of the pair of scales in use, the central short figure on the horizontal bar of the U38 determinative served the purpose of helping the person doing the measuring to calculate the measurement more precisely. Evidently, in the *māχa* hieroglyph presented in Budge (1971: 81) that same central short figure on the horizontal bar is also present, with the vertical line representing the pole to which the horizontal bar is attached, and the square at the bottom of the vertical pole is the base (indicated more clearly in the U38 determinative). If any of this is incorrect, I’m sure an Egyptologist familiar with hieroglyphs can straighten it out.

In any case, the important thing is that the Egyptian hieroglyph is very similar in shape and meaning to Linear B *dwo* , and especially to the purely metric variant . The Egyptian hieroglyph is no doubt older than Linear B *dwo*, and the scales could hardly have escaped the attention of the Cretans who came to Egypt to do business there.

As for the sign *wo*, this piece of the puzzle now falls into place as Consani and Davis have suggested. When the scales sign appeared in Linear B, the pronunciation *dwo* (and *duwo*) seemingly denoted ‘two *wo*’s,’ and logically (or humorously) the Greeks regarded each alleged ‘*wo*’ as a single ‘*wo*.’

#### HAND (PUTTING SOMETHING ON SCALE)

One detail still calls for an explanation, viz., the little figure at the

upper side of *dwo* that looks like a very small number 3, viz.,



Tentatively I would suggest that the 3-like figure is a hand (represented by three fingers), one that is supposed to convey the idea of placing something on the scales. I.e., the scales are in active use.

**EGYPTIAN MYTHOLOGY: SCALES WERE IMPORTANT NOT MERELY FOR PRACTICAL MEASUREMENTS BUT MORE BROADLY FOR JUSTICE/TRUTH, WHICH IN TURN WERE ESSENTIAL FOR ORDER (VS. CHAOS)**

In Egyptian mythology, the hieroglyphs denoting a pair of scales were symbols of truth and justice well beyond being a practical instrument of measurement. Note, for example, two pictures from ancient Egypt – one first excerpted just below so it can be presented in a larger format (for greater clarity of some parts) and then presented in its full form.

As already well known, the full picture portrays the evaluation a deceased man must undergo to be judged worthy of entering the afterlife (where Osiris resided). In the excerpted part below we see the man's character (portrayed as a heart on the left scale) being measured against justice/truth (portrayed as an ostrich feather on the right scale); the three jackal-like figures assisting the god Osiris (who will appear in the full picture) are carrying out the measurement. The figure in the middle is extending his hand onto some part of the scales that helps calculate the correct measurement. Here (from Wikipedia) is that excerpted picture:

[See next page.]





And here now is the fuller picture, with the standard interpretation below quoted from Wikipedia:



‘Judgment scene from the Book of the Dead from the Papyrus of Hunefer. In the three scenes from the Book of the Dead (version from ~1275 BCE) the deceased Hunefer is taken into the judgment



hall by the jackal-headed Anubis. The next scene is the weighing of his heart, with Ammit awaiting the result and Thoth recording. Next, the triumphant Hunefer, having passed the test, is presented by the falcon-headed Horus to Osiris, seated in his shrine with Isis, Nephthys, and the four sons of Horus. (19th Dynasty, c. 1300 BCE)'

As for Hunefer, the website <https://en.wikipedia.org/wiki/Hunefer> tells us:

'**Hunefer** was a scribe during the 19<sup>th</sup> Dynasty (*fl.* c. 1300 BCE). He was the owner of the Papyrus of Hunefer, a copy of the funerary *Egyptian Book of the Dead*, which represents one of the classic examples of these texts, along with others such as the Papyrus of Ani....'

Another website (<https://en.wikipedia.org/wiki/Maat>) shows the same excerpted picture I presented above (p. 15) and very briefly comments:

'The heart of Hunefer weighed against the feather of Maat.'

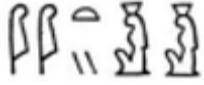
TRUTH/BALANCE/ORDER/HARMONY/LAW/MORALITY/  
JUSTICE ARE EMBODIED IN THE GODDESS MAAT

The last website mentioned above also clarifies the great importance of the goddess Maat and the concepts she personified:

'Maat or Ma'at (Egyptian: m³'t / 'murʕat/, Coptic: ΜΕΙ)[1] comprised the ancient Egyptian concepts of truth, balance, order, harmony, law, morality, and justice.

'Ma'at was also the goddess who personified these concepts, and regulated the stars, seasons, and the actions of mortals and the deities who had brought order from chaos at the moment of creation. Her ideological opposite was Isfet (Egyptian jzft), meaning injustice, chaos, violence or to do evil.'

The website also draws attention to Budge's (1969: 418) comment:

‘As a moral power Maāt was the greatest of the goddesses, and in her dual form of Maāti , i.e., the Maāt goddess of the South and the North, she was the lady of the Judgment Hall, and she became the personification of justice, who awarded to every man his due; *judging by some vignettes which represent the weighing of the heart she took at times the form of the Balance itself.*’ [G. Cohen: my italics]

