

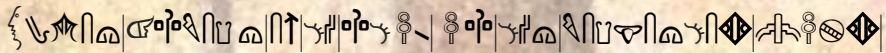


Ancient Signs



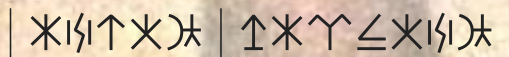
The Alphabet & the Origins of Writing

Alphabet Origins in Syllabic Script and an Ancient Sign Concordance¹ of Minoan Linear B Script, the Cypriot Syllabary, the Phaistos Disk, Old Elamite Scripts, the Axe of Arkalochori, Hieroglyphic Luvian (Luwian) Syllabograms, Sumerian Archaic Signs, and Pharaonic Egyptian Hieroglyphs



by

Andis Kaulins



¹ The Kaulins **Ancient Sign Concordance** can be cited as AnSignCon™. Please attribute to Andis Kaulins, **Ancient Signs: The Alphabet & the Origins of Writing**, epubli, Berlin, 2012. The cover photograph shows an ancient Livonian forked Y sign and was taken with a Canon PowerShot SX10IS by Andis Kaulins in June, 2010, at the *Turaida Estate* during the exhibition: *The Gauja Livs in the Cultural History of Latvia*.

2 ● ✱|ǀ Andis ↑✱^∠✱|ǀ)✱ Kaulins

This book is dedicated

To the inventors of writing

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Impressum

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Druck und Verlag: epubli GmbH, Berlin

<http://www.epubli.de/>

ISBN 978-3-8442-2017-9

Imprint

Title: Ancient Signs: The Alphabet & the Origins of Writing

Author: Andis Kaulins (Traben-Trarbach, Germany)

Published by: epubli GmbH, Berlin

<http://www.epubli.de/>

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ISBN 978-3-8442-2017-9

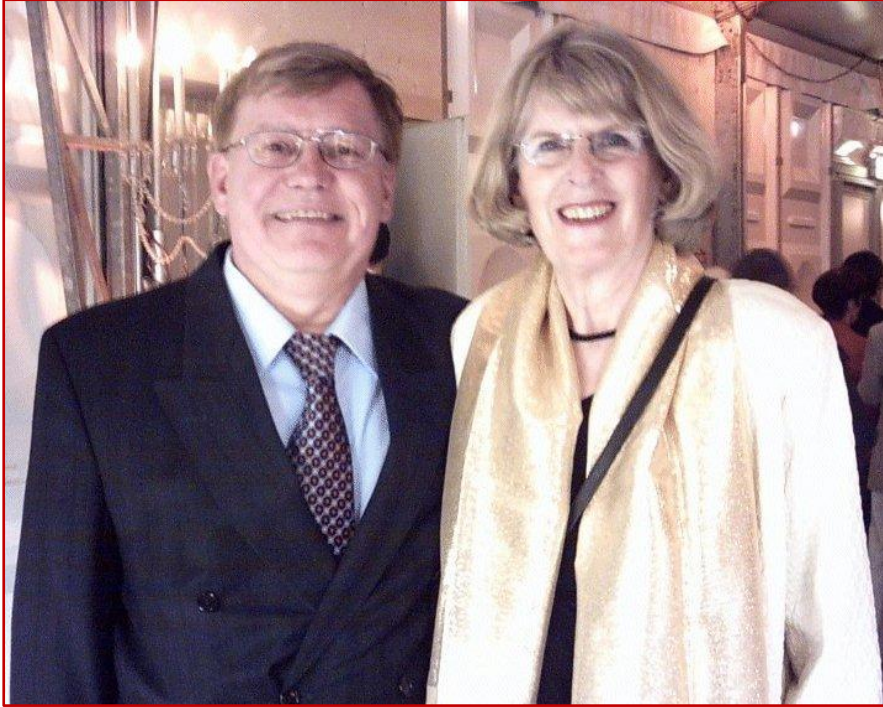
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The 17x24 cm size of the book (ca. 7x10 inches) is a standard for scientific print publications and has the advantage that it is also similar in size to many popular tablets, pads and E-readers. This is the color version of the book and it thus has an "&" in the title instead of the word "and" so that the two books, which each have their own ISBN numbers, can be distinguished.

Please cite this book as:

Andis Kaulins, **Ancient Signs: The Alphabet & the Origins of Writing**, epubli GmbH, Berlin, 2012.

The Author and his Significant Other at the Opera "Falstaff" in Düsseldorf



[King Henry IV](#), Part 2, Act 5, Scene 5, by William Shakespeare

LANCASTER: "The king hath call'd his parliament, my lord."

LORD CHIEF-JUSTICE: "He hath." ...

Epilogue (spoken by a dancer, freely excerpted, as [Marlowe](#) would have liked):

DANCER: "[W]hat I have to say is of mine own making....

But to the purpose, and so to the venture.

Be it known to you, as it is very well, I was lately here in the end of a displeasing play, to pray your patience for it and to promise you a better.... One word more, I beseech you. If you be not too much cloy'd with fat meat, our humble author will continue the story, with Sir John in it, and make you merry with fair Katharine of France: where, for any thing I know, Falstaff shall die of a sweat, unless already 'a be killed with your hard opinions....

My tongue is weary; when my legs are too, I will bid you good night....

[A]nd so I kneel down before you-but, indeed, to pray for the Queen."

Table of Contents by Subject and Page

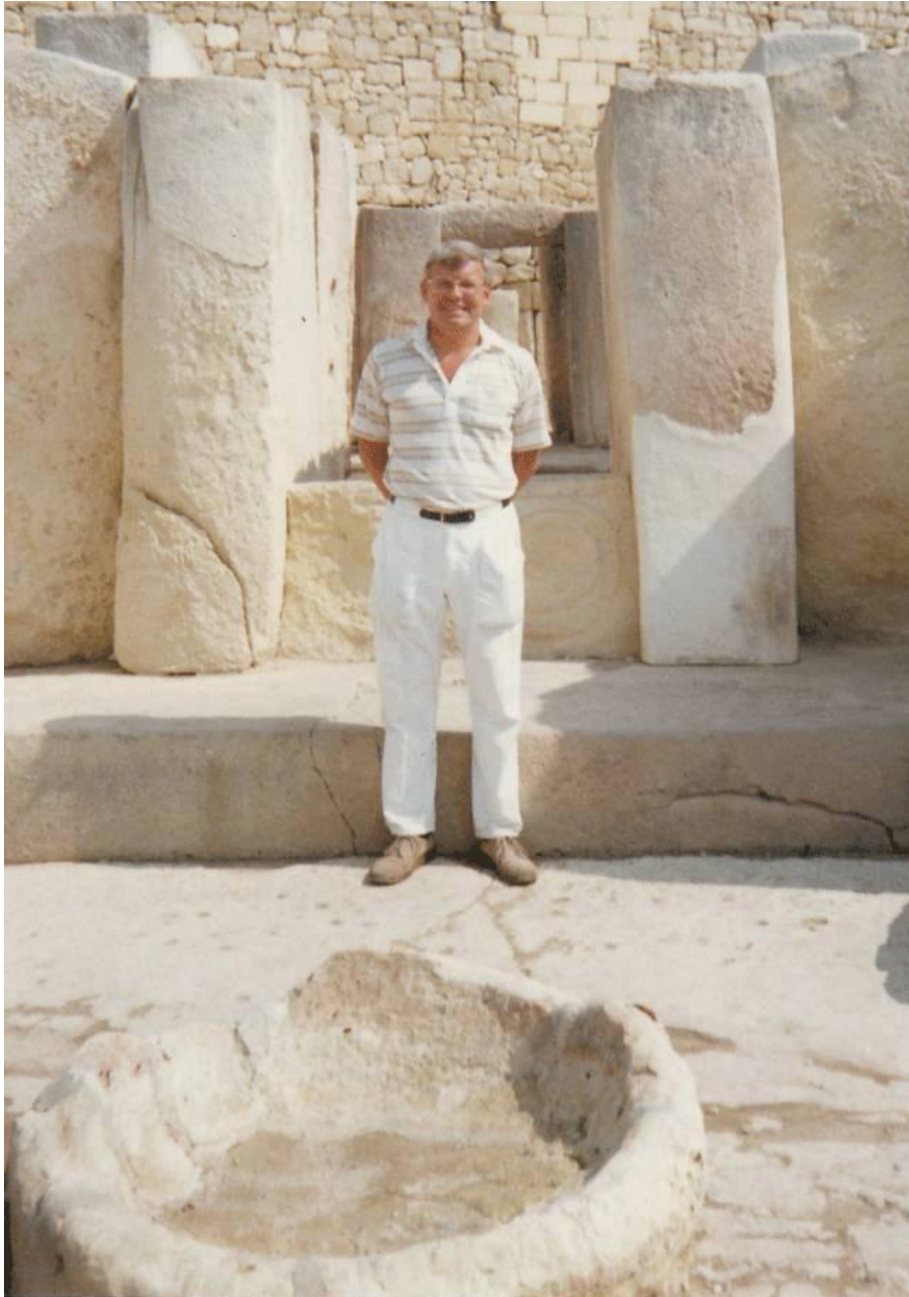
✱ ǀ The Author invokes Shakespeare (photograph)	3
✱ ǀ Table of Contents	4
○ Andis Kaulins at Tarxien (photograph)	7
✱ ǀ Preface: Rediscovering the Origins of Writing	8
○ Grimm Bro's Monument (photograph)	11
✱ ǀ Examples of Ancient Scripts and Ancient Signs	18
○ Ancient Livonian Signs (photograph)	19
✱ ǀ Perception and Consciousness in the Humanities	20
✱ ǀ Use of Latvian as a Language Research Tool	26
✱ ǀ Hittite, Luvian (Luwian) and Indo-European	30
✱ ǀ Egyptian Hieroglyphs and Indo-European	31
○ The Author in Heidelberg (photograph)	33
✱ ǀ Ancient Signs and the Origins of Writing	34
✱ ǀ Introduction to the Ancient Sign Concordance	35
○ <i>The David W. Packard Minoan Linear A Legacy</i>	35
○ <i>Michael Ventris, John Chadwick and Linear B</i>	37
○ <i>"L" and "R" Phonemes in Linear B Script</i>	38
○ <i>Multiple Sources for Syllabic Signs on the Grid</i>	39
○ <i>Structure of the Kaulins Syllabic Grid</i>	40
○ <i>Who Discovered Ancient Greek Letters as Signs?</i>	42
○ <i>Sumerian Archaic Signs and Egyptian Hieroglyphs</i>	45
○ <i>Signs in the Cypriot Syllabary, Linear B, the Phaistos Disc, Egyptian Hieroglyphs; Ancient Greek</i>	48
○ <i>Hieroglyphic Luwian (also spelled Luwian, formerly Hieroglyphic Hittite) Syllabograms and Logograms</i>	49
○ <i>Technology Transfer and the Spread of Writing by Ancient Seafarers: The Uluburun Shipwreck</i>	51
▪ <i>Map: Mediterranean Cultures and Writing</i>	51
▪ <i>Map: Ancient Seafaring Trade Routes</i>	53
✱ ǀ The Ancient Sign Concordance AnSignCon™	59
○ The Consonant-Based Syllables	59
○ Syllabic Grid Figure 1 ~ the Syllable PA	59
○ Syllabic Grid Figure 2 ~ the Syllable PE	63
○ Syllabic Grid Figure 3 ~ the Syllable PI	64
○ Syllabic Grid Figure 4 ~ the Syllable PO	65
○ Syllabic Grid Figure 5 ~ the Syllable PU	66

○ Syllabic Grid Figure 6 ~ the Syllable RA	68
○ Syllabic Grid Figure 7 ~ the Syllable RE	69
▪ Story of the Sign Identification	70
○ Syllabic Grid Figure 8 ~ the Syllable RI	72
○ Syllabic Grid Figure 9 ~ the Syllable RO	73
○ Syllabic Grid Figure 10 ~ the Syllable RU	75
○ Syllabic Grid Figure 11 ~ the Syllable MA	76
○ Syllabic Grid Figure 12 ~ the Syllable ME	77
○ Syllabic Grid Figure 13 ~ the Syllable MI	78
○ Syllabic Grid Figure 14 ~ the Syllable MO	79
○ Syllabic Grid Figure 15 ~ the Syllable MU	80
○ Syllabic Grid Figure 16 ~ the Syllable NA	81
○ Syllabic Grid Figure 17 ~ the Syllable NE	83
○ Syllabic Grid Figure 18 ~ the Syllable NI	85
○ Syllabic Grid Figure 19 ~ the Syllable NO	86
○ Syllabic Grid Figure 20 ~ the Syllable NU	89
○ Syllabic Grid Figure 21 ~ the Syllable LA	90
○ Syllabic Grid Figure 22 ~ the Syllable LE	91
○ Syllabic Grid Figure 23 ~ the Syllable LI	93
○ Syllabic Grid Figure 24 ~ the Syllable LO	94
▪ <i>Axe of Arkalochori - Decipherment</i>	95
○ Syllabic Grid Figure 25 ~ the Syllable LU	96
○ Syllabic Grid Figure 26 ~ the Syllable TA	97
○ Syllabic Grid Figure 27 ~ the Syllable TE	98
○ Syllabic Grid Figure 28 ~ the Syllable TI	99
○ Syllabic Grid Figure 29 ~ the Syllable TO	100
○ Syllabic Grid Figure 30 ~ the Syllable TU	102
○ Syllabic Grid Figure 31 ~ the Syllable DA	103
○ Syllabic Grid Figure 32 ~ the Syllable DE	104
○ Syllabic Grid Figure 33 ~ the Syllable DI	105
○ Syllabic Grid Figure 34 ~ the Syllable DO	106
○ Syllabic Grid Figure 35 ~ the Syllable DU	107

6 ● ✱⌋ Andis ⌈✱∧∟✱⌋ Kaulins

○ Syllabic Grid Figure 36 ~ the Syllable SA	108
○ Syllabic Grid Figure 37 ~ the Syllable SE	109
○ Syllabic Grid Figure 38 ~ the Syllable SI	110
○ Syllabic Grid Figure 39 ~ the Syllable SO	111
○ Syllabic Grid Figure 40 ~ the Syllable SU	112
○ Syllabic Grid Figure 41 ~ the Syllable KA	113
○ Syllabic Grid Figure 42 ~ the Syllable KE	114
○ Syllabic Grid Figure 43 ~ the Syllable KI	115
○ Syllabic Grid Figure 44 ~ the Syllable KO	116
○ Syllabic Grid Figure 45 ~ the Syllable KU	117
○ Syllabic Grid Figure 46 ~ the Syllable GA	118
○ Syllabic Grid Figure 47 ~ the Syllable GE	119
○ Syllabic Grid Figure 48 ~ the Syllable GI	120
○ Syllabic Grid Figure 49 ~ the Syllable GO	122
○ Syllabic Grid Figure 50 ~ the Syllable GU	124
○ Syllabic Grid Figure 51 ~ the Syllable ZA	125
○ Syllabic Grid Figure 52 ~ the Syllable ZE	126
○ Syllabic Grid Figure 53 ~ Syllables ZI, ZO	128
○ Syllabic Grid Figure 54 ~ the Syllable ZU	129
✚ W-based Syllables ~ Matres Lectionis	130
○ Egyptian Hieroglyphs and Vowel Theory	130
✚ Syllabic Grid Vowels	134
○ Syllabic Grid Figure 55 ~ "A"	135
○ Syllabic Grid Figure 56 ~ "E", ⌋ "He"	138
○ Syllabic Grid Figure 57 ~ "I", ⌋ "Yod"	139
○ Syllabic Grid Figure 58 ~ "O", ⌋ "Waw"	140
○ Syllabic Grid Figure 59 ~ "U", ⌋ "Waw"	141
○	
✚ Alphabet Derivation from Syllabic Signs	142
✚ The Phaistos Disc and Other Questions	152
✚ About the Author, Andis Kaulins	191

Andis Kaulins at Tarxien, Malta, Looking for Signs



The author in search of signs at [Tarxien](#), Malta, 1988. What was found?

Preface


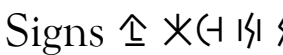
Rediscovering the Origins of Writing

The author of this book visited [Malta](#) in September, 1988. What was found? Did [Maltese Temples](#) show evidence of writing? Were there traces of alphabetic, syllabic or logographic scripts? No, none. The Maltese Temples were built by people whose culture preceded the introduction of "writing" to the Mediterranean area. Nevertheless, that culture **did have symbols**, and below is a clip taken from the author's 1988 photograph of a frieze then found in the left apse of **Tarxien**, showing one ram, one pig and four goats, a rather strange "animal procession". Why those numbers?

The Animal Procession Frieze of Tarxien, Malta



The original frieze is today in the museum in [Valetta](#) and the frieze has been photographed thousands of times. Here is the question: Do you see anything unusual in that stone? Actually, the question is unfair, because a close-up may be required, so let us just look at the frieze front only.

Ancient  Signs  • 9



Unless you are a real sleuth, you will still see nothing. So let us resize the sections of the frieze, as below. See anything?



10 ● *| Andis †*∧≤*|)† Kaulins

If you do see something remarkable, something which might lead you to an "aha" effect, then you are one up on the archaeologists, who have apparently seen nothing unusual, judging by the literature. To them this frieze appears as a sacrificial offering stone showing animals typical for the era.

In fact, this frieze of Malta exemplifies the almost childlike gift of observation that is required to conduct the detective work involved in rediscovering the origins of writing. If you are not a good observer, you are unlikely to make progress.

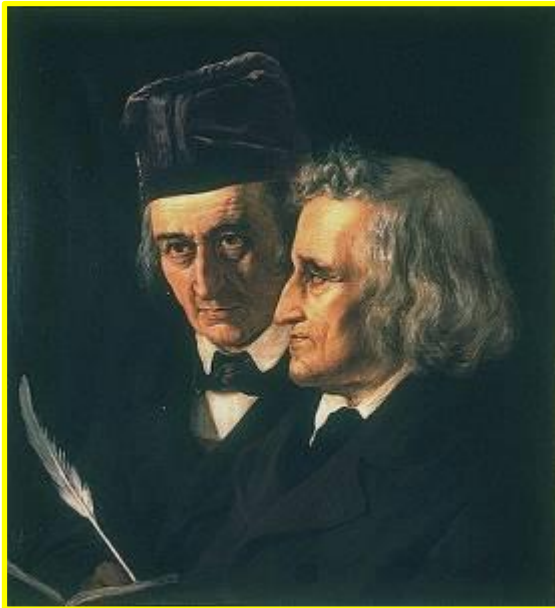


Figure 1 The Brothers Wilhelm and Jacob Grimm, a painting by [Elisabeth Jerichau Baumann](#), now in the public domain at the [Wikimedia Commons](#)

In this regard, Jacob Grimm, a German linguist famed for [Grimm's Law](#) and [Grimm's Fairy Tales](#), wrote: *(translated from German by the author)*

"As a matter of general logic, I am an enemy of grammar; it gives the appearance of being strict and exclusive in its rules, although it actually **limits [! ! !] pure observation**, which I regard to be the soul of

linguistic research. He who pays no attention to the perceptual fruits of observation - which from the very start do mock all theories by the certainty of their existence - will never make heads or tails of the impenetrable essence of language."

Grimm Brothers Monument in Hanau (Germany)

Sculpted by [Syrius Eberle](#), 1895/96

Photographed by Wikimedia User [Dr. Meierhofer](#), August 14, 2006

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The author studied law and notes that the [most famous linguist of all time](#), Jacob Grimm, also studied law. [Grimm's Law](#) was:

"[T]he first law in linguistics concerning a non-trivial sound change ... a turning point in the development of linguistics."

12 ● *| Andis ↑*∧∟*|)† Kaulins

LOOK first. That is the essence of science. If we now make negative images of our two photo clips of the left and right sides of the Tarxien frieze and then trace all the prominent lines, what do we get? We do get something remarkable.



We get a thus far unexplained line in the frieze and three circular indentations, called "cupmarks" viz. "cup marks" in megalithic research. Researchers such as myself claim that [cupmarks](#) represent stars of the sky. How about here?

The line on the frieze and three cup marks look like this:

(whereby the top image is a negative image, while the bottom image shows the lines traced)



One could argue that the line in the stone is a natural flaw and that the sculptor worked around it, but why choose a flawed stone for the frieze in the first place, and why not chisel the flaw away to the surface of the frieze if that were the case. If the line was sculpted into the stone intentionally or if it were left as a flaw and sculpted around, then it must have had a significance to "the animal procession" portrayed.

The key to a resolution of this inquiry is found in the three cupmark indentations. These are not randomly distributed natural flaws in stone or indentations caused by inadvertent damage to the stone over the millennia, but are found placed directly on the line found on the frieze front. There is in fact one cupmark for the ram, one cupmark for the pig (or boar) and one cupmark for the four goats. As shown further below, it is then arguable that **the Tarxien frieze is a star calendar** in which the peak of the line at the four goats marks the Vernal Equinox point in Auriga at the star Capella in ca. 3000 B.C.

14 ● ✳️ Andis ⤴️✳️⤵️✳️✳️ Kaulins

Ancient star groupings are similar to modern constellations because certain combinations of stars are logical based on star magnitude and proximity to one another. The ancients called the brightest star in a star group a *lucida* (from *lux* "light").

The ancients concentrated particularly on the stars on or near the [ecliptic](#) (today the [Zodiac](#)), which is the path of the Sun. Exactly when the modern Zodiac actually developed is irrelevant here, since the ancients used mostly the same stars.

The ram on the frieze would then represent Aries, the Ram, and its cupmark would mark the brightest star, [Hamal](#), as the *lucida* of that star group, regardless of its exact shape then.

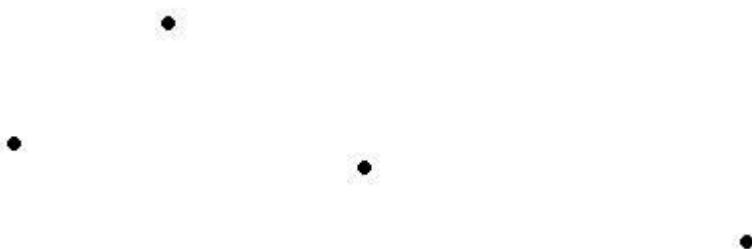
The pig on the frieze would then represent the stars of Taurus with [Aldebaran](#) as the *lucida*. The name of the [Hyades](#),² a part of Taurus, is traced to Greek [ἤς, ἤεσσι](#) "pig, wild swine, boar", especially in view of the Latin name of the Hyades, [suculae](#) "piglets". Richard Hinckley Allen wrote:³

"[T]heir colloquial title ... was **Suculae**, the Little Pigs, as if from *Sus*, *Sow*, the Greek **ἤς**, Homer's **Σῦς**, which indeed might as well be the derivation of **Ἰάδης** as ἤειν.... Smyth said that the title might come from the resemblance of the group to a pig's jaws; or because Aldebaran and its companion stars were like a sow and her litter...."

² *Hyades*, [OxfordDictionaries.com](#) writes: "[A]n open star cluster in the constellation Taurus, appearing to surround the bright star Aldebaran" ... from Greek *Huades*, by folk etymology from *huen* 'to rain', but perhaps from *hus* 'pig', the Latin name of the constellation being *Suculae* 'little pigs'.

³ Richard Hinckley Allen, [Star Names: Their Lore and Meaning](#), [Dover Publications](#), N.Y. 1963, a corrected republication of *Star-Names and Their Meanings*, as published by G.E. Stechert, 1899. Online at the [University of Chicago](#) by Bill Thayer as a work in the public domain. See there [Aries](#), [Taurus](#), [Auriga](#).

The four goats on the frieze must then represent the stars of Auriga as Capella, the [goat star](#), and her "kids". [Capella](#) as the brightest northerly star is the *lucida* of Auriga. Earthsky.org in a [closeup-on-Auriga](#) shows the top four stars approximately as follows, which is similar to the Tarxien four-star frieze depiction of the goat stars (illustration below by this author):



Let us now look at the sky over Malta in the approximate era assigned by archaeologists to the building of the Maltese Temples such as Tarxien, about 5000 years ago. What astronomical time could be depicted by the animal symbol procession on the Tarxien frieze if it was a Zodiac of sorts?

The image clip on the next page was made using the author's desktop 3.0 Version of [Starry Night Pro](#), an astronomy software program long used by this author as a desktop planetarium. [Starry Night Pro](#) can calculate the positions of heavenly bodies in any era, at any location. The settings here were set to Malta in 3117 B.C. (-3116 by astronomy).

As one can see from that image, the [Celestial Meridian](#) running from the [Vernal Equinox](#) to the North Celestial Pole passes straight through Capella in ca. 3000 B.C.

One could conclude that the Tarxien frieze is calendric and shows when that particular Maltese Temple was constructed.

The Sky Over Malta About 3000 B.C. (here 3117 BC)

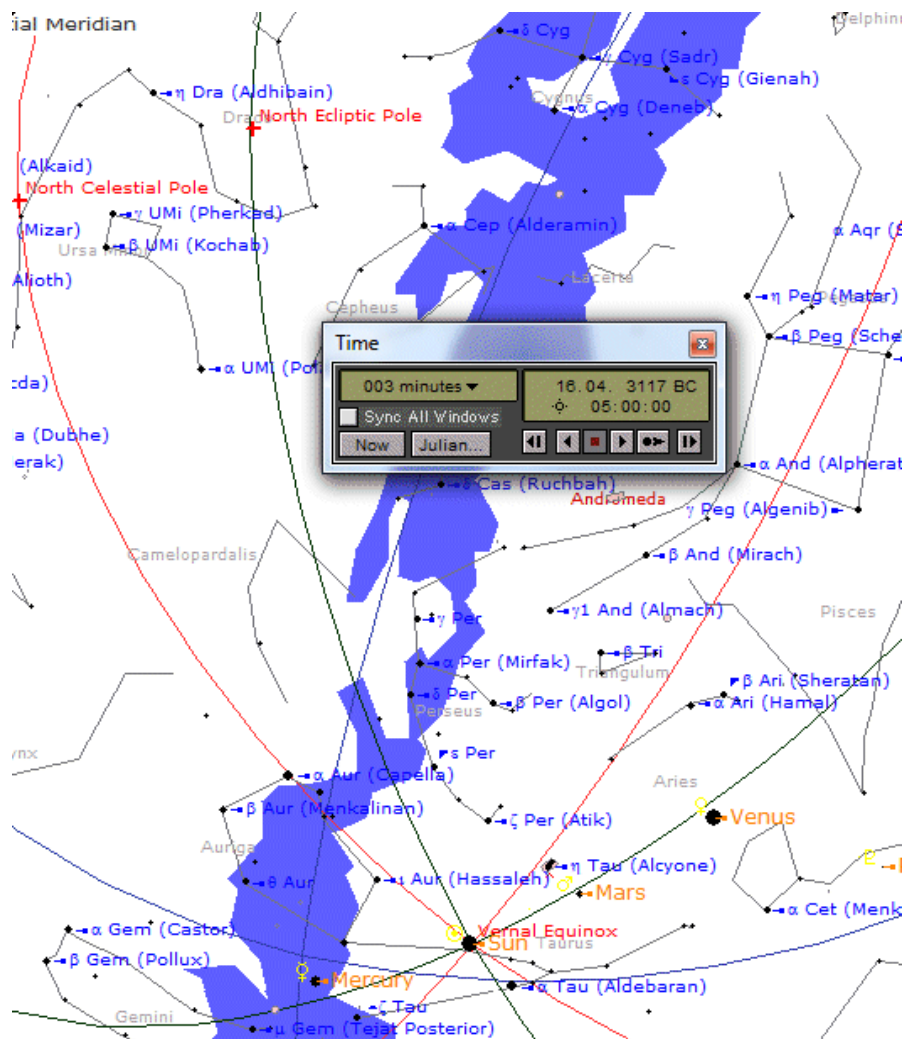


Image clip from the software [Starry Night Pro 3.0](#).

The Celestial Meridian runs from the Vernal Equinox to the North Celestial Pole and passes through Capella in Auriga in ca. 3000 B.C.

We now proceed from Malta to conduct similar detective work on the origins of writing and the alphabet, keeping in mind that close examination and inspection of ancient signs is the most important element of analysis.

Current theories about the origins of writing trace the [Latin alphabet](#) back to the [Greek alphabet](#) and that to the [Phoenician alphabet](#) (viz. [Paleo-Hebrew](#) or [Proto-Canaanite](#)), a so-called "[non-pictographic consonantal alphabet ... with ... *matres lectionis* \[special marks\] for some vowels.](#)"

There is [broad acceptance](#) of the idea that Phoenician merchants spread the alphabet throughout the ancient world. There is, however, no agreement in the scholarly community about where the Phoenicians obtained that alphabet, although ties have been alleged to the [Proto-Sinaitic script](#) or to the [Egyptian hieroglyphs](#). The purpose of this work is not only to illuminate the answer to the question of alphabet origins, but also to point to the origins of writing in general.

This book provides a new analysis of the origins of [syllabic writing](#) in [Western Civilization](#), using a symbiotic multi-syllabic grid of ancient signs. That method permits not only an understanding of the sources of the Paleo-Hebrew, Proto-Canaanite and Phoenician [alphabet](#), but also shows how the [letters](#) or "[characters](#)" of our own alphabet once evolved out of syllabic signs – signs which clearly had a **common origin**.

Rediscovering the origin of those ancient signs will get more difficult as we go back in time because of differences in sign shapes and the use of various signs to designate the same concepts, but that is the fun challenge of the research work.

Examples of Ancient Scripts and Ancient Signs

Below are examples of ancient signs in syllabic scripts. The syllabic value of these ancient signs (partly corrected) is found in the syllabic grid presented in this book. In spite of their different appearance, these signs are related.

The Script of the Phaistos Disk and its Ancient Signs



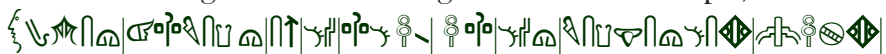
Linear B Script and its Ancient Signs

(The author of this book has written this text using the Ancient Signs of Linear B Script.)



Luvian (Luwian) Script and its Ancient Signs

(The author of this book has written this text using the Ancient Signs of Luvian Script.)



Ancient [Livonian](#) Signs, Latvia



Four ancient signs of the ancient [Livs \(Livonians\)](#), [Livonia](#), Latvia, who were ruled in ancient days by [Caupo of Turaida](#). Canon PowerShot SX10IS photos by Andis Kaulins, taken at the *Turaida Estate* during the June, 2010 exhibition: *The Gauja Livs in the Cultural History of Latvia*.

Perception and Consciousness in the Humanities

At the simplest level of analysis, the world consists of three levels of perception and consciousness.

The **first level** of perception and consciousness is our surrounding world, i.e. **nature** viz. the physical environment in which we live, including the air we breathe, the food we eat and the general resources of Mother Earth that we use for survival, shelter and other needs and necessities. This world is a **given** (though also changeable via human intervention).

The **second level** of perception and consciousness is the political, social, economic, scientific, religious, and legal world of humankind. This second world is the level of **appearances**, i.e. the way things in life and living "are viewed" from one year to the next, from one century to the next, and from one millennium to the next. This temporal world of "worldly goods" and "human values" is in constant flux.

The **third level** of perception and consciousness is the spiritual world that underlies everything that is. **This is the Y ("why") of things, shown on the cover of this book.** It is the world of the **unseen** ~ not to be confused with religion. *Religion is the attempt to find a worldly understanding of the spiritual essence of the unknowable.* Religion is not that spiritual world itself. Rather, each religion provides its own answer to the fundamental questions of existence, depending on diverse motivations and influences that guide human behavior ~ and these are, or can be, a different thing entirely than the doctrines that are preached from the pulpits.

When we examine any branch of **science**, the **first level** of perception and consciousness determines what actual physical materials are available for analysis of any question. The **second level** of perception and consciousness interprets those materials and represents the state-of-the-art of the schools of thought that prevail in any academic discipline as to what is regarded to be "current knowledge". The **third level** of perception and consciousness underlies the "why" of how things are interpreted (or not) to be as they are.

The third level of perception and consciousness is particularly important for the humanities, which are softer than the physical sciences in their alleged proofs. If, for example, an engineer designs a new motor and touts it to the world, that motor must run, for everyone can see if it runs or not. Hence, designing a fraudulent motor successfully is difficult in the physical sciences. Things either work ~ or not.

The question in the humanities of whether "a new motor runs" is determined by "the weight of authorities" rather than by an objective test as in the case of the engineers. Marxism-Leninism was a good example of a theoretical motor that did not run, but which authorities said "had to run", because they said so. Defective motors are found particularly in studies of Ancient History, including Anatolian & Balkan Studies, Anthropology, Archaeology, Assyriology, Biblical Studies, Classical Studies, Egyptology, Historical Linguistics, History of Civilization, Megalithic Research, and Oriental Studies generally. In those disciplines, the state-of-the-art of "knowledge" is defined by many unseen factors having little to do with "truth", so that many existing motors **do not run**.

Our paradigm example in the humanities is the case elaborated by Michael D. Coe, professor emeritus of Anthropology at Yale University, in [Breaking the Maya Code](#). Coe relates how the quest to decipher Maya glyphs was sabotaged for many years by a leading academic authority. A similar case of academic sabotage is alleged by some in [climate studies today](#). The battle is not so much for truth, but rather for power, just as in every other profession. As Coe relates in the case of the Maya glyphs, the truth surfaced only after the opponents ~ who were scientifically in the wrong ~ passed away ... and their erroneous opinions with them.

We have written online previously at length on this topic:

- ❖ [Law and Science](#) (and the many links there, some repeated below)
 - [Mainstream Archaeology Fakes](#)
 - [Lawyers and Archaeologists](#)
 - [Peer Review Blocks Contrary \(but Correct\) Opinions](#)
 - [Japanese Jomon rock image a fake](#)
 - [Senior Scholars Never Challenged](#)
 - [Law, Evidence & Archaeology: Errors in Biblical Chronology I](#)
 - [Law, Evidence & Archaeology: Errors in Biblical Chronology II](#)
 - [Vaccination, Autism, Facts, Peer Review, Popper, Kuhn, Lakatos](#) citing to [The Scientific Status of Theology: Imre Lakatos, Method and Demarcation](#) by Greg Peterson
 - [The Importance of Evidence](#)
 - [The Sky Disk of Nebra : A Question of Evidence](#)
 - [Belief Without Proof : Evidence and the World - #12 - Americas Populated only Recently](#)
 - [Who Rightfully Claims the Holy Land?](#)
 - [The Political Realities of Mainstream Science - Richard C. Lewontin](#)
 - [Research Skills are not everything - but close](#)

Instructive of the degree to which mainstream science is prepared to groom the facts to fit preconceived views is found at "[Faking Biblical History](#)", an article relating to a small chalk ossuary, which in October 2002 was alleged to be the oldest specific mention of Jesus outside of Biblical sources. The ossuary was treated as a "great sensation" in established archaeology circles. Indeed, this ossuary was presented with a great deal of hype to more than 100,000 visitors at the Royal Ontario Museum, until it was removed as a clear fake.

To this author, the ossuary was a clear forgery from the start. To the deluded, it was like the Holy Grail, as the "believers" basked in their imagined view of what Biblical history OUGHT to look like. Facts *followed* belief, not vice versa.