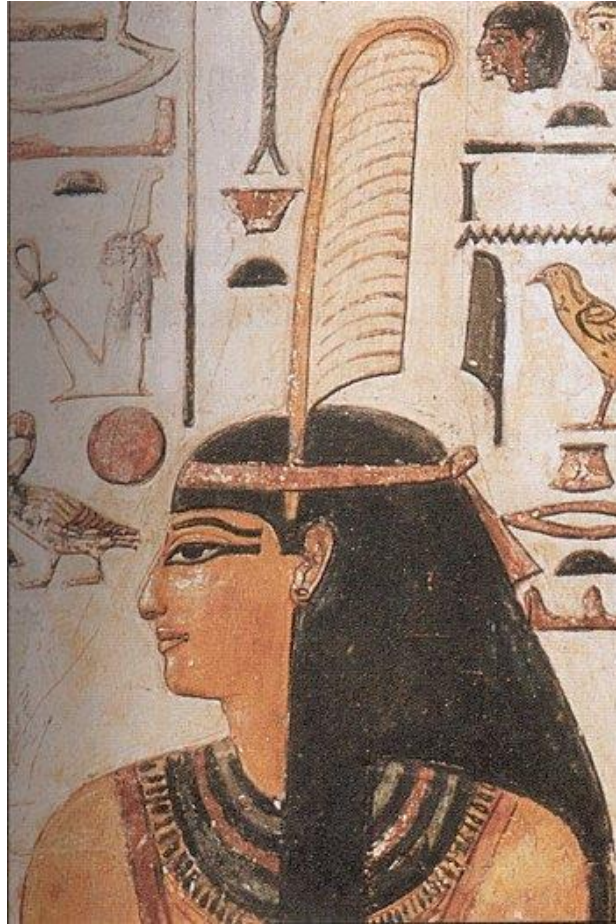
From Helen Strudwick (2006: 106):

‘From the Eighteenth Dynasty (1550-1295 BC), Maat was described as the daughter of Ra, indicating that pharaohs were believed to rule through her authority.’

And finally, the same website last mentioned above (<https://en.wikipedia.org/wiki/Maat>) gives us the following statue and pictures of Maat, together with the writing below each one:

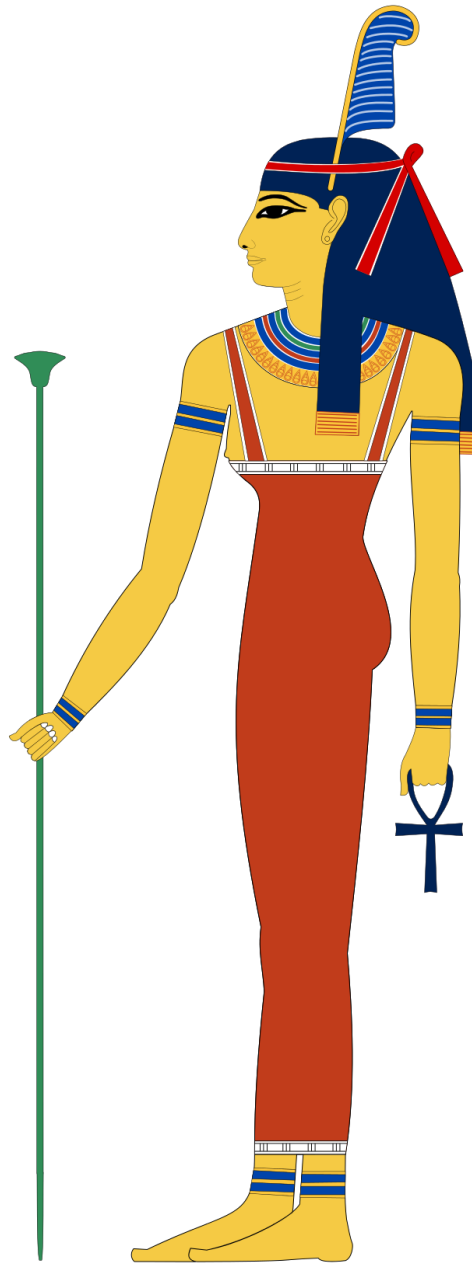


Statue of Maat, adorned with the ostrich feather of truth



Maat wearing the feather of truth

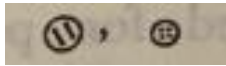
INCIDENTALLY: SYMBOL OF ROYAL AUTHORITY ( $\bar{A}NKH$ ),  
WHICH ALSO APPEARS IN LINEAR B



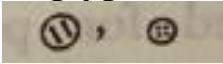
Maat is both the goddess and the personification of truth, cosmic balance, and justice. Her ostrich feather represents the truth.

[G. Cohen]: Both objects in Maat's hands are symbols of royal authority. At least one of them [*ānkh* 'live (verb), life, eternal-living] in her left hand, apparently turns up in Linear B.]

# LINEAR B SIGN 78 ☉ AND EGYPTIAN HIEROGLYPH



. WHY A CIRCLE? WHY FOUR DOTS?

By way of summary: Linear B sign 78 ☉ and its antecedent Linear A ☉ (probably also Cretan hieroglyph ☉ ) derives from the 4-dot variant of the Egyptian hieroglyph . The four dots of the Egyptian hieroglyph represent the three 120-day Egyptian seasons plus the ominous (and therefore not-to-be-ignored) ‘epagomenal’ (added) five days.

\* \* \*

First, I note Ventris & Chadwick’s (1973: 39) comment that ‘ ☉ *qe* is a frequent sign at [the Linear A document] Agia Triada’ plus (p. 33) their mention of ☉ [sic: 3 dots] as a Cretan hieroglyph. Clearly Linear B ☉ had at least one predecessor within the Aegean writing systems.

But that information is not critical for my suggestion that Linear B ☉ derives from an Egyptian hieroglyph of the same shape; I am presenting this suggestion with the understanding that Linear B ☉ *ultimately* derived from that Egyptian hieroglyph. Here now is the presentation.

Linear B sign 78 consists of a circle containing several dots. Specifically, from Ventris & Chadwick 1956: 41:



[compartments left to right: Knossos, Pylos, Mycenae, (blank): Thebes]

The sign is transliterated as *qe*, i.e., it is the labiovelar /g<sup>w</sup>e/, /k<sup>w</sup>e/ or k<sup>wh</sup>e/. As for a possible meaning behind the shape of the Linear B sign, an initial reaction might be to reject any suggestions as entirely speculative.

And yet the Egyptian hieroglyph for ‘time season,’ with its circle containing four dots or two dashes, seems worth a look. Here, first, is what I find:

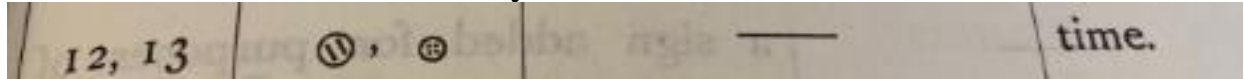
Budge (1971: 92, #14):



Note: Budge (1971: 93): two short lines indicate the dual.

Budge [1978, vol. 1, p. 145 (in Roman numerals at beginning, items #12-13]: 

in the entry:



Note: Budge (1971: 93) says two short lines (look like back slashes) indicate the dual. So the two short lines in the hieroglyph *sep* might each indicate two dots. Total: four, which are also found in an alternate portrayal of the same hieroglyph.

And now for a suggested interpretation on the circle part of the Egyptian hieroglyph for time/season: Time is sometimes conceived as revolving; cf. Russian *vremja* ‘time,’ from the Proto-Indo-European (PIE) root VR ‘turn.’

Cf. also the *Odyssey* I., line 16:

all’ hote dē etos ēlthe periplomenōn eniautōn,  
tō hoi epeklōsanto theoi oikonde neesthai,...

TRANSLATION:

‘But when the year came as the seasons revolved  
(*perip[e]lomenōn*, in which the Gods destined for him,’ etc.  
[from W.W. Merry 1995, second page of the Notes section,  
numbered ‘20’, at back of book, which also comments:  
‘*eniautos* is a year regarded as a series of seasons;  
*etos* as a date.’]

Cf. too Liddell & Scott’s Greek dictionary:

‘*peripelomai* = to move round;... 2. of Time: to come round,  
revolve, recur.’

Even an American folksong (‘Turn! Turn! Turn!’, sung by the Byrds), with lyrics based on Ecclesiastes, has imagery of time/seasons turning; its first two lines are:

“To everything turn, turn, turn,  
There is a season turn, turn, turn.”

## WHAT ABOUT THE DOTS IN THE CIRCLE?

The first thought which comes to mind is that the four dots represent the four seasons, and although that is perhaps basically correct, there is also a wrinkle here: the ancient Egyptians recognized only three seasons (pre-flooding of the Nile, the flooding season, and then the post-flooding season). Each had 120 days, with five days left over, and the Egyptians regarded those days as particularly ominous. So on a speculative note, perhaps the Egyptian scribes thought it best to take no chances and give those five days their due, viz., a dot of their own. Hence a total of four dots.

Here now is some detail (accessed on the internet) concerning the ancient Egyptian calendar:

### **QUESTION: ‘How many seasons did the Egyptians recognize?’**

‘The ancient Egyptian calendar – a civil calendar – was a solar calendar with a 365-day year. The year consisted of three seasons of 120 days each, plus an intercalary month of five epagomenal days treated as outside of the year proper. Each season was divided into four months of 30 days.’

[G. Cohen: ‘epagomenal days’ = days added to the calendar; from Greek *epagō* = I bring in.

‘intercalary’ = ‘inserted or interpolated in the calendar, as an extra day or month.]

### **‘Ancient Egypt: importance of the seasons’**

‘A year in ancient Egypt was divided into three seasons: Akhet, Peret, and Shemu. Each season spanned four months and represented a different period in the flooding cycle of the Nile. The flooding cycle of the Nile was especially important because it dictated when crops could be planted, grown, and harvested.’

### **QUESTION: ‘What is the most important season for ancient Egypt?’**

‘The annual flooding of the Nile, which falls roughly from mid-July to mid-November in our calendar, was one of the most important and



sacred events for the ancient Egyptians, who recognized that this is what made the land fertile for crops.’

**QUESTION: ‘What are the ancient Egyptian seasons?’**

‘The civil calendar was divided into three seasons based on Nile observations: the season of inundation (Akhet), the season of growth (Peret), and the season of harvest (Shemu).’

**QUESTION: ‘What are the seasons in Egyptian mythology?’**

“The civil year was divided into three seasons, commonly translated: Inundation, when the Nile overflowed the agricultural land; Going Forth, the time of planting when the Nile returned to its bed; and Deficiency, the time of low water and harvest.”

**ITEM: EPAGOMENAL (added/inserted) DAYS**

**<https://www.globalegyptianmuseum.org/glossary.aspx?id=148>**

‘The Egyptian year was divided into twelve months of thirty days each, which means that each year was about five days short of the astronomical year. To compensate for this difference, five extra days were added to the year, called epagomenal days. Because they were not part of the normal year created by the gods, *the Egyptian regarded these days as particularly ominous* [italics added], and texts have survived listing exactly what may and may not be done during this period. Even the addition of these five days did not solve the concurrence problem with the solar year, however, which lasts 365 1/4 days. As a result, the calendars shifted at a rate of 1 day every four years, and over time an important gap opened up between the real and the theoretical calendars. This meant that the inundation no longer occurred in the inundation season, and the warm season no longer in the summer. The two calendars only coincided again once every 1,460 years. After an unsuccessful attempt to revise the calendar in the reign of Ptolemy III, this problem was eventually solved by the Romans by adding one leap day every four years to the Alexandrian calendar. The Greek







author Plutarch has recorded his own version of the creation of the epagomenal days. The sun god Helios (the Greek equivalent of Re) had put a curse on the goddess Rhea (the Egyptian sky goddess Nut), which meant that she was unable to bear children on any of the 360 days of the year. Hermes (the Egyptian god Thoth, the god of learning) solved the problem by adding five days to the year. Five children were born on these days, Osiris, Isis, Nephthys and Seth, but also Apollo (= Horus), the latter because of the association between his original mother Hathor with the sky goddess Nut.”