Has the fake ossuary proven to be a "lesson" for the humanities? Such fakes and frauds run off the backs of prevailing schools of thought like water from ducks. Biblical adherents are e.g. still busy looking for many historical Biblical persons in the wrong centuries chronologically, and appear to be immune to contrary source materials.

Moses is a case in point.⁴ Moses, according to the historian [Artapanus of Alexandria](#), was born in the reign of Chaneferre (Khenephres), an Egyptian Pharaoh who ruled ca. 1700 B.C. ~ not 400 or more years later, as erroneously alleged by today's scholars. They ignore the date of 1700 B.C. because it would hopelessly entangle the current Biblical chronology. It is a chronology built on a foundation of sand.

⁴ See [Moses, Exodus, 10 Plagues of Egypt & Ipuwer Papyrus : A Question of Evidence : Errors in the Chronology of the Ancient Near East, Egypt & the Bible.](#)

A [biography of Moses](#) by [Artapanus of Alexandria](#) was contained in *Concerning the Jews*, a history written in Greek ca. 175 B.C. The original work is lost, but it was cited by [Lucius Cornelius Alexander Polyhistor](#), whose work was then cited by [Eusebius of Caesarea](#) in *Præparatio Evangelica* ix. 18, 23, 27 and [Clement of Alexandria](#) in *Stromata* i. 23, 154.

[Gaius Julius Hyginus](#), the *major source* for the account of the origins of Greek writing, cited later in this book, was a student of no other than Alexander Polyhistor.

[Clement of Alexandria](#) in Chapter XXIII of Book 1 of [The Stromata, or Miscellanies](#), writes on the *Age, Birth and Life of Moses*, and has some remarkable material concerning the origins of writing (<http://www.gnosis.org/library/strom1.htm>):

"Moses, originally of a Chaldean family, was born in Egypt, his ancestors having migrated from Babylon into Egypt....

[H]e was taught ... the philosophy which is conveyed by symbols, which they point out in the hieroglyphical inscriptions.... [Eupolemus](#), in his book *On the Kings in Judea*, says that "Moses was the ... first that imparted grammar to the Jews, that the Phoenicians received it from the Jews, and the Greeks from the Phoenicians.... And so Artapanus, in his work *On the Jews*, relates "that Moses, being shut up in custody by [Chenephres](#), king of the Egyptians ... stood before the king...." [emphasis added, footnotes removed, link to [Eupolemus](#) added]

From that it is quite clear that **Moses** lived in the era of **Chenephres** (ca. 1700 B.C.) and that the Phoenicians took their alphabet from the Jews, who learned it in that same era.

Eusebius of Caesarea wrote as follows in Chapter XXVII of *Praeparatio Evangelica* (*Preparation for the Gospel*), translated by E.H. Gifford (1903), Book 9, found online at http://www.tertullian.org/fathers/eusebius_pe_09_book9.htm in part repeating information from **Alexander Polyhistor** that is also included in *The Stromata* of **Clement of Alexandria**:

"... **Artapanus** says ... **Palmanothes** succeeded to the sovereignty [as the King of Egypt].... This king behaved badly to the Jews; and first he built Kessa [[Kessan](#)], and founded the temple therein, and then built the temple in Heliopolis. [The only Pharaoh who built two temples was **Amenemhet III** whose rule in the 12th Dynasty followed **Senusret III** and preceded the 13th Dynasty kings including *inter alia* **Chaneffere**, i.e. **Chenephres**.]

He begat a daughter Merris, whom he betrothed to a certain **Chenephres**, king of the regions above Memphis (for there were at that time many kings in Egypt [*i.e.* the 13th Dynasty]); and she being barren took a supposititious child from one of the Jews, and called him Mouses (Moses).... And this Moses, they said ... divided the State into thirty-six Nomes, and appointed the god to be worshipped by each Nome, and the sacred writing for the priests...."

The accounts of Artapanus of the deeds of Moses are scoffed at **in error** by Egyptologists and Biblical scholars, who fail to see that they match similar events in the reign of [Senusret III](#) in the 12th Dynasty, including the new division of Egypt into 36 nomes and the introduction of animal idolatry. Indeed, as further proof, the Egyptian [Story of Sinuhe](#) from the same period largely matches the Biblical life of Moses. Historians have erred in placing the life of Moses later. That great error epitomizes colossal flaws in the third level of perception and consciousness in the humanities, especially Ancient History.

On the Use of Latvian as a Language Research Tool

"The Baltic languages are said to be the closest of the living Indo-European languages to Proto-Indo-European — the original parent of all the Indo-European tongues — both phonologically and grammatically." [Infoplease.com](http://infoplease.com), citing to -- [The Columbia Electronic Encyclopedia](#), 6th ed., 2004, Columbia University Press; and, T. F. Magner and W. R. Schmalstieg, ed., [Baltic Linguistics](#) (1970). The Baltic languages are ARCHAIC.

That alone is sufficient reason to pay great attention to the [Baltic languages](#) when doing ANY historical linguistic research. Moreover, as a fluent native Latvian speaker with ancestors who come from the area of the purest central dialect, I have a great advantage over linguists who speak no Baltic tongues.

The hypothesis that Lithuanian is more archaic than Latvian in all respects is not shared by this author and those who do not like my use of Latvian lexical comparables in this book can use Lithuanian ones. Most of the comparisons to other languages will stand regardless of whether one uses Latvian or Lithuanian for comparison, so that this issue has no great importance for this book. I have written previously at LexiLine.com on this controversy and repeat and embellish those comments below.

The more archaic nature of Lithuanian was first alleged by [August Schleicher](#) (1821-1868), who published the first comprehensive grammatical study of the Lithuanian language. However, Schleicher conducted most of his work in East Prussia, and NEVER actually came into contact with the actual primary Lithuanian dialect, so that his conclusions must be regarded with great skepticism. See the [Latvian Institute](#) and the [Institute of Lithuanian Language](#).

Schleicher also advocated the ill-conceived idea of the [polygenesis of languages](#), which has proven increasingly wrong. He made his conclusions at a time when there was a near vacuum of information and research on Latvian. The Latvian Grammar ([Lettische Grammatik](#)) of Endzelins first appeared in Riga in 1922. Essentially, Schleicher's conclusions have not been questioned seriously since that time, except for a few researchers who have dealt with the subject intensively, such as the German [Rainer Eckert](#) or the Scandinavian [Richard Ekblom](#), who concluded that some elements of Latvian are more archaic than in Lithuanian. Generally, however, the position that Lithuanian is more archaic than Latvian pervades the literature. See e.g. Algirdas Sabaliauskas in [We, the Balts](#).

Professor [Rainer Eckert](#), University of Greifswald, provides several examples which to him point to the relatively greater age of some aspects of Latvian, as evidenced by the following:

FIRST -- There is a retention of older Indo-European irregular inflections (heteroclitics); and,

SECOND -- There is retention of the older **i-stems** in the roots of nominative forms of words, which are not retained in Lithuanian or in [Old Prussian](#).

"Older" or "more archaic" is used here in following sense: if we posit a proto-language, then a language which most nearly retains the original forms of this language is "older" and "more archaic" than languages which show greater innovation. These are then "newer", although all languages are of course equally "old" in tracing their roots back to the proto-language.

To the above two points we can add eight more:

THIRD -- Latvian is the ONLY language in Indo-European WITHOUT aspirates. One must argue impossibly that Latvian somehow lost all aspirates without a trace. The only possible explanation is that Latvian NEVER had aspirates -- neither did [Nostratic](#). That was surely the case for proto-Indo-European.

FOURTH -- Latvian is the ONLY language in Indo-European in which ALL words are stressed on the FIRST SYLLABLE, where later more modern "sing-song" effects and accents are not present and where stress or accent has not been transferred to interceding or closing syllables carrying less than the initial important root meaning of the word. Those are modernisms.

FIFTH -- The lexical origin of words is easily reconstructed within the Latvian language itself, without recourse to any other outside sources or languages - it is almost like an original language, explaining even difficult forms in [Sumerian](#).

SIXTH -- The [Latvian Dainas](#) seem more prevalent than the comparable [Dainos](#) in Lithuanian. See also a 2009 [PhD thesis](#) by Christina Jaremko-Porter on [Johann Gottfried Herder and the Latvian Voice](#) ([Edinburgh Research Archive](#)) for general info.

SEVENTH -- The most ancient continuously used cemetery in all of [Northern Europe](#) has been found in Latvia, not Lithuania, indeed, pointing to the origins of individual human burial.

EIGHTH -- The [oldest skull finds](#) in the Baltic are in Latvia.

NINTH -- The [oldest pottery](#) found in the Baltics is in Latvia.

TENTH -- The Baltic [Landsteiner Wiener LWb gene](#) is most prominent in Latvia at 5.9%, compared to 5.7% in Lithuania.

The Main Historically Important Latvian-German Dictionary

The main historical dictionary for any serious study of Latvian language and proto-Indo-European word roots is the four-volume [Mīlenbaha - Endzelīna latviešu valodas vārdnīca](#). It is also cited to as **Mīlenbahs' and Endzelīns' Latvian-German Dictionary**, or **Mīlenbahs' und Endzelīns' Lettisch-Deutsches Wörterbuch**, and was compiled by [Kārlis Mīlenbahs](#) ([Karl Mühlenbach](#)) and [Jānis Endzelīns](#) (John Endzelins), Riga, 1923-1932, I-IV, including supplementary volumes published later (Riga, 1933-1939) by Endzelins after Muehlenbach's passage. An electronic if incomplete online version is available on a free but registered basis at <http://www.tezaurs.lv/mev/login>, although the entire login procedure is still only possible in Latvian.

Dictionary Use in Linguistic Work by Mainstream Linguists

How often do you find the above dictionary used and cited in mainstream linguistic work? As good as never. The alleged [Indo-European Etymological Dictionary](#) by Julius Pokorny has only three citations to Latvian that I have been able to find.

An interesting recent dissertation by Ineta Polanska (from Ogre, Latvia) on the influence of Latvian language on German language in the Baltic is found at [Zum Einfluss des Lettischen auf das Deutsche im Baltikum](#), published in Bamberg, 2002.

Polanska cites liberally to **Mühlenbachs-Endzelins** and has the honor of apparently being the only linguist online to do so. Her section on specific German borrowings from Latvian with etymologies -- at pages 195 through 321 -- is of particular value.

Perhaps she represents the wave of the future.

Hittite, Luvian (Luwian) and Indo-European⁵

Latvian and Lithuanian are the most archaic still spoken Indo-European tongues. A comparison of Latvian with extinct Hieroglyphic Hittite (now Hieroglyphic Luvian) case forms for the word "water" thus shows great similarity. The Hittite terms are from Heinz Kronasser, [Etymologie der hethitischen Sprache](#), Otto Harrassowitz, Wiesbaden, 1966).

Case form for the word "water"	Hieroglyphic Hittite (now called Luvian, viz. Luwian) ca. 1500 B.C.	Modern Latvian language "water" word comparable
Nominative	ú-i-da-ar	ū-de nis (ūdenis , ūdens)
Genitive	ú-wi-te-na-es	ū-de-na (s) (ūdena , ūdenas)
Dative / Locative	ú-i-ten-ni	ū-de-nī (ūdenī)
	ú-i-te-na-as	ū-de-ņo-s (ūdenos)
	ú-e-te-na	ū-de-ņa (ūdena)
Ablative	ú-i-te-na-za ú-e-ti-na-an-za	ū-de-nai-ns (ūdenains)
Instrumental	ú-i-te-ni-it	ū-de-nī-t(dim.) (ūdenīt)

(links are to online pages that as of the date of this writing actually used that word form)

[Hieroglyphic Luvian \(viz. Luwian\)](#) is the most ancient **written** Indo-European language - dated back to at least 1500 B.C. Although separated by 3500 years or more, the case forms are nearly identical to Latvian. Scholars currently write "Luvian" viz. "Luwian" but the correct transliteration is likely something like Livonian or Lutvian, or even Latvian. [Kronasser](#) obviously did not know Latvian and **never** mentioned it in his book. This ignorance of Baltic terms continues unabated in many current mainstream linguistic publications, much to the detriment of their conclusions.

⁵ Adapted from [LexiLine.com](#) as written many years ago by this author.

Pharaonic Egyptian Hieroglyphs and Indo-European

As will become clear in the course of reading this book, there is a substantial, thus far largely unrecognized Indo-European element or substratum in the Pharaonic Egyptian hieroglyphs, especially in the Old Kingdom sources.⁶

When [Latvian](#) or Lithuanian terms are used for comparison because of their archaic Indo-European nature, this does not mean the oldest Pharaohs were from the Baltic, but it does mean that there is a common lexical foundation that was shared by some elements of culture at some ancient time.

A good example here is the bent [throw stick hieroglyph](#) which means both "throw" and "foreigner" in Pharaonic Egyptian. Where is the connection between those concepts? The hieroglyph is described in the [Wikipedia](#) as follows:

"From the earliest [Predynastic Ancient Egypt](#) upon the cosmetic palettes, the throwing stick was used to refer to foreigners, or to foreign territory. This use persisted for three millennia till the end of Ancient Egypt and the use of hieroglyphs. [Link to Libyan Palette added]

In the Ancient Egyptian language however, the main use of the throwing stick is a [determinative](#) [classifier], first for foreign territory, but also for actions involved with 'defeating', submission, or the unfortunate." [added]

⁶ See Rainer Hannig, [Ägyptisches Wörterbuch I: Alter Reich und Erste Zwischenzeit](#), Hannig Lexica 4, Kulturgeschichte der Antiken Welt, Band 98, Verlag Philipp von Zabern, Mainz am Rhein, Germany.

32 ● *𐌵 Andis 𐌹*𐌶 𐌸*𐌵𐌹𐌺* Kaulins

The words for "throw" and "foreigner" or "stranger" in Latvian are virtually same-sounding ~ what the linguists call "homophonic" words. In Latvian we find a "throw stick" could easily stand as a symbol for either of these two ideas:

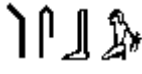
[sviest](#) viz. [sviež](#) means "throw"


[svešs](#) means "stranger, foreigner"

The connecting idea between throw and foreigner is surely "separate" viz. "separation. We see this in "thrown" viz. "churned" milk, i.e. butter, called [sviests](#) in Latvian.

A "stick" in Latvian via p//v shift is a [spiekis](#) "stick".

Hence, it is not surprising in the Old Kingdom sources to find the throw stick hieroglyph in the combination SBJ.

[Hannig](#) translates the foreigner hieroglyphs  as "rebel" and gives the reading **sbj** "enemy act". This has its comparable in Latvian [spiest](#) "force, pressure, catch".

The Egyptologist Budge has other terms for foreigner with the throw stick as a determinative. This one,  for example, which Budge reads "**aān (?)**" should be read correctly as in Latvian "[āriene](#)", i.e. "from the outside, outsider" (surely cognate with modern English "**alien**"), but of course that is not the word for the throw stick itself.

We do not expect Egyptologists or linguists to accept these comparisons offhand, but they should be a wake-up call.

The Author and his Significant Other
at Heidelberg Castle, Setting for [The Student Prince](#)



Listen at YouTube to [Gaudeamus Igitur](#) from the Student Prince by Mario Lanza to obtain the spirit of this book: <http://www.youtube.com/watch?v=Qvrzi-J7ZKM>.

Ancient Signs & the Origins of Writing

by Andis Kaulins⁷

Writing was a technological quantum leap for humanity without which our modern world would not be possible. The first writing systems of *Western Civilization* surfaced in Aegean **Crete**, Mycenaean **Greece**, Mediterranean **Cyprus**, and **Anatolia** in Asia Minor in the second millennium B.C. This publication suggests that **ancient signs** from early writing systems such as *Sumerian* and *Elamite* in the Ancient Near East, as also the *Pharaonic Hieroglyphs* of Egypt, originated at one source and were then spread by ancient seafarers and merchants as well as by intermarriage of royal families ~ who in ancient eras ruled their peoples in the Mediterranean, Aegean and Near East regions.

⁷ [J.D. \(Doctor of Jurisprudence\) Stanford University Law School.](#) Former Lecturer in Anglo-American Law, Legal Research and Legal Writing, [FFA, University of Trier Law School.](#) Co-author: [The Langenscheidt Routledge German-English English-German Dictionary of Business, Commerce and Finance \(4th ed. 2011\).](#) Author: [The Phaistos Disc: Hieroglyphic Greek with Euclidean Dimensions](#) (Darmstadt, 1980); [The Phaistos Disc: An Ancient Enigma Solved: Two Corroborative Old Elamite Scripts](#), *International Conference on the Phaistos Disk*, London, Society of Antiquaries, Burlington House, October 31, 2008; [Stars Stones and Scholars: The Decipherment of the Megaliths](#), Trafford Publishing, 2003; [Zum Ursprung des Horus-Glaubens im vordynastischen Ägypten \(The Origin of the Cult of Horus in Predynastic Egypt\)](#), 2005; [Die Himmelsscheibe von Nebra: Beweisführung und Deutung \(The Sky Disk of Nebra: Evidence and Interpretation\)](#), 2005; [Das Tanum System - ein alteuropäisches Vermessungssystem? \(The Tanum System: Ancient Seafarers as Megalithic Surveyors of Europe and Africa\)](#), 2007.

Introduction to AnSignCon™, the Kaulins Ancient Sign Concordance

A. Communication History and the David W. Packard Minoan Linear A Legacy

The importance of the study of the origins of writing ~ a fascinating field in its own right ~ is often underestimated.

The ancient signs of written scripts manifest a communication technology not unlike that used by modern "high tech". It is not surprising, for example, that someone like **David W. Packard**, co-founder of computer giant Hewlett-Packard Co., wrote his college dissertation on [*Minoan Linear A*](#),⁸ an undeciphered written script of Crete.