**REMAINING DETAIL: THE THREE DOTS (VS. FOUR) IN LINEAR B ALTERNATE SIGN 78 IS PROBABLY NOT SIGNIFICANT.**


As mentioned above (p. 20), Knossos and Pylos, present two linear B variants of the circle with dots – one variant with four dots and one variant with just three: ☺. Mycenae presents one variant with three dots and one variant with two dashes. Linear A has only three dots in the circle, and, incidentally, all three-dot variants in Linear A and B look like a face (two eyes, mouth).

My impression is that the three-dot variants probably arose from the whimsy of some scribes, rather than a desire to convey something symbolically significant.

VARIANT OF LINEAR B SIGN 17:  ; MIGHT IT DERIVE FROM THE EGYPTIAN HIEROGLYPH  ‘LIVE (VERB), LIFE’; ‘EVER-LIVING,’ A TITLE OF GODS AND KINGS?

The similarity of Egyptian hieroglyph  and the Linear B variant  of sign 17 is striking. Might Linear B have borrowed this sign from Egyptian<sup>1</sup>, or is the similarity merely coincidental? The Egyptian hieroglyph has the basic meaning ‘live (verb), life,’ the Greek verb *za-(ō)* ‘I live’ fits in well with the pronunciation /za/ of sign 17, and there would be a semantic incentive for a Mycenaean ruler to want the hieroglyph brought into his Linear B writing system: The Egyptian hieroglyph was a sign of authority for gods and kings; how appropriate (a Mycenaean ruler might think) to make that sign part of his own system.


Here now are some details:

Budge (1971: 83, #43) presents  *ānχ/āanχ* life, and incidentally the hieroglyph’s pronunciation is variously rendered as *ānχ*, *ānkh*, *āankh*. Meanwhile, in Ventris/Chadwick’s (1973: 41) chart we see the following for Linear B sign 17 (left to right: Knossos, Pylos, Mycenae):



Also, in Budge 1978 (vol. 1, pp. 112, 124) there are several entries for *ānkh* ‘live (verb), life’:



















PAGE 112:













*āankh*  (Demotic form), to live, life; Copt. *ⲱⲛⲉ*, *ⲱⲛⲉ*.










*āankh*  , Rec. 33, 137, to swear an oath; Copt. *ⲁⲛⲁⲩⲩ*.










<sup>1</sup>See the Mosenkis item in the References, where I mention his crediting Vladimir Georgiev with noticing this borrowing.






PAGE 124:



**ānkh**   , U. 191, T. 71, M. 225,  
 N. 603,   ,      ,  
  ,    to live, to live upon some-  
 thing, life; Copt. **ωπζ**.



**ānkh** -   , "life, stability, prosperity  
 (or, content)";          
, "life, all prosperity, all stability, all health,  
 [and] joy of heart," a formula of good wishes  
 which follows each mention of the king's name  
 in official documents. See the following exam-  
 ples.






**ānkh** -   , P. 652, life and con-  
 tent for ever!      , P. 18, M. 20,  
 N. 119, all life and content for ever!

**ānkh** -    =      ,  
 T. 338, N. 626, life, strength, health!

**ānkh** -  ,   , the name  
 of a college of priests.

**ānkh** -  , "repeating life," a formula  
 used sometimes in the place of maā-kheru.

**ānkh** -  , Rec. 29, 184, "to whom  
 life is given."

**ānkh** -  ,   , "ever-  
 living," a title of gods and kings.

Almost all the above items in Budge (1978: 124) are important, but three stand out for me:


1. ‘to live, to live upon something, life.’ [This is the basic meaning of  $\bar{a}n\chi/\bar{a}an\chi$ ]
2. a. “life, stability, prospering (or, content)” [Quote marks in the book’s entry]
  - b. [written hieroglyphically somewhat differently]:  
“life, all prosperity, all stability, all health [and] joy of heart,” a formula of good wishes which follows each mention of the king’s name in official documents.
3. “ever-living,” a title of gods and kings.


Note the good wishes expressed in item 2a. and 2b. just above, plus the comment at the end of 2b.:

‘a formula of good wishes which follows each mention of the king’s name in official documents.’

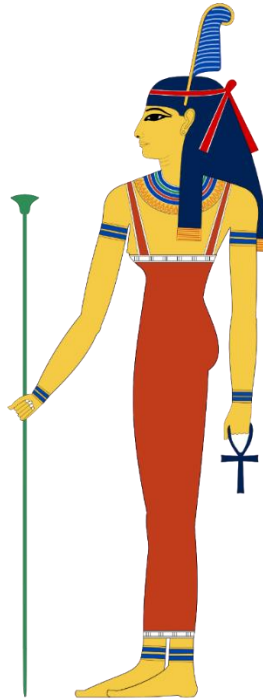
Note too item #3 just above:

““ever living,” a title of gods and kings.’