Computer hardware and digital devices operate by means of software that is coded by signs which convert **human language information** into **machine language**. Ancient signs similarly converted **spoken language** into **written language** with the result that human communication expanded [exponentially](#). Literacy brought humanity into a richer world.

Indeed, modern communication ~ even at the simplest level ~ depends a great deal on written language literacy by everyone.

Just think of social networking services such as [Facebook](#), [Twitter](#) or [Google+](#). All depend on the written word.

⁸ David W. Packard, [*Minoan Linear A*](#), University of California Press in Berkeley, California, 1974.

The **written word** not only **communicates**, but also **permits recordation** of human expression *and* knowledge for posterity, whether this be on paper, on microfilm, or as CDs, DVDs, Blu-ray Discs or future technologies for the storage of digital materials. Written information is thereby communicated not only by letters and the written word in alphabetic writing, but also by logograms, such as Chinese characters, or by various combinations of numbers and symbols, such as [mathematical expressions](#).

Written signs and symbols permit the creation of special types of "languages" whose function far exceeds the limits set by audible human speech. Modern software programming languages are a good example of this phenomenon.

The discovery of script had far-reaching consequences for everyday human life on our planet, initiating massive cultural changes which no one could have foreseen in early eras. With the onset of [writing](#), mankind obtained a "history", that started about 3200 B.C. Today, without writing, the mass of humanity would still languish in ignorance, as it still does in some regions of the Earth marked by widespread illiteracy. For those who do learn to read and write, the written word can open up magic worlds of individual potential and a seemingly endless reservoir of human talents and abilities from which most of us on this planet Earth profit every day.

Whatever the origins of writing may be, we are all indebted to the men and women who invented, introduced and dispersed this new technology to the world. These were great inventors indeed, and we should all know more about them.

B. Michael Ventris, John Chadwick and the Decipherment of Minoan Linear B Script as Mycenaean Greek

The decipherment of ancient scripts has been made largely by so-called "amateurs".⁹ [Georg Friedrich Grotefend](#), the decipherer of cuneiform writing, was a high school teacher in [Göttingen](#), Germany. [Johan David Åkerblad](#), a Swedish diplomat, [Thomas Young](#), an English polymath, and [Jean-François Champollion](#), a French historian at [Grenoble](#), all played a role in the chain of decipherment of the Egyptian hieroglyphs. The controversial [Diego de Landa](#) was the Spanish Bishop of Yucatan when he produced an imperfect Maya alphabet. The true decipherer of Maya glyphs (he had some [predecessors](#)) was [Yuri V. Knorozov](#), a Russian ethnographer, whose work was ignored for 40 years by Western scholars, as related by [Michael D. Coe](#), an anthropologist at [Yale](#), in [Breaking the Maya Code](#).¹⁰

It is thus no real surprise that [Michael Ventris](#), who deciphered Minoan Linear B script as Mycenaean Greek, was an [architect](#), assisted later by [John Chadwick](#),¹¹ a Greek philologist at Cambridge University. Their work, and that of others, such as [Alice Kober](#), revealed some lost clues to the origins of writing in Western Civilization. [Andrew Robinson](#), citing to [Georges Dumézil](#), dubbed the work of Ventris a great "[intellectual triumph](#)" in decipherment history.

⁹ "Amateur" is a misnomer since no "decipherment professionals" exist, except in the military. Archaeologists are not trained decipherers.

¹⁰ Michael D. Coe, [Breaking the Maya Code](#), 3rd ed., 2012.

¹¹ Michael Ventris & John Chadwick, [Documents in Mycenaean Greek](#), Volume I, 1956 (1st ed.), corrected 1959; Volume II, 1973 (2nd ed.).

The importance of the Linear B script decipherment is acknowledged by nearly all serious scholars. Therefore, although decipherment improvements in Linear B and Mycenaean Greek are suggested subsequently in the course of this publication, those suggestions take nothing away from the genius of the original decipherment work by Ventris. Whatever is done always builds on the prior works of others.

C. The Syllables for "L" and "R" Phonemes in Mycenaean Greek Linear B Script

The new and original *Ancient Sign Concordance (AnSignCon™)* presented subsequently in this publication contains numerous insights for understanding the origins of writing and ancient syllabic signs. Some insights, e.g., require corrections to Linear B syllabic identifications.

As the analysis will show, for example, **Linear B script had both an /R/ and an /L/ phoneme and also had R-based and L-based syllabic signs for those particular phonemes.** Signs in Minoan Linear B language for L-based syllables are currently negated in Linear B by [classical philology](#), but this unfortunate view does not bear up to critical scrutiny.

R-based syllables are presently applied erroneously in Linear B to words **clearly containing the /L/ phoneme in both modern and ancient Greek language** ~ as if L-based signs had not existed in Minoan days. That is absurd. In Linear B, a few well-known examples can be cited as follows:

- the currently erroneous transcription QA-SI-RE-U is nevertheless transliterated as *βασιλεύς*
- the currently erroneous transcription A-PI-QO-RO is nevertheless transliterated as *αμφίπολοι*, and
- the currently erroneous transcription QO-U-KO-RO is nevertheless transliterated as *βουκόλοι*.

The syllabic grid of Ventris and Chadwick does not include L-based syllabic values and is thus erroneous on that score. The missing L-based syllables and signs are identified in the syllabic grid of the sign concordance in this publication.

D. Multiple Sources are used to determine the Syllabic Value and Conceptual Origin of the Syllabic Signs

Ventris made a syllabic grid applicable only to Linear B, while the syllabic grid presented here covers **eight different sources**, all in one symbiotic syllabic grid: 1) the **Cypriot Syllabary**, 2) **Linear B**, 3) the **Phaistos Disk**, 4) the **Axe of Arkalochori**, 5) two **Old Elamite scripts**, 6) **Luvian Syllabograms** (*Luwian, Hieroglyphic Hittite*), 7) **Sumerian archaic signs**, and 8) **Pharaonic Egyptian hieroglyphs**. When this work began, only five sources were intended – the last were added as the concordance expanded in scope and as unexpected similarities in signs and their syllabic values emerged. **These multiple scripts produce a *symbiotic syllabic grid system with countervailing checks and balances***, whereby these eight (8!) sources and their syllabic signs provide internal symbiotic comparative evidence for the correctness of the "*Kaulins*" *Ancient Sign Concordance*.








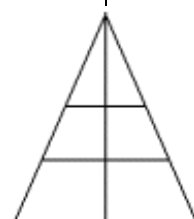

E. Structure of the Syllabic Grid of the Kaulins Ancient Sign Concordance (AnSignCon™)

The Syllabic Grid of the *Ancient Sign Concordance (AnSignCon™)* has a table format of **seven columns** to provide the greatest amount of information in the smallest possible page space. A sample is shown on the next page.

1. The **first column** contains the comparable *Sumerian* archaic signs together with the syllabic reading. There is often great and unexpected agreement of Sumerian signs and their syllabic values (some of which we dispute) with other syllabic scripts on the grid.
2. The **second column** gives comparable signs in *Pharaonic Egyptian* hieroglyphs – lesser agreement is found there, but a common origin is still clear.
3. The **third column** gives the comparable signs in *Old Elamite* (in our decipherment), though the number of these signs is not yet full. A common origin is clear.
4. The **fourth column** gives the comparable signs in *Luvian Hieroglyphs (Luwian, formerly Hieroglyphic Hittite)*. Also here, a common origin is clear.
5. The **fifth column** gives the comparable signs on the *Phaistos Disk*, which agree greatly with Linear B signs and the script of the Cypriot Syllabary. Signs from the *Axe of Arkalochori* are also included in this column.
6. The **sixth column** gives the comparable signs in *Linear B script*, which agree greatly with the Phaistos Disc signs and the script of the Cypriot Syllabary.
7. The **seventh column** gives the comparable signs in the *Cypriot Syllabary*, which agree greatly with the Phaistos Disc signs and the script of Linear B.

Please note that the design of the grid table is a bit tight since it was originally planned for only five columns, not including Luwian logograms, Sumerian signs or Pharaonic Egyptian hieroglyphs, which were added in the course of research. Nevertheless, this format permits a very quick and effective "at a glance" presentation. The reader can easily see the signs and their syllabic values, including analysis about the words and the objects from which the syllables arguably originated, as found presented in those columns and further in the full text of this book. Below as an example of the syllabic grid is the grid column arrangement for the syllable SI.

Syllabic Grid Figure 38 -- the Syllable SI
The Syllable SI in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (41)	
ZUBUD Jaritz #962 "fish" <hr/> Compare Latvian zivīte dim. of zivs Lithuanian žuvis "fish" Latvian žāvēt "to dry"	SICHNT "Food rack prop" O30 , Gardiner <hr/> Santorini (Thera) <hr/> For a Minoan fisherman with "mackerel or tuna" see Wikipedia image from Akrotiri.	SI A rack for drying fish. <hr/> For a photo of a fish drying rack in the modern day see http://blog.tra velpod.com/t ravel- photo/margre et98/112465 58734/fish- drying- rack.jpg/tpod .html	SI, SÁ fish hook <hr/> Usage for À e.g. Latvian āķis „hook” <hr/> 	SI "SI" is for fish. <hr/> See also Sparavigna and Harappa	SI A rack for drying or smoking fish. <hr/> The illustration to the left is of a fish drying rack in a shape still used today.	SI A propped tent <hr/> Phoenician: Semk (samekh or simketh)  Hebrew samekh means "support" while samak is "fish" in Arabic

F. Who Discovered Ancient Greek Letters as Signs? and was there an Elamite Connection to Minoan Crete?

The syllabic grid includes signs from two Old Elamite scripts which have been deciphered by this author as being Ancient Greek.¹² How could there be a connection of Crete to far distant [Elam](#), in today's Iran? See the map on page 53.

The technology of *stamping* letters into clay – as on the Phaistos Disk – is first found archaeologically in Elam. Was this a case of technology transfer via seafaring merchants? **There is in fact ancient ~ legendary ~ source material about the discovery of ancient Greek letters** that points clearly to technology transfer from one or more ancient locations. [Gaius Julius Hyginus](#) (ca. 64 BC to 17 AD) passed on many Greek tales in his *Fabulae*, of which **Tale Number 277** deals with "Ancient Inventors". Hyginus wrote [as follows](#):

"CCLXXVII. **FIRST INVENTORS.** The Parcae, Clotho, Lachesis, and Atropos invented seven Greek letters - A B H T I Y. Others say that Mercury invented them from the flight of cranes, which, when they fly, form letters. **Palamedes**, too, son of Nauplius, invented eleven letters; Simonides, too, invented four letters - Ó E Z PH; Epicharmus of Sicily, two - P and PS. The Greek letters Mercury is said to have brought to Egypt, and from Egypt Cadmus took them to Greece. Cadmus in exile from Arcadia, took them to Italy, and his mother Carmenta changed them to Latin to the number of 15. Apollo on the lyre added the rest..." [emphasis added]

¹² Andis Kaulins, [The Phaistos Disc: An Ancient Enigma Solved: Two corroborative Old Elamite scripts can be deciphered using the Greek syllabic values obtained for the Phaistos Disc by A. Kaulins in 1980, International Conference on the Phaistos Disc, London, Society of Antiquaries, Burlington House, October 31, 2008.](#)

Sumerian has no O, PH or PS while Luvian allegedly had neither O, E, PH or PS. Those are the letters that Hyginus tells us were added by the Greeks to the Greek alphabet. Hyginus confirms that other Greek letters *were indeed taken from several older and more ancient sources.*

Map of Locations in the Era of Minoan Crete¹³



One of the legendary inventors of Greek letters is Palamedes, the son of Nauplius and Clymene (her name means "Asia"), who was the daughter of Catreus. Catreus of Crete was thus the grandfather of Palamedes, who later allegedly invented Greek letters. Catreus was the king of Crete and the son of the first legendary king of Crete, Minos. Catreus was also the grandfather of Menelaus, the Greek husband of Helen of Troy. As one can see, many legends focus on this era.

¹³ The above map by Andis Kaulins under a [Creative Commons Attribution-Share Alike 2.5 Generic license](https://creativecommons.org/licenses/by-sa/4.0/) is based on a map of Crete at http://en.wikipedia.org/wiki/File:Map_Minoan_Crete-en.svg by Wikimedia user [Bibi Saint-Pol](#) and an archaeological map of Minoan site locations on the island of Crete at Stanford University online at <http://metamedia.stanford.edu/imagebin/minoan%20crete%20map.1.PG>. Symbols, fonts and labels were changed from the original maps for a number of unavoidable reasons, including printing requirements.

Greek legend has an oracle foretelling *Catreus's* death by the hand of one of his children. His son *Althaemenes* and daughter *Apemosyne* thus fled to Rhodes. His daughters *Aerope* and *Clymene* were given to a merchant mariner, *Nauplius*, to be married off in foreign lands. *Aerope* married *Pleisthenes* viz. *Atreus* in Mycenae while *Nauplius* took *Clymene* for himself and sailed off into the sunset. Whereto?

Clymene in ancient Greek sources is also called *Asia*, which some say is how the continent Asia got its name. Did Clymene have an Asian destiny? *Herodotus* wondered at women's names for Asia and Europe (*Europa* of *Tyre*). Is the answer "royal marriage", by which daughters of the Greek king so married abroad gave their names to regions?

It is Clymene's son *Palamedes* who subsequently surfaces (from a thus far unknown location) as *the greatest Greek inventor of antiquity*. He allegedly invented eleven of the Greek letters, counting, currency, weights and measures, military ranks, dice, pessi (a type of chess), and made improvements in winemaking, *an ancient art said to originate in Shiraz, Iran – a city mentioned on Elamite clay tablets*:¹⁴

The earliest reference to the city is on Elamite clay tablets dated to 2000 BCE.... a city called *Tiraziš*.... This name became Old Persian /širājiš/ ... modern Persian ... *Shirāz*. The name Shiraz also appears on clay sealings found at a 2nd century CE Sassanid ruin, east of the city.... Shiraz is most likely more than 4,000 years old.... The oldest sample of wine in the world, dating to approximately 7,000 years ago, was discovered on clay jars recovered outside of Shiraz.

¹⁴ [Shiraz](#), Wikipedia.

So much invention by Palamedes would be amazing ~ and generally unbelievable ~ but the accounts of his invention could be indirectly true in the ancient era if those inventions were obtained by technology transfer from a foreign land.

The Roman [Mercury](#) viz. Greek [Hermes](#) was "the bringer of letters", and Mercury also meant "merchant". These inventions were thus arguably brought to Greece from a distant land via travelling merchants, *a conclusion which could be seen as corroborated by the legendary story about King Catreus of Crete, his daughter Clymene and the travelling foreign merchant Nauplius.*

This foreign land was arguably [Elam](#). **Elam is the land in which letters were first stamped onto clay**, just as on the Phaistos Disk, long before the [Minoans of Crete](#). An existing technology for writing was arguably imported to ancient Crete from an ancient culture of the [Ancient Near East](#).

G. Sumerian Archaic Signs and Egyptian Hieroglyphs

The examination of comparable Sumerian archaic signs began with the discovery of the Elamite connection to Crete. The reasoning was that if Linear B signs were related to Old Elamite script, then an [ancient relationship to neighboring Sumerian signs](#) in the Ancient Near East was also possible.

Furthermore, an examination of the Pharaonic Egyptian hieroglyphs as signs related to origin of script also seemed logical given the ancient legend that Cadmus brought Greek letters to Greece via Egypt.

Our research profited greatly from the availability of online resources posted by **Patrick C. Ryan**¹⁵ at [Sumerian Archaic Sign Table](#), [Sumerian Sign Value Register](#) and [Proto-Language Monosyllables with Correspondent Sumerian and Egyptian Signs](#). **Ryan** cites Sumerian signs to their **Jaritz** number, as we do on our syllabic grid as well. [Ryan wrote](#) about his online Sumerian archaic signs as follows:

"All available readings for Sumerian signs in **Kurt Jaritz'** *Schriftarchäologie der altmesopotamischen Kultur* (1) (1967) have been listed in the Sumerian Sign Value Register.... With the sign numbers from that register, Sumerian archaic sign forms where available [are] courtesy of **Dr. Antonio Reguera Feo**.... If the sign is composed of two or more signs, the numbers for the component signs will appear under the table number; and, if the component signs are available individually, will be highlighted. If the later cuneiform sign is derived from several different archaic signs, each archaic sign will be shown, if available, by pressing on the highlighted letters behind the sign number." [emphasis added]

Other resources that we used for Sumerian included the [ePSD Sumerian Glossary](#), John A. Halloran's [Sumerian Lexicon, Version 3.0.](#) (also as a .pdf) and the [ETCSL \(Electronic Text Corpus of Sumerian Literature\)](#).

¹⁵ It was on Patrick C. Ryan's suggestion that the author of the present work initially started the online group ACE (Ancient Cultures Explored) in 1997 to replace the defunct ANE List at the University of Chicago, which had no affiliation to the subsequent ACE list. ACE changed in 1999 to [LexiLine](#), which still exists today with over 500 members, primarily as a newsletter on the History of Civilization. See: <http://tech.groups.yahoo.com/group/LexiLine/message/595>
<http://tech.groups.yahoo.com/group/LexiLine/message/1403>
http://lexiline.blogspot.com/2002_03_01_archive.html.

Resources used for Pharaonic Egyptian hieroglyphs were primarily as follows:

- Rainer Hannig, [Ägyptisches Wörterbuch I: Alter Reich und Erste Zwischenzeit](#), Hannig Lexica 4, Kulturgeschichte der Antiken Welt, Band 98, Verlag Philipp von Zabern, Mainz am Rhein, Germany.
- [Jean-François Champollion](#), [Précis du système hiéroglyphique](#)", Paris, France, 1824.
- Christiane Ziegler, "Das Geheimnis ist Gelüftet", pp. 81-109, [Pharaonen-Dämmerung](#), DNA, Strasbourg, originally published in French as "Mémoires d'Égypte", Strasbourg, France.
- Mark Collier and Bill Manley, [How to Read Egyptian Hieroglyphs](#), British Museum Press, London, England, 1998.
- [Maria Carmela Betrò](#), [Heilige Zeichen](#), Gustav Lübbe Verlag, Bergisch Gladbach, Germany, 1996 (originally published in Italian in 1995 as [Geroglifici](#). 580 Segni per Capire l'Antico Egitto, Arnoldo Mondadori Editore S.p.A., Mailand, and now also available in English as "[Hieroglyphics: The Writing of Ancient Egypt](#)", Abbeville Press, New York, 1996.
- Gabriele Wenzel, [Hieroglyphen: Schreiben und lesen wie die Pharaonen](#), Nymphenburger - F.A. Herbig, Munich, 2001.
- Andis Kaulins, *Writing Origins: Pharaohs, Moderns, Dyslexics*, available online at the website Lexiline.com at <http://www.lexiline.com/lexiline/lexi40.htm>.

The Wikipedia also has numerous useful pages on Egyptian hieroglyphs, e.g. [Gardiner's Sign List](#), the [A-L list](#) and [M-Z list](#). Other resources are cited and linked when used.

H. Rendering of Signs in the Cypriot Syllabary, Linear B, the Phaistos Disc, Egyptian hieroglyphs, Ancient Greek

The [Aegean Font](#) was used to render Cypriot Syllabary, Linear B and Phaistos Disc signs. Many Egyptian hieroglyphs are rendered using the font [Aegyptus](#), while [Charis SIL](#) was used to obtain linguistically required phonetic letters not otherwise reproducible via normal fonts. The Aegean and Aegyptus fonts are both from [George Douros](#), Kolokotroni 3, Larissa 41223, Greece, provided free as *Unicode Fonts for Ancient Scripts*, Copyright © George Douros 2010. The Aegean and Aegyptus Fonts were implemented by copy and paste, using the [BabelMap Unicode Character Map](#), Version 6.0.0.2 for Windows, Copyright © Andrew West 2002-2010.

[Palaeolexicon](#) ~ a word study tool of ancient languages ~ was used as a source for words in the Cypriot Syllabary and Linear B writing ~ as found in the [Cypriot Syllabic Word Index](#) and the [Linear B Word Index](#).

Ancient Greek terms were taken primarily from the online [Perseus Digital Library](#), Gregory R. Crane, Editor-in-Chief, Tufts University, which incorporates Henry George Liddell & Robert Scott, *A Greek-English Lexicon*, revised and augmented by Sir Henry Stuart Jones & Roderick McKenzie. Oxford. Clarendon Press. 1940.

We also used [Lexilogos](#), the *Ancient Greek Dictionary* online by Xavier Negre, which searches the above-cited Perseus database as well as Woodhouse's *English-Greek Dictionary*, located at the University of Chicago Library.

I. Hieroglyphic Luvian (also spelled Luwian, formerly called Hieroglyphic Hittite) Syllabograms and Logograms

Ancient Greek legend relates that Sarpedon, brother of King Minos of Crete, was exiled to [Lycia](#) in Anatolia, where the Luvian (Luwian) and Lycian writing systems surface:

"The eponymous inhabitants of Lycia, the Lycians, spoke an [Indo-European](#) language, belonging to its [Anatolian](#) branch. The closest language to the [Lycian language](#) is the [Luwian](#) language ... spoken in Anatolia during the 2nd and early 1st millennium BC; it may even be its direct ancestor.... [I]n [Greek mythology](#), the Lycian kingdom was said to have been ruled by ... [Sarpedon](#), a [Cretan](#) exile and brother of the king [Minos](#) ... **this mythical story implies a Cretan connection to the settlement of Asia Minor.** " [emphasis added]

Hieroglyphic Luvian inscriptions are found online at [Mnamon](#) and [Crystal Links](#) (a Stele from Carchemish --called [Europus](#) (!) by the Greeks), now at the [Ashmolean Museum, Oxford](#). See also Plate T. 92 in [Die Welt der Hethiter](#) by Dr. Margarete Riemschneider, *Große Kulturen der Frühzeit*, herausg. von Prof. Dr. Helmuth T. Bossert, Gustav Klipper Verlag, Stuttgart, 1954.

[Luvian is said to be an Indo-European language](#). Many Luvian syllabic signs were included in the **syllabic grid**, adding substantial lexical power to the *Sign Concordance* as such.

As research progressed, the conclusion became likely that **ALL the syllabic sign systems included in the grid had a common origin**. Many of the similar signs not only had common syllabic values to begin with, but also had seemingly retained the same or similar syllabic values in their later evolvment -- either in their original meaning or as incorporated in related sign forms.

50 ● *İ| Andis †*∩≤*İ|† Kaulins

Some Luvian sign values are not accepted by all Luvian scholars and [errors have been acknowledged in previous scholarship](#). Syllabic values assigned to Luvian syllabograms and logograms were taken from the following sources:

- Gunter Anders, the [LUHWITTA and LUHWITTB ttf fonts](#), *Luwisch-Hethitische Hieroglyphen Fonts für Macintosh und Windows*, [Hethitologie Portal Mainz](#) ([Hittite Portal Mainz](#)).
- Annick Payne, [Hieroglyphic Luwian: An Introduction with Original Texts](#), 2nd rev. ed., Harrassowitz, Wiesbaden, 2010.
- [Luwian Hieroglyphics](#) at [Nostratic.ru](#).
- Lawrence Lo, [Ancient Scripts : Luwian](#).
- H. Craig Melchert, [The Luwians](#), Brill, Leiden/Boston, 2003, and *Cuneiform Luwian Lexicon*, at [LUVLEX.pdf](#), *Lexica Anatolica*, Volume 2, Chapel Hill, 1993.
- John D. Hawkins (author) & Halet Çambel (editor), **Corpus of Hieroglyphic Luwian Inscriptions: Inscriptions of the Iron Age, Volume 1** (*Untersuchungen zur Indogermanischen Sprach- und Kulturwissenschaft*), Berlin, NY, [Walter de Gruyter](#), 1999.
- Halet Çambel (author), [Corpus of Hieroglyphic Luwian Inscriptions: Karatepe-Aslantas, Volume 2](#), Berlin & N. Y., [Walter de Gruyter](#), 1999.
- [Objects in the Collections of the Department of Antiquities, Ashmolean Museum of Art and Archaeology, University of Oxford](#), Oxford, England, UK.
- Harald Haarmann, [Universalgeschichte der Schrift](#), Campus Verlag, Frankfurt/New York, 2nd ed. 1991, Sonderausgabe 1998 Parkland Verlag, Köln (Cologne).

J. Technology Transfer and the Spread of Writing by Ancient Seafarers: The Uluburun (Ulu Burun) Shipwreck

The extent of ancient seafaring (and the resulting spread of writing) is evidenced by the [discovery](#) of the [Uluburun Shipwreck](#) in 1982 (explored starting 1984) off the coast of [Ulu Burun](#), Turkey by [Bodrum](#) sponge diver Mehmed Çakir. The shipwreck was discovered in the [Mediterranean Sea](#) at a depth of 50 meters ca. 6 miles southeast of [Kaş, Turkey](#). The location of Ulu Burun is shown below (see also an [online map](#) of The Ellis School), together with locations of ancient scripts spread by seafaring merchants. For Sumerian and Elamite cultures, see the map on the page after next.



Mediterranean map in the era of the spread of writing. Look how closely congregated are Mycenaean Greek, Linear B and the Phaistos Disk, the Cypriot Syllabary, Luvian Hittite, & Egyptian Hieroglyphs.

As written *inter alia* in the periodical [Nature](#) (*International weekly journal of science*), January 25, 2012, by Jo Marchant in [Underwater archaeology: Hunt for the ancient mariner](#):

"A Bronze Age wreck called Ulu Burun shows how the remains of a single ship can transform archaeologists' understanding of an era.... [A]rtefacts on this one vessel came from at least 11 different cultures¹ – from a gold scarab bearing the name of the Egyptian queen Nefertiti to copper from Cyprus and tin from central Asia.... The wreck provided tangible evidence of an astonishing array of contacts and trade between the different cultures of the Mediterranean and Near East in the late Bronze Age. The Ulu Burun ship sailed at around the time that Tutankhamun ruled Egypt...."

The Uluburun Shipwreck thus provides evidence of ancient seafaring in the 2nd millennium B.C. and also casts possible light on Ancient Egypt in that era. As Marchant writes, a gold scarab of Nefertiti [formerly Nofretete] showing signs of wear was found, and surely worn by the Queen herself. Why was it on the shipwreck? This author has a theory about that.

The gold scarab surely had belonged to the Queen of Egypt. No one else in ancient days could have dared to wear it and no simple seafaring trader would have come into possession of such a valuable piece of jewelry in the Queen's own era and lived long to tell about it. Rather, in what appears to us to be the only likely explanation, it was surely sent to Suppiluliuma I, King of the Hittites, via an ambassador of the Egyptians, as proof of Nefertiti's true intentions in the Amarna Letters. There she asked for a son of Suppiluliuma to be sent to her as a husband for the reason that her husband had died, and because she herself had no sons left.

Ancient Seafaring Trade Routes

Ancient Seafaring Trade Routes Match Locations for the Spread of Writing: Minoan Crete, Mycenaean Greece, Mediterranean Cyprus, Pharaonic Egypt, Luvian (Luwian) Anatolia, Elam, Sumer, & Vinča Culture (signs as symbols)



This is a map clip from the [Wikimedia CIA World Factbook](https://www.cia.gov/library/publications/the-world-factbook) physical world map. Yellow circles, their black labels and red lines were added by Andis Kaulins.

King Suppiluliuma had been skeptical of the Queen's request and had sent a chamberlain to Egypt to bring him "information worthy of belief" that her request was legitimate,¹⁶ with the result that Egypt sent an ambassador, *Lord Hani* (possibly from [Ras Ibn Hani](#), near [Ugarit](#) in those days), who convinced the King to send a son, [Zannanza](#).

The gold scarab found on the Uluburun Shipwreck is strong evidence that Nefertiti wrote the husband request, and not, as some have alleged, Ankhesenamun (unless she be one and the same), the alleged widow of Tutankhamun.¹⁷ The gold scarab would have been part of the proof required by Suppiluliuma. The ship arguably was loaded with royal wedding gifts to accompany the son, Zannanza, to Egypt.

The historical problem is that the designated son, [Zannanza](#), died before reaching Egypt. One can now speculate that the Uluburun Shipwreck was arguably his destiny by drowning at sea. The ancient record indicates that his death was known first to the Egyptians and then communicated to the Hittites, saying that he was not murdered, but also not detailing the cause of his passing and without producing a body.

¹⁶ [The Deeds of Suppiluliuma as Told by His Son, Mursili II](#) (translation), [Journal of Cuneiform Studies](#) (source), X (1956), pp. 41-68, 75-98, 107-130, edited by Hans Gustav Güterbock. Christiane DesRoches-Noblecourt has a newer transliteration in [Tutankhamen](#), as found reproduced at André Dollinger's [reshafim.org Pharaonic Egypt](#).

¹⁷ In our study of Egyptian historical annals, the evidence indicates that Tutankhamun was never pharaoh and therefore is also not listed in the king lists of ancient Egypt, a fact puzzlingly ignored by Egyptology. Rather [he was the royal son of the pharaoh Akhenaten](#) (formerly *Echnaton*) and the heir apparent, who died before taking office.

What evidence can be found for the fate of Zannanza? Many of the persons in the Amarna Letters **are designated by their positions**, rather than by any apparent given name, even the Egyptian Queen. Could this also be true for Zannanza? Could Zannanza be an epithet to describe the marriage "position" of the son rather than a real given name?

Irene E. Riegner¹⁸ writes about the Akkadian term *zanānu* and notes that a derivative term *Zununnē* means "marriage gifts". It is likely that Zannanza was a name reference to a son as "the marriage gift" as it were for the Egyptian Queen, together with the royally laden ship. Indeed, the [huge variety and wealth of wares on board the Uluburun shipwreck](#) point to a royal source. Michael Rice Jones writes:¹⁹

"The unusually rich cargo of the ship indicates that it was probably part of a royal consignment from one ruler, possibly Syro-Palestinian, to another, perhaps located in the Aegean."

Jones is likely right in assigning the cargo to a royal source. Normal Mediterranean traders would not have had access to so much wealth at any one time, unless it was for a special reason. That reason may have been a royal marriage involving the two most powerful kingdoms of that ancient era.

¹⁸ Irene E. Riegner, [The vanishing Hebrew harlot: the adventures of the Hebrew stem ZNH](#), Peter Lang, 2009.

¹⁹ Michael Rice Jones, [Oxhide Ingots, Copper Production, and the Mediterranean Trade in Copper and Other Metals in the Bronze Age](#), A Thesis by Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of Master Of Arts, 2007.

What special relation did Nefertiti have to the Hittites? Why ask **them** for a husband to rule beside her? The answer in [our analysis of the hieroglyphs](#) of Nefertiti's name is that the name Nefertiti actually reads "Chetite" i.e. "Hittite", which explains the existence of the Amarna Letters to begin with. **She had relatives in Hittite lands.** Her name means "**Hittite Queen of Egypt**", a name misread by the Egyptologists.

We claim ~ as shown further on our syllabic grid ~ that [NFR as the windpipe symbol stands for a "windpipe" sound](#),²⁰ and not for the **word** NFR, meaning "windpipe". If we write "breath-A-R-D" in English, we would read that as HARD and not as "BREATHARD". If we write "*windpipe sound, T, T*", then Nefertiti is correctly read "**Che-tite**", i.e. "Hittite".

This in our **speculative** opinion could be equivalent to **Ahinoam** (Ahi-Noam, "daughter of Ahi") in the Bible. **Ahi**, today transcribed as [Ay](#), was the Egyptian "high priest", in our view a **Hittite**, who wrote the Egyptian side of the Amarna Letters (someone did). He could be the Biblical priest [Ahimaaz](#) "brother [father in law] of the Pharaoh", who was the [father of Ahinoam](#) [Nefertiti] in the Bible.

²⁰ The [1911 Encyclopaedia Britannica](#) writes that "[c]ontraction of the windpipe produces a sound similar to the Arabic ,ia, but weaker, which when followed by a vowel has the effect of a strong aspirate.... When voiced it becomes a mere colourer of the accompanying voice-murmur, or vowel, to which it imparts a deep timbre." As written at IsraelForum.com, in Hebrew - and the Hebrews **were** in Egypt - the windpipe is in fact a "["k"-type sound](#)": "[a]ccording to Klein, kaneh ??? has many meanings: stalk, reed, cane, beam of scales, shaft of lampstand, arm of lampstand, length of a reed, and in later Hebrew - windpipe."

Noam in Hebrew means "pleasant, gentle, sweet, kind, and tender". Nefertiti is translated similarly by the Egyptologists as "[the beautiful one](#)". [Ahinoam](#) is "[relative] of pleasantness". Accordingly, the given name of the Hittite Queen was Naomi "the pleasant one". Biblical scholars err in thinking that there are two Biblical Ahinoams, one [Ahinoam](#) as the wife of Saul and one [Ahinoam of Jezreel](#) ([Israel](#)) as the wife of David. Obviously, these are one and the same person, as David took the wife of Saul (Nefertiti) into his court upon Saul's death and the death of all of Saul's [and Nefertiti's] sons.²¹

²¹ [Ahinoam](#), Wikipedia, 1 February 2012, cites to [Jon D. Levenson](#), *1 Samuel 25 as Literature and History*, [CBQ](#) 40 [1978] 27:

"[Ahinoam](#) (Hebrew: **אחינועם**) is a [Hebrew](#) name literally meaning *brother of pleasantness*, thus meaning *pleasant*. There are two references in the [Bible](#) to people who bear that name:

- A daughter of [Ahimaaz](#), who became a wife of [Saul](#)^[1] and the mother of his four sons and two daughters.
- A woman from [Jezreel](#), who became [David](#)'s first wife^{[2][3]} after [Michal](#)^[4], and the mother of [Amnon](#).^[5]

Some scholars suggest that the two may be, in fact, one person. In [2 Samuel](#) 12:8, God tells David through the prophet [Nathan](#), "I gave your master's house to you, and your master's wives into your arms." [Jon Levenson](#) suggests that this implies David took Ahinoam from Saul.

Adherents of [source criticism](#) suggest that references to a woman called Ahinoam being Saul's wife belong to the account of the *republican source* of the Books of Samuel,^[2] while in the passages ascribed to the *monarchial source*,^[1] the only mention of a woman called Ahinoam is the description of her as a wife of David.

Dr. Cemal Pulak, an archaeological authority on the Uluburun Shipwreck, states that the dendrochronological evidence (tree rings), as provided by analysis of wood on the ship, [dates the Uluburun Shipwreck to the late 14th century B.C.](#)²², which was the end of the Amarna period.