So the Egyptian hieroglyph  came to mean not merely ‘life’ (very important in itself) but the good wishes for a long, happy, prosperous life, and eventually (for gods and kings as part of their title): eternal life. If the Linear B scribes adopted this thinking when writing sign 17 in their own documents, the implication would be that the document expressed those reverential good wishes to the scribes’ ruler too.


Here now are two pictures with  already presented in the discussion of /dwo/; the first is the all-important goddess Maat:

[See next page.]



In the second picture (excerpted just below (p. 29) from a larger one (see above, p. 15), in which the god Osiris (not pictured in this excerpt) oversees the judging of whether the deceased scribe Hunefer is worthy to enter the paradise of the afterlife. The figures with the heads of animals (or a bird) are assisting the god Osiris, and the one on the left is holding the *ānkh* symbol. That figure is Anubis (also a god of the underworld), serving as a protector and guide whose main job was to serve as a sort of ferryman for the dead. He was later identified as Osiris' son. Incidentally, in the full picture Osiris appears holding two other important royal symbols: the crook and flail.



LINEAR B SIGN 14  EVIDENTLY GIVING OFF LIGHT, MAY DERIVE FROM AN EGYPTIAN HIEROGLYPH DENOTING AUTHORITY AND STRENGTH AND MEANING ‘MACE, CLUB; SHINING, WHITE.’

Linear B 14 has several slightly varied shapes; the four separate compartments just below are presented in Ventris & Chadwick (1973: 41) and represent (going from left to right) Knossos, Pylos, Mycenae, Thebes.



Of these varieties, I suppose the earliest representation was from Pylos:



At least, it's the only one for which I can find a rationale, viz., that it represents a mace – important in ancient Egypt first as a weapon of war and then as a symbol of authority and power.

And thanks to Budge (1978: page cxxiii) we know that the hieroglyph for ‘mace, club’ also had the meaning ‘white, shining’; note especially Budge’s item #76, viz.,



76.77.78		hetch   	mace, club; white, shining.
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As for the shining aspect of a mace, this would come from the metal that replaced stone in forming the mace head.

Here are a few pictures involving the mace:



## KING DEN

<https://www.khanacademy.org/humanities/ancient-art-civilizations/egypt-art/beginners-guide-egypt/a/ancient-egyptian-hieroglyphs-overview>



King Den's sandal label, c. 2985 B.C.E., Early Dynastic Period, 1<sup>st</sup> Dynasty, ivory, found at Abydos, Upper Egypt, 4.5 x 5.3 cm. (© Trustees of the British Museum)

In the fall of 2023 I found a BBC website which provided the following detail about King Den's sandal label, although for some reason I can no longer access it:



[Title]: ‘A History of the World in 100 Objects: King Den’s sandal label

‘In Den’s time the role of ‘keeper of the sandals’ was a high rank with privileges. The figure holding a mace on this hippopotamus ivory label is King Den. He was a member of the first dynasty of rulers that united Egypt into a single state. This label was attached to one of Den’s sandals and placed in his tomb when he died. In front of Den a much smaller enemy cowers. Hieroglyphs on the label celebrate, “the first occasion of smiting the east”. They refer to King Den’s military conquests in Sinai, eastern Egypt.’

\*\*\*\*

### THREE ‘MACE’ PICTURES FROM THE INTERNET

[https://www.google.com/search?sca\\_esv=564532646&sxsrf=AB5stBj42LtFRf9MXWZbBd9kjzu9DIRmtA:1694477179752&q=ancient+egypt+scepter&tbm=isch&chips=q:ancient+egypt+scepter,online\\_chips:weapon:gjN34Decks0%3D&usg=AI4\\_-kTetdB1ApNb5GiRZ7jjnO65fiduig&sa=X&ved=2ahUKEwjM6IOz46OBaxWyklkEHan9CeMQgloDKAF6BAGPEBY&biw=1195&bih=556&dpr=1.25](https://www.google.com/search?sca_esv=564532646&sxsrf=AB5stBj42LtFRf9MXWZbBd9kjzu9DIRmtA:1694477179752&q=ancient+egypt+scepter&tbm=isch&chips=q:ancient+egypt+scepter,online_chips:weapon:gjN34Decks0%3D&usg=AI4_-kTetdB1ApNb5GiRZ7jjnO65fiduig&sa=X&ved=2ahUKEwjM6IOz46OBaxWyklkEHan9CeMQgloDKAF6BAGPEBY&biw=1195&bih=556&dpr=1.25)



### EXCERPT FROM ONLINE ITEM ON THE MACE

<https://www.touregypt.net/featurestories/mace.htm>

Author: Jimmy Dunn (writing as Troy Fox).

Title: ‘The Blunt Instrument: A Weapon of Enduring Fascination in Ancient Egypt.’


‘...A rounded pear form of mace head known as a “piriform” replaced the disc mace in the Naqada II period of pre-dynastic Upper Egypt (3600-3250 BC) and was used throughout the Naqada III period (3250-3100 BC). Similar mace heads were also used in Mesopotamia around 2450-1900 BC.

‘An important, later development in mace heads was the use of metal for their composition. With the advent of copper mace heads, they no longer shattered and a better fit could be made to the wooden club by giving the eye of the mace head the shape of a cone and using a tapered handle.

‘Yet time and again, we continue to find at least the pharaoh smiting his enemies with the mace. More than 1,500 years after the Scorpion King was depicted upon a mace head, we find inscribed on a Stela of Amadeh the 18<sup>th</sup> Dynasty King Amenhotep II, recording that:


“His Majesty returned in joy of heart to his father Amun; his hand had struck down seven chiefs with his mace himself, which were in the territory of Takhsi”.’