The ship was built of Lebanese cedar and carried huge stone anchors unknown from shipwrecks in the Aegean, but which have been found in the Fertile Crescent and Cyprus. Likely is that the Uluburun shipwreck was a Phoenician ship. The [Phoenicians were known](#), "**for their spread of the alphabet.**"

This returns us to ancient signs and the origins of writing. The [artifacts](#) found on board the Uluburun Shipwreck **include the oldest writing-board set ever found** (a *dyptich*, two plates attached at a hinge). The Uluburun *dyptich* is evidence that writing implements were well known just a few hundred years after the Minoan period. Equally important for our study of ancient signs is that the shipwreck produced hundreds of large oxhide-shaped copper ingots and round copper buns, a good share of which are marked with symbols, presumably to mark the ingot origin, as is recorded in some ancient texts.²³ Some of those symbols are found as syllabic signs in the ancient writings of the region.²⁴

²² See Dr. Cemal Pulak, [Dendrochronological Dating of the Uluburun Ship, Institute of Nautical Archaeology, Bodrum, Turkey](#)

²³ See Michael Rice Jones, [Oxhide Ingots, Copper Production, and the Mediterranean Trade in Copper and Other Metals in the Bronze Age](#), A Thesis by Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of Master Of Arts, 2007.

²⁴ See Dr. Patricia Sibella, [Uluburun: The Copper Oxhide and Bun Ingots, Institute of Nautical Archaeology](#), Bodrum, Turkey.

THE KAULINS ANCIENT SIGN CONCORDANCE AnSignCon™

by Andis Kaulins

















A SYLLABIC GRID OF ANCIENT SIGNS

An Ancient Sign Concordance of:

- 1) Sumerian Archaic Signs, 2) Pharaonic Egyptian Hieroglyphs,
- 3) [Old Elamite Scripts](#) – as deciphered by Andis Kaulins,
- 4) Luvian viz. Luwian, 5) [Phaistos Disk](#) – as deciphered by Andis Kaulins,
- 6) [Linear B](#) – as deciphered by Michael Ventris and John Chadwick,
- and 7) the Cypriot Syllabary

Syllabic Grid Figure 1 -- the Syllable PA

The Syllable PA in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
Jaritz #893  or 					 (B03)	
B17, BIT, BIT3, BU7 "mat"	P "papyrus mat"	PA "head & neck"	PA "tongue"	PA "head"	PA "across"	PA "across"
Jaritz #118  Jaritz #005  "scraper"	 "house, roof over head"	Egyptian Demotic "papyrus mat" is the sign 	 "head & tongue" "talk"	 "head" on the Axe of Arkalochori	 (B16) "head & ears"	 "scraper, division"
PAR2, BAR PA2, BA	PR	P	PARI	PA	BA	PU

PA

Signs for the syllable **PA** represent the concept of "**over, above, across, on**". An Indo-European root (*pār-* not **per*) is possible in view of phonetically and conceptually comparable terms such as Latvian *piere* "forehead" and Latvian *pār* "**over, above, across, on**". The Egyptian hieroglyph for *pr* "house" compares to Indo-European, for example Latvian *pār* "**over, above**" as "a roof over one's head". The original papyrus mat (Betro, 1995) is later seen by Egyptologists as a stool, a view not substantiated by the equivalent demotic sign of three "**bars**". The "(a)cross bars" are similar to Linear B and the Cypriot Syllabary in the concept of lines "**across, over**". Terms for "friction" as being "on" or "across" something else are found in Indo-European e.g. Latvian as *berz-*, *birz-*, or *burz-* for various meanings of "rub, chafe, grate, scrub, friction, crease". To be "cross (with)", whence arguably **the Luvian tongue sign**, as e.g. Latvian *parāt*, *bar*, *bārt* ("scolds, to scold"), perhaps related to Latvian *balss* "voice" to which compare Sumerian [inim BALA](#) "talk".

In Linear B, sign B16 was originally assigned a value of PA2, correctly probably BA, but later changed in error by the linguists to QA. The first sign on the Axe of Arkalochori is the head figure and the entire word is correctly read as βασιλεύς, negating in Linear B the currently erroneous transcription **qa-si-re-u** which scholars nevertheless transliterate as βασιλεύς. The syllables should correctly be transcribed as **ba-si-leu-s**.

Note in Linear B signs that "**the vertical line**" as a "**holder**" in a sign need not be a part of the conceptual representation but may only "carry" the elements of meaning. For example, in B16 these are an abstract head with ears at the top of **the vertical line** which functions as a "holder" for the main "head" concept.

Note in the Cypriot Syllabary that "a **horizontal line**" at the bottom of a Cypriot sign represents "the ground", i.e. the earth, or in several special cases the "earth surface" as water.

Others have viewed the Linear B "head sign" to represent [Peleset](#), the people of Keftiu (Crete), but if a meaning other than "forehead" was intended, then perhaps more likely would be "warrior", i.e. [πολεμιστής](#), [πολεμίζω](#), Thracian "peltast" [πελταστής](#), later Greek [όπ\[ο\]λίτης](#), "hoplitēs". Both "people" and "warrior" remain doubtful interpretations for the sign.

The **Peleset** are listed in the [hieroglyphs of Egypt](#) among the [Sea Peoples](#), hieroglyphs as shown at the [Wikipedia](#). The erroneous current reading of those Egyptian [hieroglyphs](#) is *n3 h3t.w n p3 ym* (unpronounceable, as is common in Egyptology), allegedly meaning "Sea Peoples" or "People of Foreign Lands". The hieroglyphs are followed by a list of ethnic names.

The hieroglyphs below are currently read in Egyptology as:

n3 h3t.w n p3 ym [determinative]



A "corrected" reading of those same hieroglyphs gives terms strikingly similar to Ancient Greek. My corrected reading is:

An- thro- (e)po- n- y- my hydro (peir-as)
 (or, alternatively at the end) **naiya peir-aikos**

62 ● *ἰ Andis ἰ*ῥ ἰ*ἰ)† Kaulins

In Ancient Greek the terms written in hieroglyphs thus can be rendered as follows -- with transcription close to Ancient Greek:

[ἀνθρώπων](#) [ἑπωνυμια](#) ([Ναία](#), [νᾶμα](#), [ὔδωρ](#)) [πειραικός](#) ([πεῖρας](#))


which can be translated into English as:

"names of peoples of the border (proximate) countries beyond the limit (mouth) of the Nile."

[Note](#) that the **Nile** in [Ancient Egyptian](#) is **iteru** or **ἱ'pī** [compare the general Indo-European **hydro-** and also the Indo-European, e.g. Latvian **upe** "river"], viz. [Coptic piaro](#) (Sahidic) or **phiaro** (Bohairic).

The [Pharaonic hieroglyphs for "Mediterranean Sea"](#) are .

In my reading those hieroglyphs represent [ἄέξω](#) ([αὔξω](#)) [εὐρεῖα](#) i.e. *naiya peiras* viz. [ἄέξω](#) [εὐρεῖα](#) i.e. *nama (or) hydro peiras* meaning "great wide river limit" viz. "mouth of the Nile".










The Egyptian hieroglyph for the [Nile](#) is  (hydro) which is the same as Greek [ὔδωρ](#) "udro-, hydro, water"

viz. [νᾶμα](#) "nama" or *naiya* ([Ναίας](#)).

Nama in Greek means "[anything flowing, running water, stream, spring](#)". It could have the same N-based root as Greek [Νεῖλος](#) for "Nile" as in [ὔδος τὸ Νεῖλου](#), to which compare [Arabic](#): النيل, **an-nīl**, which together would give a meaning of "flowing water".


The N-based root for "water, something flowing" is retained in Indo-European, e.g. English [naval](#), *nautical* and *nymph* ([Ναίας](#)), Finnish *nevo* "sea", and Russian *Neva*.

Syllabic Grid Figure 2 -- the Syllable PE
 The Syllable PE in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
 Jaritz #684			 viz. 		 (B72)	 PE not PI
PIR "heat", a brazier	-- καίω brazier	PE "4-legged brazier"	PI brazier, oil lamp	PE torch πῦρ "fire"	PE brazier πῦρ "fire"	PI brazier πῦρ "fire"
 Jaritz #453 oil vessel on a brazier	KH 4-legs and flame, Q7 <i>in Gardiner</i>	The Elamite sign clearly shows a brazier.	Ident. of Luvian PI variant as Italian DARE "give" is wrong	<u>Some</u> turn sign and say "ox foot", Greek πέζος	Brazier or cooking utensil or hearth	Casserole in a brazier, variant of Sumerian sign and Linear B
BAR₄	---	---	---	but that is unlikely	---	---

For an Ancient Greek [casserole and brazier](#) see the [Wikipedia](#) in an image attributed to the [Ancient Agora Museum in Athens](#), photo by Giovanni Dall'Orto, November, 2009. A brazier similar to the Elamite sign can be found in an image of a 4-legged brazier at <http://www.tcnj.edu/~anchouse/kitchen.html>.

PE










The Phaistos Disk sign could be an ancient torch while the other signs are braziers or perhaps in the case of Luvian, an oil lamp. The syllable PE is represented by the Greek term [πῦρ](#) (pyr) "burn", Old English [fȳr](#) ("fire"). The hypothetical proto-Indo-European root is **peh₂ur* "fire", e.g. Hittite  ([pahhur](#)) and compare [pa-a-h-u-u-ur](#) "fire", and Latvian [piekurināt](#) viz. [pakurināt](#) "fire, heat up". This old Indo European "fire" is found e.g. in Latvian UPUR- "offering" (in K-form as [kurināt](#) "stoke a fire, burn" whence perhaps the Egyptian hieroglyph KH).



This is a thumb image of The Axe of Arkalochori

Syllabic Grid Figure 3 -- the Syllable PI


The Syllable PI in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
 Jaritz #893	 Gardiner (sign T7)				 (sign B11)	 PI not PO
PO	miBT minB see "ME"	PI jar, cask πίθος	PU hand axe	PI πέλεκυς an axe	PI πέλεκυς an axe	PO πέλεκυς an axe
Sumerian  "drum" <i>balag</i> Jaritz #649	See the image at icobase.com for a Sumerian <i>balag</i> hour glass drum	See the image of an hour-glass pithos at Mathilda's Anthro-pology Blog	Axe of Arkalochori see image at top of figure here. PELEKUS is the bottom word on the axe middle column.	Ancient Greek πέλεκυς "double-sided axe" later as the symbol 	hemipelekus Neolithic Wanderwörter Sumerian <i>balag</i> , Akkadian <i>pilakku-</i> (spindle whorl), or PIE <i>pelek'u-</i> 'axe'	See the <i>Chaldean Cylinder Seal of Nabunadin schumi</i> in the Pierpont Morgan Library, Porada, Nr. 747, via T. Schmökel , T. 113.
BALAG		---	---	PHI	---	

PI



The Classical Greek [πέλεκυς](#) "pelekus" was a double-sided axe, a term later [applied to all axes](#), also single-sided ones. Indo-European comparable terms are Swedish BILA or German BEIL "hatchet" or even Finno-Ugric viz. Ural-Altaic Hungarian and Turkish BALTA "axe". In ancient Egypt the axe slowly replaced the older mace found in the Old Kingdom. In Russian the mace is PALICA or PULAVA, in Czech PALCAT, perhaps also found in Polish as PALKA "bludgeon". In Latvian the term PLAKANS means "flat" so that the Indo-European term here might go back to the use of flat-surfaced stones as weapons.

Syllabic Grid Figure 4 -- the Syllable PO
 The Syllable PO in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
--- none	--- none	--- none	--- none	--- none	 (B39)	Cypriot PO is correctly PI
---	--	--	---	---	PO ποιέω "to make"	---

PO

PO appears to be a later-developed derived sign for the concept of "the making", in Ancient Greek [ποιέω](#) "to make".











The companion Linear B sign to PO  is the sign currently and erroneously transcribed as TI  rather than TE, as can be seen in the later discussion of the syllables TE and TI.

PO and TE are companion signs on the grid, but only for Linear B. Cypriot PO is correct PI and the sign PO is not found in other scripts on the grid. The TE sign symbolizes the craftsman or master of an art as "the maker", in Ancient Greek [τέκτων](#) viz. [τέχνη](#) "craftsman, master of an art", more precisely in Greek:

[τέκτων](#) ... (tektōn)

1. ...carpenter, builder
2. any craftsman...
3. a master of any art...
4. author, creator, planner









Syllabic Grid Figure 5 -- the Syllable PU
 The Syllable PU in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
	 [correctly read P-AUSS-RIJAS]				 (B50)	 PU not PE
PA Jaritz #560 "bud, sprout" Cf. Persian <i>baghāla</i> "broad bean"	PRJ André Dollinger writes at: http://www.res-hafim.org.il/ad/egypt/timelines/topics/vegetables.htm as follows:	PU "broad beans" as the growing tendrils	PU PU, PÁ "broad beans" as in Linear B	PU φύλαξ phylax "guardian" amulett, pendant"	PU Bean tendrils φάσηλος kairatos com writes: "Py-amos and the laconic form pou-amos = broad beans"	PE φάσηλος An abstracted simplified sign of a tendril of the broad bean plant?
 Jaritz #669 with Jaritz #101 as BULUG5 "grain, barley"	"Broad beans, <i>Vicia faba</i> L., the Egyptians used a Semitic loanword,  ^[14] — The oldest known broad beans have been found in 5th dynasty tombs. ^[14] "	In Iran, beans are mostly cultivated in the former Elam .	This sign has a left side curl and flat stalks as if abstracted in the same style as Linear B	See e.g. broad bean cultivation in the image at the Prespa Park Project .	 (B29) φύλλον "foliage" PU2, PHU or PUL.	The signs PI, PE and PU in the Cypriot Syllabary need to be shifted around to conform to this analysis.
BU	Arabic FUL	---	---	---	PHU PHUL	---

PU (phy)

There is fairly uniform agreement here among the various languages on the syllabic grid that the syllable PU derived from an ancient culture word for broad beans, which were a staple of the Old World diet. Even the Pharaonic Egyptian hieroglyphs, as written by André Dollinger at [Reshafim.org](#), include a term for broad beans that is currently read in Egyptology as PRJ.








Syllabic Grid Figure 6 -- the Syllable RA
 The Syllable RA in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
						
<p>RA</p> <p>Jaritz #609 to "roll a seal into clay"</p> <p>The syllabic value of a comparable notch sign is unknown:</p>  <p>Jaritz #734</p>	<p>RA</p> <p>sun disk</p> <p>Compare all the RA signs here generally to Indo- European e.g. German <i>Rad</i> and Latvian <i>rats</i> "wheel"</p>	<p>RA</p> <p>ῥάβδος "rod, wand" spear point but also perhaps simply "notch" or "groove"</p> <p>Indo-European e.g. Latvian <i>robs</i> "notch" also found in the word <i>robeža</i> or Lith. <i>riba</i> "boundary"</p>	<p>RA</p> <p>The notched Luvian sign confirmed analysis for Elamite and Sumerian (via Latvian) that those signs represented a notch, groove or slit, usually cut at an angle.</p>	<p>RA</p> <p>ῥόμβος "round, roll"</p> <p>A similar Aegean design on an ancient sword pommel can be seen at Salimbeti. Com Micenei</p>	<p>RA</p> <p>ῥόμβος ("round, roll") The comparable Sumerian sign reads RA for "roll a seal into clay" - John Halloran, Sumerian Lexicon, v. 3.0"</p>	<p>RA</p> <p>Sun & Earth The round symbol is the sun and, as in other Cypriot signs, the horizon line is the Earth surface.</p>

RA

We determined 40 years ago that the round Phaistos Disc sign had a syllabic value of RA, now corroborated in Sumerian. The Linear B sign for RA is similar to the [Sumerian RA](#) sign showing a square object and curl(er) viz. "roll(er)", probably for "rolling seals" that were not originally round but had sides. The Sumerian RA sign is [Jaritz #609](#) meaning "to **roll** a seal into clay", according to John A. Halloran, [Sumerian Lexicon](#), Version 3.0". The "notch" meaning of the other signs was first clued by Luvian RA. The conceptual connection surely exists in the fact that seals of a symbol were "rolled" into clay while signs and symbols could also be "notched" or "etched" into surfaces.

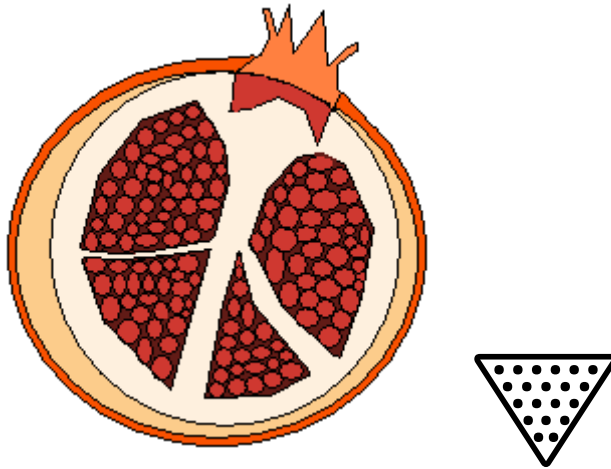
Syllabic Grid Figure 7 -- the Syllable RE
 The Syllable RE in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
	see Dollinger 				 (76)	
<p>RU8 Jaritz #185 Also read as LAL3, but this is surely RHEA-DAR with DAR likely a determinative for agriculture e.g. Latvian <i>dārzā</i> "in the garden"</p>	<p>RE The current mainstream transcription of the Egyptian hieroglyphs above for "pomegranate" is in error, misreading the pomegranate triangle as N rather than R. Read correctly: R-IE-MN which is the same as Hebrew <i>rimmon</i> Arabic <i>rummon</i> "pomegranate"</p>	<p>RE ῥῶρα, IR "Halter collar or oxbow" <hr/> Akkadian is read incorrectly nu.UR.ma pomegranate but RUMMON is correct</p>	<p>UR "magnus" ? compare Elamite "halter, collar or oxbow" <hr/> Deuteronomy 8:8 "A land of wheat, and barley, and vines, and fig trees, and pomegranates; a land of oil olive, and honey;"</p>	<p>RE ῥῶδης A wedge of sliced pomegranate <hr/> Liddell-Scott write "knob ... like a pomegranate" <hr/> ... <i>tassel of like shape</i>"</p>	<p>RYA RA2 ῥῶα pruned pomegranate tree(s), with trellis? See the Rhea (myth.) <hr/> RU+JA seen as pomegranate in Linear A</p>	<p>RE Pomegranates not only served as an important Aegean staple food but also were endowed with ancient symbolic fertility value.</p>

RE

The [pomegranate](#), in Greek *Ῥέα* (Rhea, [ῥῶα](#)), was an important Aegean staple food and had a symbolic fertility value for the ancients. The name of the mother Goddess [Rhea](#) is "connected with words for the [pomegranate](#), [ῥῶα](#), later [ῥοιά](#)" ([Rhea \(mythology\)](#), [Wikipedia](#)). [Kris Hirst](#) at [about.com](#) writes that the pomegranate was native to the Middle East -- **most likely from ancient Persia (modern Iran)**. He notes further that the pomegranate was domesticated as a plant by ca. 3500 B.C., and that the pomegranate was later quite well-known in Minoan culture, given that pomegranate-shaped vases were found on Crete at Phaistos and Knossos and are dated to the Middle Minoan period ca. 18th century B.C. For history, see [In Mama's Kitchen](#).