LINEAR B SIGN 57  ; EGYPTIAN HIEROGLYPH  ‘DOOR’



Linear B sign 57  is pronounced /ja/ (as in ‘hallelujah’), and its origin is evidently unknown. But if we approach the sign with Egyptian hieroglyphics in mind, a candidate soon emerges, viz., the Egyptian hieroglyph for ‘door’:



Budge (1971: 94, item #38) defines that hieroglyph as ‘door,’ and earlier (p. 30) in the same book he clarified:

‘Thus the first character  P [of the name “Ptolemy”], represents a door made of a number of planks of wood upon which three cross-pieces are nailed.’

Those details are very welcome, although I am puzzled by Budge’s mention of ‘three cross-pieces;’ I see only two and assume I’m missing something obvious. In any case, the number of cross-pieces is not essential for the present discussion.

What *is* essential (besides the similarity in shape of  and ) is that one particular door plays a role in ancient Egyptian religion/mythology; that door and its parts have magical names, and a deceased person who is being judged on his worthiness for acceptance into the afterlife is required to know them all. This fits in with the adoption by Linear B of several other Egyptians hieroglyphs connected with Egyptian religion and mythology, although just what the Mycenaean rulers and scribes wanted to convey with this borrowing can only be speculated on.

As for the Egyptian mythology connected with the door in question, here are a few relevant passages concerning a deceased person who is being tested for his worthiness to enter the afterlife; (except for the names *Atef* and *Maāt*, the italics [for highlighting] are mine):


1. Budge (1969: 418):

‘*Anubis was the guardian of the door at the end by which the deceased entered, and which was called Khersek-Shu, [Budge then writes its name in hieroglyphs]; one leaf of the door was called Neb-Maāt-ḥeri-ṭep-reṭui-f and the other leaf Neb-peḥti-thesu-menmenet, ...*’

2. Budge (1969: 420):



‘Even when the deceased had satisfied the Forty-two Assessors he could not pass out of the Hall of Maāti *unless he knew the magical names of the various parts of the door which opened into the regions of the blessed*. In the address which he makes to the gods collectively, and which is usually considered to have been made after the Negative Confession, he summarizes his good deeds, and declares to the god Osiris, whom he calls the “lord of the *Atef* crown,” that he has done *Maāt*, and purified himself with *Maāt*, and that none of his members lack *Maāt*. He tells how he has been to the “Field of the Grasshoppers,” and how he has bathed in the pool wherein the sailors of Rā bathe, and describes all the things which he has done, including the finding of a sceptre of flint in the “furrow of Maāt.” *Finally, having satisfied all the various parts of the door by declaring to them their magical names*, he comes to the god MĀU-TAUI. ...’

#### PRONUNCIATION /JA/ OF LINEAR B SIGN 57

A final matter is, why is Linear B 57 pronounced /ja/ (as in ‘hallelujah’), and I have no answer. I note that the Romans had a god of doors/gates/passageways, viz., Ianus, but alas! he has no known Greek equivalent. On the other hand (and this is in full speculative mode), perhaps  /ja/ in Linear B is an indication that the Greeks in their prehistory did have a Ianus-type god in their pantheon.

LINEAR B SIGN 3  /PA/ MAY DERIVE FROM THE EGYPTIAN  
HIEROGLYPH  'BOLT' ALTERED TO APPEAR  
VERTICALLY

The possibility that the Linear B sign /ja/ derives from the Egyptian hieroglyph for 'door' gives me the courage to suggest that another Linear B sign containing /a/ might be based on an Egyptian hieroglyph associated with doors, viz., the one denoting a bolt.

Budge (1971: 8; item #8) presents  and defines it as 'a bolt of a door.' Linear B  has the same shape, except that it appears vertically, most likely for symmetry with the other Linear B vertical signs.

Of course, one might not expect 'bolt' to appear as a religious/mythological component in Linear B writing. But if some doors in ancient Egyptian mythology are important enough to have names (even magical ones), then the door's bolt might also have been considered significant.

Note especially the following from Budge 1969: 420 (my italics added):

'Even when the deceased had satisfied the Forty-two Assessors he could not pass out of the Hall of Maāti *unless he knew the magical names of the various parts of the door which opened into the regions of the blessed.*' ---

[*'The regions of the blessed.'* – i.e., the afterlife.]

And Budge (1969: 420):



*Finally, having satisfied all the various parts of the door by declaring to them their magical names, he comes to the god MĀU-TAUI.*

'The various parts of the door' – the bolt was probably one of them.

Also, for background on the bolt in ancient Egypt, the following internet item might be of interest:

(Mary Bellis (Feb. 5, 2020):

‘Archeologists found the oldest known lock in the Khorsabad palace ruins near Nineveh. The lock was estimated to be 4,000 years old. It was a forerunner to a pin tumbler type of lock, and a common Egyptian lock for the time. This lock worked using a large wooden bolt to secure a door, which had a slot with several holes in its upper surface. The holes were filled with wooden pegs that prevented the bolt from being opened.’

So the two short vertical lines in the Egyptian hieroglyph  represent the little wood pegs that prevented the bolt from being opened, and those pegs are now (as I suppose) represented in the horizontal short lines of Linear B sign 3: .

## REFERENCES

Bellis, Mary (updated Feb. 5, 2020). The History of Locks.

Thought Co., History and Culture.

[https://www.thoughtco.com/history-of-locks-](https://www.thoughtco.com/history-of-locks-4076693#:~:text=Archeologists%20found%20the%20oldest%20known%20lock%20in%20the,slo%20with%20several%20holes%20in%20its%20upper%20surface)

[4076693#:~:text=Archeologists%20found%20the%20oldest%20known%20lock%20in%20the,slo%20with%20several%20holes%20in%20its%20upper%20surface](https://www.thoughtco.com/history-of-locks-4076693#:~:text=Archeologists%20found%20the%20oldest%20known%20lock%20in%20the,slo%20with%20several%20holes%20in%20its%20upper%20surface)

Budge, E.A. Wallis 1969. *The Gods of the Egyptians: Or Studies in Egyptian Mythology*, 2 vols. New York Dover. – reprint of the original work published by The Open Court Publishing Company, Chicago, 1904).

\_\_\_\_\_ 1971. *Egyptian Language: Easy Lessons in Egyptian Hieroglyphics, With Sign List*. London: Routledge.

\_\_\_\_\_ 1978. *An Egyptian Hieroglyphic Dictionary*, 2 vols.

NY: Dover. This edition is a republication of the work originally published by John Murray, in 1920, but some changes have been made. Page: cxxiii.

Chadwick, John 1967. *The Decipherment of Linear B*. 2<sup>nd</sup> edition, with later reprintings. Cambridge U. Pr.

[https://www.google.com/books/edition/The\\_Decipherment\\_of\\_Linear\\_B/0e-](https://www.google.com/books/edition/The_Decipherment_of_Linear_B/0e-cAwAAQBAJ?hl=en&gbpv=1&dq=Linear+B+letters&pg=PT30&printsec=frontcover)

[cAwAAQBAJ?hl=en&gbpv=1&dq=Linear+B+letters&pg=PT30&printsec=frontcover](https://www.google.com/books/edition/The_Decipherment_of_Linear_B/0e-cAwAAQBAJ?hl=en&gbpv=1&dq=Linear+B+letters&pg=PT30&printsec=frontcover)

*COE = Comments on Etymology*.

Cohen, Gerald Leonard 1982, The origin of the Greek letter *omicron*.’

*Kadmos* (Zeitschrift für vor- und frühgriechische Epigraphik), vol. 21 pp. 122-123.

\_\_\_\_\_ 2020. Reflections on the origin of some letters in the Glagolitic alphabet, part 2. *Comments on Etymology*, Jan. 2020, vol. 49, #4, pp. 2-11.

[https://scholarsmine.mst.edu/artlan\\_phil\\_facwork/162](https://scholarsmine.mst.edu/artlan_phil_facwork/162)

\_\_\_\_\_ 2021. Reflections on the Phoenician Alphabet: Property and its Defense in the Origin and Order of the Letters (Draft #3). *Comments on Etymology*, Dec. 2021, vol. 51 #3, pp. 1-22.

[https://scholarsmine.mst.edu/artlan\\_phil\\_facwork/196/](https://scholarsmine.mst.edu/artlan_phil_facwork/196/)



- Comments on Etymology* 1971ff. = a series of working papers on the origin of various features of language, edited and frequently written by Gerald Leonard Cohen.
- Consani, C. 1996. 'AB 118/DWO tra minoico e miceneo', in: Consani, C., Negri, M. and Aspesi, F. (eds.) Κρήτη τις γαι ἔστι *studi e ricerche intorno ai testi minoici*. Quaderni linguistici e filologici, Università di Macerata, Facoltà di lettere e filosofia, Istituto di glottologia e linguistica generale VIII. Rome: Editrice 'il Calamo', 71-81 [Atti del Convegno 'Numeri e istanzzi di numerazione tra preistoria e protoistoria linguistica del mondo antico', Naples, 1-2 dicembre 1995]
- Davis, Brent 2014. *Minoan Stone Vessels with Linear A Inscriptions*, *Aegaeum* 36. Leuven/Liège: Peeters.
- Duhoux, Y. 1988. Mycénien et écriture grecque. In: A. Morpugo Davies and Y. Duhoux., eds. *Linear B: A 1984 Survey*, Mycenaean Colloquium of the VIII Congress of the International Federation of the Societies of Classical Studies, Bibliothèque des Cahiers de L'Institut de Linguistique de Louvain 26. Louvain-la-Neuve, pp. 7-74.
- Dunn, Jimmy (writing as Troy Fox). date: ? The Blunt Instrument: A Weapon of Enduring Fascination in Ancient Egypt. (Online article about the mace):  
<https://www.touregypt.net/featurestories/mace.htm>
- Forman, Werner and Stephen Quirke 1996. *Hieroglyphs and the Afterlife in Ancient Egypt*. Norman, OK: U. of Oklahoma Pr.
- Fox, Troy. See above: Dunn, Jimmy)
- Gardiner, Alan (date: ?). List of Egyptian hieroglyphs (online):  
[https://en.wikipedia.org/wiki/List\\_of\\_Egyptian\\_hieroglyphs#M](https://en.wikipedia.org/wiki/List_of_Egyptian_hieroglyphs#M)
- Georgiev, Vladimir Ivanov 1958: *Исследования по сравнительно-историческому языкознанию (Родственные отношения индоевропейских языков)*. Translation: *Studies in Comparative-Historical Linguistics (Kinship Relationships of the Indo-European Languages)*. Moskva : Izdatel'stvo Inostrannoï Literatury
- \_\_\_\_\_ 1981. *Introduction to the History of the Indo-European Languages*. Sofia: Publ. House of the Bulgarian Academy of Sciences.