The Egyptian [Story of Sinuhe](#) contains the first [Pharaonic mention](#) of pomegranates. The Amun Temple at Karnak in Egypt refers to pomegranates from the land of *Retenu* ("Canaan"),²⁵ "a land of ... pomegranates" ([Deuteronomy 8:8](#)). An [image online](#) at [Ruby Red Pomegranates](#) (approximate illustration by this author below) led to his identification of a Phaistos Disk sign as showing a section of pomegranate [óóα](#).

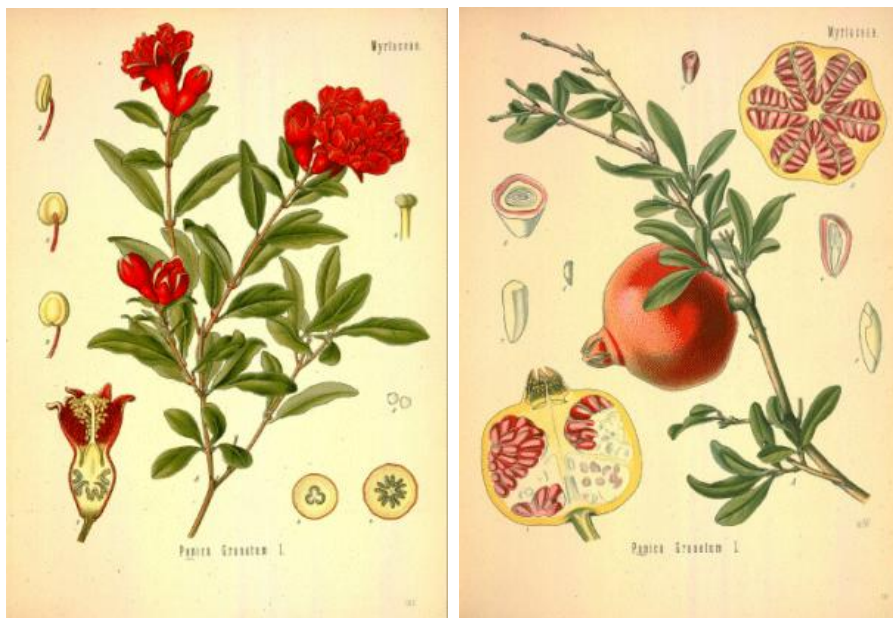


See the image that brought our "aha" idea at <http://rubyredpomegranates.co.uk/>. A triangular pomegranate section is represented by the dotted triangular sign on the Phaistos Disc. The sliced pomegranate image referred to above **was** the key to identify all the pomegranate signs on the syllabic grid.

²⁵ The hieroglyph for "Canaan" is while stands for "land(s) of 'the rising sun". Egyptologists totally misread the first set of hieroglyphs whose first row of symbols mean "[velar](#) throat sound" and are followed by NI-NU plus the determinative "terra land sign" so that the correct reading is Cha+Ni+NU+"terra" = CANAAN, literally "land of the shepherds" as in Latvian GANIŅU (shepherds, diminutive form, genitive case"). The correct reading for the second set of hieroglyphs is RI-TI-NI AUSS-TI, which is Indo-European, e.g. Latvian *rītiņi aust* "morning rises, the day dawns", and thus "East". Indo-European, e.g. Latvian *rītiņi (dim.)* means "(direction of) morning" and thus refers to (where) the Sun (morning) rises, i.e. East, in combination with the "terra" hieroglyph thus "lands to the East".










Most symbols for the Syllable RE relate to the pomegranate, [punica granatum](#), where "the genus name *Punica* refers to the [Phoenicians](#), who were active in broadening its cultivation...." Pomegranates were found, e.g. on the [Uluburun Shipwreck](#) from the late 14th century B.C., whose cargo is discussed in this publication, an ancient cargo that provides strong evidence for extensive seafaring merchant trade in ancient eras that led to the spread of ancient signs and scripts.

PUNICA GRANATUM ("The Pomegranate")











The images above are reproduced from an 1887 work now in the public domain: [Hermann Adolph Köhler, Köhler's Medizinal-Pflanzen in naturgetreuen Abbildungen mit kurz erläuterndem Texte : Atlas zur Pharmacopoea germanica, austriaca, belgica, danica, helvetica, hungarica, rossica, suecica, Neerlandica, British pharmacopoeia, zum Codex medicamentarius, sowie zur Pharmacopoeia of the United States of America](#), herausgegeben von Gustav Pabst, with color lithographs by Walther Müller and C.F. Schmidt, Plates [110](#) and [110i](#), Volume 2, Verlag Franz Eugen Köhler 1887, printed by Herm. J. Ramm, Leipzig. (Online at [Biodiversity Heritage Library](#)).

Syllabic Grid Figure 8 -- the Syllable RI
The Syllable RI in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (53)	
IRIG Jaritz #457 "conical oil container" <u>IRI</u> <u>or</u> <u>IRIG</u> "voluminous" in Ancient Greek a rhyton <u>ῥυτόν</u>	Rd "lotus rhizome in a pot" The lotus "rhizome" hieroglyph seems to combine the idea of a rhizome with that of a rhyton	RE <u>ἑώρα</u> , <u>IR</u> "halter" collar or oxbow Compare Sumer sign to Heraklion rhyton	RI "rhyton" (but see Luvian KI) Are Luvian variants for RI or LI found at ARI  or 	RI Originally thought by this writer to be a plant leaf branch but now maybe plant root, <u>ῥίζωμα</u> "rhizome" or simply Greek <u>ῥίζω</u> "to plant, strike root".	RI <u>ῥυτόν</u> A rhyton on a table-like support. An image of a rhyton from Agia Triada is found at the <u>Heraklion Museum</u>	RO Correctly RI for the Cypriot Syllabary. The values accepted for RI and RO signs must be exchanged, so that this is actually the RI sign and not the RO sign.

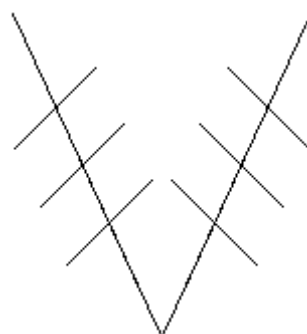
The oldest form of the RI sign appears to be the Sumerian IRI viz. IRIG "conical oil container" also meaning "voluminous", a container called the RHYTON ([ῥυτόν](#)) by the Ancient Greeks. The Linear B sign could be a *rhyton* on a stand while the Cypriot sign looks like a more abstract variant. Luvian has a container sign that could be RI but it might also be KI (see the discussion at KI). The bird and wing sign variants are also candidates for RI or LI in Luvian. The Elamite and Phaistos Disk signs are their own variants. The Elamite sign shows what appears to be a halter, collar or oxbow ([ἑώρα](#), [IR](#)). The Phaistos sign, originally thought to be a plant leaf branch, could be plant root, Ancient Greek [ῥίζωμα](#) or a general representation of the simpler Greek concept of [ῥίζω](#) "to plant, strike root". The Egyptian **Rd** sign combines both rhizome and rhyton concepts.

Syllabic Grid Figure 9 -- the Syllable RO
 The Syllable RO in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite sign known yet.	No Luvian comparable sign known yet.	Axe of Arkalochori 	 (68)	 (boat side)
RO "rim" Jaritz #834 Halloran: ra-ah "to strike repetitively" -like an oar-  "oar" (riš) SAL Jaritz #449	hRw The above Egyptian hieroglyph is found at Gardiner #P8 as an "oar" see ships at AncientEgy ptOnline.co.uk	It is interesting to compare the Sumerian SAL "oar" with Russian vesló "oar" Sumerian had no "O" so RO can not be the original value.	The key to establishing the RO value were the three similar signs of the Cypriot Syllabary, which the present author was able to decipher as discussed below.	RO There is no comparable sign on the Phaistos Disc for an oar. The Axe of Arkalochori has an oar sign that some might think to be a spear or an arrow.	RYO RO2 ἐρετ-μόν "oar" ἐρέσω "row"	RI (RO) "rowers, oars" see also  NI (NE)  KI (KE)

RO


How the Cypriot Syllabary signs show an ancient boat is illustrated by the image right showing the rowing arrangement on an Ancient Greek [trireme](#). A similar graphic is found at the Portland State University Greek Civilization Home Page of Kenny McMahon, Nick Chadha, and Paul Hotchkiss on [Ancient Greek Methods of Boating and Shipping](#). It is comparable and yet simple sign





imagery for the concept depicted and surely similar to what the Cypriot Syllabary was intended to portray as a trireme.

The key to establishing the RO value (surely "AR" or similar originally) were the three similar signs of the Cypriot Syllabary, which the present author was able to decipher as follows:

Three nautically related signs of the **Cypriot Syllabary**

-  = RO (not RI) "rowers, oars"
[ἔρετ-μόν](#) "oar", [ἔρέσσω](#) "row"










-  = NE (not NI) "boat"
Greek [ναῦς](#) "boat, ship"
(in Cypriot signs, a bottom horizontal line represents the Earth surface, horizon, or, here, water)

-  = KE "boatswain – rudderer"
probably "rudder" originally
[κελευστής](#)


The various signs and related linguistic materials indicate that the word concept for "rowing" came from a repetitive action of striking the water and the concept of an "oar" came thereafter.

The Linear B symbol B68 is an abstract representation of an **oar** for **rowing**. Additional Indo-European terms for English "oar" are: Norwegian [åre](#), Icelandic [ár](#), Swedish [åra](#), Estonian [aer](#), Finnish [airo](#), Latvian [airis](#), and Lithuanian [iriu](#) "to row". The clear logic of the three similar Cypriot signs for "boat", "rowers, oars" and "boatswain, rudderer, rudder" confirm the conclusion regarding the Linear B sign internally. The first ancient scripts were spread in the ancient world by seafaring merchants.

Syllabic Grid Figure 10 -- the Syllable RU
 The Syllable RU in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite sign known yet. <i>The Axe of Arkalochori</i>			 (26)	
RU Jaritz #111 Halloran : "give by hand" — The basic concept here for the origin of this sign is "hand" and "reach out, give over to"	RDJ "give, hand over, reach (to)" — Compare modern images of hand drawings as found at: Cheryl B. at Artamaze : hand drawings	RU  This sign is reproduced from a faulty copy of the Axe. An original photo traces a "hand": 	RU The sign shows the hand + 5 fingers. It is of course somewhat abstracted as a round symbol with a five-divided crossing horizontal ribbon.	RU "hand" viz. "fist" Archaic Indo European had one word only for both arm and hand: e.g. Latvian roka Lithuanian ranka	RU "(arms) reach out" ὀρένω ὄρενον ὄρωρέ- χαταί The vertical line is simply a holder for the concept	RU That the Cypriot Syllabary sign likely shows two arms or "sides" is seen from the Cypriot sign SU as an arm/line (extension). See Cypriot SU : 

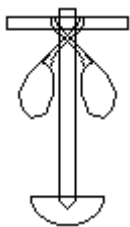
RU

Archaic Indo-European had one word for the concept of the arm and the hand: e.g. Latvian [roka](#) (the "o" in Latvian is an "uo"), surely derived from [lok-, loc-](#), "bend, bent" [lokans](#) "limber", i.e. a root in the concept of "joint", as we retain in English "knee". The vertical line in Linear B is a "holder" for two arms reaching out. A sign like this was easier to draw than the hand as on the Phaistos Disk and the Axe of Arkalochori. That the Cypriot Syllabary likely shows two arms viz. sides is seen from the Cypriot sign **SU** where a comparable arc is an arm type of extension. See Cypriot **SU**: 

Syllabic Grid Figure 11 -- the Syllable MA
 The Syllable MA in the Kaulins Ancient Sign Concordance







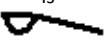

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
<p>MHE This is likely an ancient bow drill. See the discussion below.</p> <p></p> <p>e-MAR-RU arrow quiver</p> <p>See Ryan.</p>	<p>MSHA bow archer</p> <p>—</p> <p>An Indo-European origin for Pharaonic mšw is possible in view of e.g. Latvian meš-ana "throw(ing) hurl(ing)"</p>	<p>MA a bow</p> <p>—</p> <p>A modern drawn bow with stress marks as on the Linear B sign is found at http://www.people.vcu.edu/~rgowdy/mod/020/xmp4.htm</p>	<p>MÚ bow + hand ?</p> <p>That this is a bow and hand is not a standard view of this sign and it is unclear.</p>	<p>MA ἄεμμο ἄμμο (archaic Greek)</p> <p>"bowstring, bow"</p> <p>—</p> <p>The Phaistos Disk was the key to identify these signs</p>	<p>MA A bow drawn back.</p> <p>The outer lines mark the drawn bow, and two arcs (hands -- see RU) mark the hand grip.</p>	<p>MA a bow ?</p> <p>The vertically reversed sign is the syllable WA in the Cypriot Syllabary Is that the front ae in ἄεμμο ? Very speculative.</p>

MA






MA signs represent a bow. The Sumerian sign in Syllabic Grid Figure 11 was puzzling until this author saw an image online by [Archae Solenhofen](#) on [Ancient Egyptian Stoneworking Tools and Methods](#) illustrating an ancient bow drill. The illustration you see here is our approximation of that ancient Pharaonic bow drill. The shape of this Ancient Egyptian bow drill clearly resolved the matter of identification of the Sumerian sign, indicating that the sign from Sumer was also a [bow drill](#), just as in Ancient Egypt. Presumably, the term on which the syllable was based came from the **bow** for its principle of action in using a stick and a string.











Syllabic Grid Figure 12 -- the Syllable ME
 The Syllable ME in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
Unable to find Sumerian sign but terms exist		No Elamite sign known yet.			 (13)	
MITUM ₂ MIDDU ₂ "mace" See Ryan at MHE Akkadian <i>mašgašu</i> "mace" Hebrew <i>mateh</i> הַטְּחַ "mace, staff"	aMES mace + flail The Gardiner T1 mace  is MNW Stevenson while the axe is  is MDW with variant 	Many maces can be traced to mace-heads in Luristan, Īlām Province , a part of ancient Elam , 2nd millennium BC.	MAX MAX regal symbol of some kind Egyptian Note the MNW in Pharaonic and the archaic Latvian MILNA "club"	ME μέδω "rule(r)" μάχης "staff" Indo-European e.g. Latvian milnis "club" Armenian մահակ (<i>mahak</i>) "club" Polish maczuga "mace, club"	ME μέδω "rule(r)" μάχης "staff" Linear B shows that the sign of a mace or club over time became a staff viz. flail representing the might of the ruler	ME μέδω "ruler" μένας "mighty" Presumably the X means a city location and the added flail means ruler, i.e. seat of government capital

ME

Most of the ME symbols represent a [mace](#) or similar. A [mace](#), staff, scepter, flail or axe (in Ancient Egypt) was a symbol of power. Power words in this regard are Greek [μάχης](#) "staff" [μέδω](#) "rule(r)", Pharaonic [mdw](#) "axe", Hebrew [matteh](#) "staff". The Gardiner T1 mace  is MNW [Stevenson, 2008, Mace.UEE](#) while the axe is  MDW or variant . Sumerian maceheads are similar to maceheads found at Hierakonpolis. Many maces [are traced](#) to maceheads in Luristan, [Īlām Province](#), a part of ancient [Elam](#), 2nd millennium BC.











Syllabic Grid Figure 13 -- the Syllable MI
The Syllable MI in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (73)	
MUD Jaritz #702 "vat" "bag" "amphora"  Jaritz #458 MA3 MASA "basket"  Jaritz #770 ME2 dark, black	MES (Budge, p. 321) "birth" asmes (Budge). MSJ is the current birth transliteration. There is surely a connection here to Indo-European e.g. Latvian maiss "placenta"	MI dark, reed basket ? μέλας — Indo-European e.g. Latvian maiss "sack" muca "cask, vat, barrel" murds "fish basket, trap for lamprey eels (<i>nēāis</i>)"	MI basket sides ? See also  The vowel "A" (see vowels later) Compare the similar sign at Linear B.	MA ἀμφορέα An amphora image is found at Iraklion Museum, Crete .	MI "pouch, basket" A similar basket is seen in an image at Wine Harvesting Antiques , a basket carried on the back to collect grapes in vineyards.	MI A vessel on the ground. In the Cypriot signs, the horizontal line below seems to mean "earth", i.e. the surface.