- Gordon, Cyrus H. 1971. *Forgotten Scripts*. Middlesex, England: Penguin Books. Revised edition published in Pelican Books. (The book was first published in Great Britain by Thames & Hudson, 1968). Page 169 points out close relations between Minoan Crete and Egypt: ‘In addition to Northwest Semitic names, the Minoan tablets contain non-Semitic names of various derivations. Some are Egyptian, tying in with the archeological evidence of close relations between Minoan Crete and Egypt.’
- Judson, Ann P. 2020. *The Undeciphered Signs of Linear B: Interpretation and Scribal Practices*. Cambridge U. Press.
- Mercatante, Anthony S. and Robert Steven Bianchi 1998. *Who’s Who in Egyptian Mythology*. 2<sup>nd</sup> edition. New York: Barnes & Noble. (first published 1978, NY: Clarkson Potter). Pages 103-104 list the 42 items of the ancient Egyptian ‘Negative Confession’ (solemn assertion of sins one did NOT commit).
- Merry, W.W. 1955. *Homer, Odyssey, Books I-XII*. Oxford: Clarendon Press. This is an impression of the first (1870) edition.
- Mosenkis, Iurii (undated article). The Greek written language 2000-1500 BCE: Linear A. This article appears on the website of Academia.edu [https://www.academia.edu/11302281/THE\\_GREEK\\_WRITEN\\_LANGUAGE\\_2000\\_1500\\_BCE\\_LINEAR\\_A?email\\_work\\_card=view-paper](https://www.academia.edu/11302281/THE_GREEK_WRITEN_LANGUAGE_2000_1500_BCE_LINEAR_A?email_work_card=view-paper)
- The article is eight pages in length but unpaginated, and no journal title is given. What interests me here is Mosenkis’ helpful comment (page 1 of his article) that Vladimir Georgiev made the following interpretation of the Linear B sign that is identical to the Egyptian hieroglyph for ‘life’:
- ‘*za* (Egyptian symbol of life – “ankh”) < Greek *zaō* “I live”.’
- I assume the reference is to Georgiev 1958.
- Olivier, J.-P. 1979. L’origine de l’écriture linéaire B. *Studi Micenei ed Egeo-Anatolici* 20, 43-52.
- Salgarella, Ester 2020. *Aegean Linear Script(s): Rethinking the Relationship Between Linear A and Linear B*. Cambridge U. Pr.
- Shaw, Ian and Paul Nicholson 1995. *The Dictionary of Ancient Egypt*. New York: Harry N. Abrams.
- Steele, Philippa M. (editor) 2017. *Understanding Relations Between Scripts: The Aegean Writing Systems*. Oxford: Oxbow Books.

Steele, Philippa M. 2023. *Exploring Writing Systems and Practices in the Bronze Age Aegean*. Oxford, England (and in USA: Haverton, PA): Oxbow Books. --- Online:

<https://archive.org/details/arq-bronze-micen-epigraf-exploring-writing-system-bronze-age-aegean-steele-livro/page/n13/mode/2up>

Steele, Philippa M. and Torsten Meißner 2017. From Linear B to Linear A: the problem of the backward projection of sound values. In: Steele, Philippa M., ed. *Understanding Relations Between Scripts: The Aegean Writing Systems*, Oxford, pp. 93-110.

Strudwick, Helen 2006. *The Encyclopedia of Ancient Egypt*. New York: Sterling.

Vandenabeele, F. & J.P. Olivier 1979. *Les Idéogrammes Archéologiques du Linéaire B*. École Française d'Athènes: Études Crétoises 24. Paris: Geuthner.

Ventris, Michael and John Chadwick 1953. Evidence for Greek dialect in the Mycenaean Archives. *Journal of Hellenic Studies* 73: 84-103  
\_\_\_\_\_ 1973. *Documents in Mycenaean Greek*. 2<sup>nd</sup> ed. Cambridge U. Pr.— The first edition, 1956, was co-authored with Michael Ventris, who died that same year.

<https://archive.org/details/MichaelVentrisJohnChadwickDocumentsInMYCENAEANGREEKIIlovepdfCompressed/page/n195/mode/2up?view=theater>

Wieger, L. 1965. *Chinese Characters. Their Origin, Etymology, History, Classification and Signification. A Thorough Study From Chinese Documents*. Reprint of the second edition, published by the Catholic Mission Press in 1927. The first edition was published in 1915. NY: Dover.

Witczak, Krzysztof Tomasz 2011. Some Remarks on the Ancient Contacts between Crete and Egypt. *Do-so-mo* [Journal of Minoan-Mycenaean and Classical Studies; *Do-so-mo* is the transcription of the Linear B signs for *dosmos*, *-on* '(a kind of) gift, contribution'; see Ventris & Chadwick 1973: 391]. Published in Łódź, Poland. Vol. 9, pp. 45-54.

[https://www.academia.edu/6878215/Ancient\\_Contacts\\_between\\_Crete\\_and\\_Egypt](https://www.academia.edu/6878215/Ancient_Contacts_between_Crete_and_Egypt)  
*Abstract* (p. 45):

‘The present author [K. Witczak] discusses selected items of the Cretan vocabulary of the Ancient Greek language, as well as some Linear B and Linear A words, indicating a number of early borrowings from an Egyptian source. It is obvious that the intensive contacts between Egypt and Crete began to develop in the Minoan-Mycenaean age.’

Also, p. 52, Witczak’s conclusion #4: ‘Intensive contacts between Egypt and Crete began to develop as early as in the Minoan-Mycenaean age.’