MI

Signs for MI show vessels, bags, baskets or containers. The Greek language has [ἀμφορέα](#) "amphora", [μόργος](#) "leather vessel" or [μάροισπος](#) "a pouch to carry infants". Compare Indo-European e.g. Latvian [maiss](#) "placenta" to Pharaonic Egyptian **mes** viz. **msj** "birth". Elamite and Sumerian seem also to use a concept of "dark" for MI. The Phaistos Disk has both concepts in a dark "shaded" vase so the original terms for dark and vase should be similar. For an image of a modern harvest basket similar to Linear B and Luvian signs see [Grape Escapes](#) online.








Syllabic Grid Figure 14 -- the Syllable MO
 The Syllable MO in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (15)	
<p>MI₃ Jaritz #889 "middle"  ↓ MAL₃ Jaritz #126 unknown meaning AMA "wild ox" (no sign) Compare Latvian mala "side"</p>	<p>MAA "plinth", i.e. a base ("back" in this sense) in building construction and architecture Ryan writes: "Egyptian <i>m</i>, ... represents ME meaning... in the middle of"</p>	<p>MO "divided, distributed" ——— The Greek comparable words to all these terms could be μοιράω, ἐμμορε "divide, distribute" where "divide" as "middle" is μετά viz. μέσος</p>	<p>MA₂ "divided, middle?"  or  wild antelope MA₁ Note that the sign identified by scholars as MÚ looks like the bow sign MA.</p>	<p>MO The Phaistos Disk sign for MO may show the "back" viz. "middle" of an "ox", thus perhaps combining 2 concepts used for the MO and MU signs elsewhere on the grid.</p>	<p>MO Linear B signs B15 (MO) „middle" B12 (SO) "channel" and B14 (DO) "pipe". all involve Minoan plumbing). The bend in the vertical holder is the common feature.</p>	<p>MO "middle" This sign is similar to the Luvian sign. The Linear B sign divides a half-circle differently and the Sumerian sign uses a T-square symbol. The Phaistos Disk uses an ox back and tail.</p>

MO (should be viewed together with **MU**)

Ancient scripts did not originally have the letter "O". An archaic Indo-European language such as Latvian even today has a letter written as "O" but actually pronounced "UO". Hence, since Sumerian e.g. had no "O", overlap occurs between O and U syllabic sign elements in terms of concepts, especially here at the M-based signs and syllables. The concepts of "ox-back", "back" and "middle-(back)" and "side" seem to have meshed in the Phaistos Disk sign for MO viz. MU as the back middle of an ox back plus tail, while Linear B has an abstracted ox head and back-located squiggle marking the back middle of the ox.










Syllabic Grid Figure 15 -- the Syllable MU
 The Syllable MU in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (23)	
MUR7 MURGU "back" Indo-European e.g. Latvian mugura "back". Latvian muguru is an inflection that can be compared to Sumerian MURGU.	M(J)R "ox tongue" Gardiner #F20 Cf. Indo-European e.g. Latvian mēle "tongue" There is no proof that the tongue rather than the ox or oxback was the object of syllabic attention.	MU "back, on one's back, laid to rest, deceased" My decipherment of an Old Elamite script indicates that this symbol was used to show the deceased pictographically and syllabically	MU "ox head" "ox body (ribs)" The lower MU sign is sometimes shown "empty". Maybe it is instead a bow quiver for arrows, full or empty. Sumerian e-MAR-RU	MU "ox back" The Phaistos Disk sign is alleged to show the "back" viz. "middle" of an "ox", combining 2 concepts used for the MO and MU signs elsewhere on the grid.	MU "ox back" This sign is seen as an ox-head but actually stands for the ox-back as marked by the small squiggle. It does not stand for βούς "ox" or Βουκέφαλος "ox-head" The vertical is a holder.	MU "middle" The Cypriot Syllabary has some abstracted sign forms. This sign is similar to Sumerian MI3 at MO. It is an X with two side marks marking the middle of the crossed figure.

MU (should be viewed together with **MO**)

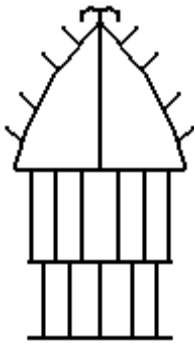
Signs for the syllables MO and MU harken back to one common conceptual origin since ancient scripts did not have the letter O. That concept seems to be "back", although the concepts of "ox-back", "back" and "middle" are used as variants for the signs that represent the syllables, MO and MU. Note especially the similarity of the Elamite and Sumerian signs, which depict a stretcher (litter) for carrying (or simply symbolizing) the deceased on their back. Most of the other signs use an ox-back or other similar "ox"-sign to symbolize the syllable. although the Cypriot Syllabary has an abstract "middle-crossed X" sign. Perhaps it is a precursor for later "cross" signs for the deceased.

Syllabic Grid Figure 16 -- the Syllable NA
 The Syllable NA in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
 Jaritz #391			 or  NA ₂		 (06)	
UNU "elevated shrine or building" NIR "raised, elevated" Please note that we use the syllabic values assigned to Sumerian by scholars. This should correctly be something like NAI.	NWT "city, habitation". It may have the same word root as Greek VAIETÁΩ "dwell, inhabit" Historyonthenet.com writes: "earliest inhabitants of Egypt lived in [papyrus] huts...."	NA Floor view of dwelling on pillars or piles. Greek VAIETÁΩ "dwell, inhabit." Consider as a word root Indo-European e.g. Latvian NE-IET "not go" "stay put" "dwell"	NA See the image in stone at Halet Çambel showing the sign  NA, NI ₂ "raised, elevated" as a later version?	NA VAIETÁΩ "to dwell, inhabit" The Phaistos Disk sign is similar in design to ancient lake dwellings but also to round Sumerian reed houses.	NA VAIETÁΩ "to dwell, inhabit". See the dwellings at the Lake Dwelling Museum, Pfahlbauten-Museum, Unter-uhldinen, Bodensee, Germany.	NA VAIETÁΩ dwell(ing) An elevated building with two levels. See at this link a pile dwelling reconstruction in Switzerland

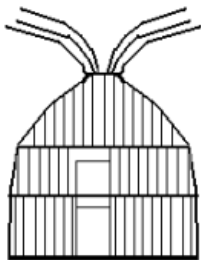
NA

The original concept for the NA syllable was a raised or elevated house on wooden piles, so that the NA-signs represent dwellings, inhabitations, cities, raised or elevated shrines or buildings, or simply the concept of "raised, elevated", as in the Luvian sign. Sumerian script had a special sign for elevated shrines. Ancient Greek [vaietáω](#) means "dwell, inhabit" and this is surely of the same origin as Pharaonic NWT "city". Consider Indo-European as the providing the word root as in e.g. Latvian neiet, i.e. "ne-[iet](#)" = "not go", i.e. "stay put", "dwell".




At the left is an idealized illustration of a prehistoric rock drawing of an ancient lake dwelling as found at Val Camonica, Italy, at [Naquane National Park](#) on Rock 35 near Capo di Ponte. A photograph can be found at [Rupestre.net](#). Given its prehistoric date, the "Jumis" on the roof top of the lake dwelling is extraordinary. "Jumis" in Latvia was a protective god placed on roofs as in the

photograph right from the [Wikipedia Commons](#) by [Xil](#) as taken at an open air museum in Courland, Latvia. **The thatch roof even has similar beams sticking out from the sides as at Val Camonica.** [Jumts](#) is "roof" in Latvian.

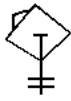
















The idealized illustration to the left shows a Sumerian reed house which is similar in its multi-story construction to the ancient lake dwelling above, including a type of reed Jumis. A comparable photo of a Sumerian reed house can be found at [Laputan Logic](#).

Compare the Phaistos Disk sign  with the above two images. Are these all architectural technology transfer remnants of ancient trade connections? [Crete at WordPress](#) writes:

"Kato Zakro [Crete] was ... the main port for dealing with Egypt, Syria, Gaza in Palestine and Cyprus. ... [trading] items from both Syria and Egypt. Later they extended to Asia Minor (Turkey), Rhodes and other Aegean islands."

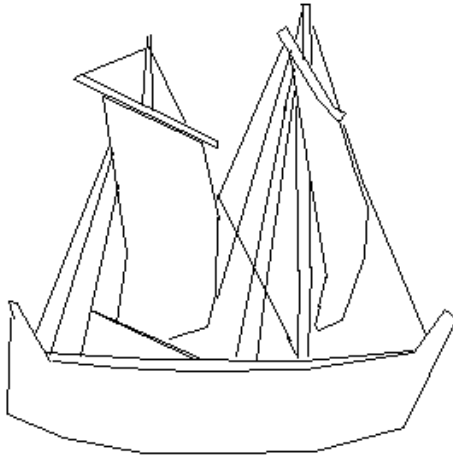
Syllabic Grid Figure 17 -- the Syllable NE
 The Syllable NE in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (B24)	
<p>NI₂ Jaritz #721 "sail with rigging"</p> <p>— Axe of Arkalochori The sign on the Axe of Arkalochori is correctly reproduced as a boat.</p> 	<p>NE Gardiner P1 determinative for N'J "travel"</p>  holy barque Neshe-met	<p>NE "boat hull"</p> <p>— Axe of Arkalochori  This sign is incorrectly reproduced by scholars from a false axe copy. Tracing of an original axe photo shows a boat (left).</p>	<p>NA "boat hull"</p> <p>N boat + mast</p>  later as  See See the sign image at Halet Cambel	<p>NEA Greek ναῦς "boat, ship"</p> <p>Proto-Indo-European *<i>nau-</i> "boat"</p> <p>For more etymology, see naval at the Online Etymological Dictionary</p>	<p>NE ναῦς</p> <p>The vessel sits atop the vertical holding line, which here also appears to serve as the mast at its upper extension.</p>	<p>NI (NE) "boat" horizontal line is water This is one of a trio of naval signs.</p>  <p>— RI (RO) "rowers, oars"</p>  <p>KI (KE) "boatswain, rudderer"</p> 

NE

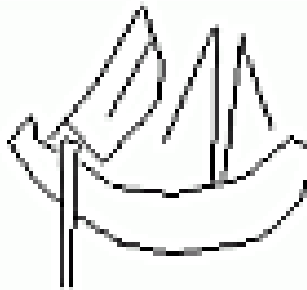
The conceptual root for these signs comes from ancient navigation, as in the Greek term [ναῦς](#) "boat". The Cypriot Syllabary has three similar signs relating to navigation by water, one previously as the syllable RI. In Cypriot signs, the horizontal bottom line represents the Earth surface or horizon. Here it is water. The respective sign on the Axe of Arkalochori is also a boat, but hardly recognizable as such, because it is based on photos using a false, viz. simplified physical copy of the axe. Tracing of an old photo of the original axe shows that this sign is a sailboat. Other axe signs also need amendment.

84 ● *| Andis ↑*∩≤*|)† Kaulins





The illustration to the left is an approximation of a boat image found at [Art Knowledge News: Smithsonian and Singapore Organize World Tour of Shipwreck Treasure](#). It shows a modern replica of an ancient seafaring sailboat discovered as the [Belitung shipwreck](#), an Arabian [dhow](#) dating to ca. 830 A.D. The replica was built by Singapore and Oman under the name [Jewel of Muscat](#).

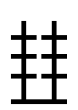








Compare that above image to a sign tracing that this author obtained from a photo of the original Axe of Arkalochori. they are similar, except for the more rounded hull.



The Axe of Arkalochori sign is an ancient sailing vessel. The currently accepted sign version of that sign on the Axe of Arkalochori is apparently based on photos of an inaccurate physical copy of the axe, rather than on the original. That

erroneous image is currently presented as follows: , but of course should be viewed horizontally..  ..as a boat, Greek [ναῦς](#). Digital retracing by this author of a photo of the original axe resulted in a sailboat sign in much greater detail, as above.

Syllabic Grid Figure 18 -- the Syllable NI The Syllable NI in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (30)	
<p>NIR "two trees" figs? Jaritz #603</p> <p> NIŠ (nīš) Jaritz #561 "wood"</p>	<p>NEHI (M1) Gardiner NHT "sycamore fig" ("Pharaoh fig") R. Hannig, Ägyptisches Wörterbuch I, Altes Reich und Erste Zwischen-zeit</p>	<p>NI "wood ?" — Note the Persian anijr "fig tree".</p>	<p>NÌ "twisted wood branch?"</p> <p> NU "tree, plant" ?</p>	<p>NI ἄνεμῶν (Grecian windflower)</p> <p>See the image at Wikimedia Commons by Nino Bariieri</p>	<p>NI Fig tree in Minoan agricultural texts. Persian²⁶ anijr "fig tree".</p>	<p>NO "fig trees" The Cypriot Syllabary regards this sign as the syllable NO but it is correctly NI. The correct NO is now NU.</p>

²⁶ Hubert La Marle, *Linéaire A, la première écriture syllabique de Crète*. Geuthner, Paris, 4 volumes, 1997–1999, 2006; *Introduction au linéaire A*. Geuthner, Paris, 2002; *L'aventure de l'alphabet: les écritures cursives et linéaires du Proche-Orient et de l'Europe du sud-est à l'Âge du Bronze*. Geuthner, Paris, 2002; *Les racines du crétois ancien et leur morphologie: communication à l'Académie des Inscriptions et Belles Lettres*, 2007. <http://www.premiumwanadoo.com/crete-minos-linear.a/index.html>. Diana Gainer writes at scienceblogs.com in a comment: "For a summary of this and other studies covering most of the world, you could always buy my book "The Human Journey" available on the Kindle electronic book (less than \$10 now) on Amazon. There is also a recent study of genetic data of people on the island of Crete, which indicates that they are different from other Greeks. ("The origin of Cretan populations as determined by characterization of HLA alleles" in *Tissue Antigens* 1999 Mar. 53 (3):213-226). I am not an expert in the chemistry involved, but the conclusions are clear enough. Most of the Greek population originated after 2000 B.C., probably as Indo-European speakers. But most Cretan were there earlier, from before the Neolithic. They share a number of genes with Imazighen populations, Caucasoid Berbers who now live along the North African coast and in various parts of the Sahara desert. Some of these people, it is hypothesized, migrated northward as far as Crete between 8000 and 6000 B.C., when the Sahara-Sahel area first began to dry up (before that, it was very green and supported herds of animals, like modern sub-Saharan Africa, as a recent article in the journal *Science* demonstrated). They are thought to be related to the populations that became Sumerians (ancient southern Iraqis) and Iberians (ancient Spain and Portugal) also. The authors say that this is supported by linguistic data as well as genetic data, but I have my doubts about that part. So far as I know, Sumerian is an agglutinative language rather like modern Turkish, not known to be related to anything else. Linear A, the oldest type of writing found on Crete, has recently been deciphered by the Frenchman, Hubert la Marle, as a form of ancient Indo-Iranian, an Indo-European language very distantly related to Greek. The ancient Iberian language is thought to be ancestral to Basque, another isolate." See also [Linear A deciphered?](#) at [Minerva's Owl](#).

NI

The common concept here is nature in the form of trees, blossoms, and fruits. The Linear B sign B30 is seen by scholars to be a **fig tree** in Minoan agricultural texts. If Linear A has an Indo-Iranian connection as La Marle claims, it is interesting that the syllabically similar Persian term [anjir](#) means "fig tree".

A fig leaf and a fig tree branch



The fig leaf drawing on the left is the author's own work based on a [Wikimedia](#) photo by H. Zell, which I liked. The fig tree branch on the right is a scan from a book by Prof. Dr. Otto Wilhelm Thomé, **Flora von Deutschland, Österreich und der Schweiz**, 1885, Gera, Germany. Permission granted to use under GFDL by Kurt Stueber, <http://www.biolib.de/>.



The image shows anemone-like blossoms on the "Tree of Life" in Mesopotamia in an illustration by this author approximating a photograph from Uruk, Djemdet Nasr, Moortgat, 11, 67, via [Schmökel](#), T. 12. This shows the origin of the Phaistos Disk "flower" sign in comparable Near East depictions.

[Figs in the Bible](#)

"The fig tree is the 3rd tree noted by name. 1st is the Tree of Life. 2nd is the Tree of Knowledge. Adam and Eve clothed in leaves of the fig tree. The fig was a food of the promised land."








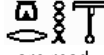
Syllabic Grid Figure 19 -- the Syllable NO
 The Syllable NO in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
	 see hieroglyphs.net	No comparable sign known yet.		No comparable sign.	(52)	
NU Jaritz #119 "be stored, i.e. locked away" This sign is similar to the Cypriot sign. A storage load of goods must be carried to be stored.	NkHT "strength" (Latvian nēsāt "to carry") (and the related) KAT (k3t) man carries basket is determinative for "load, carry work"	See a donkey hauling a gigantic load of hay at Dinkenesh Fund for Needy Animals	Nlx "to carry ?" Compare Indo-European e.g. Latvian nes(tj) viz. nēsāt "to carry" nasta "burden, load". In Sumerian anše means "male donkey"	At concierge.com see donkeys carrying loads of hay near Phaistos, Crete, as in ancient days	NO "beast of burden" ῥωτεύς "donkey carrying a load" The Cypriot sign is turned sideways from the Linear B sign and simplified.	NU "beast of burden" The Cypriot Syllabary regards this sign as the syllable NU but it is correctly NO The current NE is the right NU.

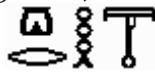
NO

All of the signs for the syllable NO relate to carrying a load, by either man or animal as a beast of burden and/or the storage of that load. The Linear B sign abstracts a beast of burden, most assuredly a donkey, carrying a load (surely to be stored). Sumerian [anše](#) as the term for "male donkey" is a term very similar to Indo-European e.g. Latvian comparable terms [nes\(tj\)](#) viz. [nēsāt](#) "to carry" or [nasta](#) "burden, load". The Ancient Greek terms are [ῥωτεύς](#) viz. [ῥωτόν](#) (noton) "carry on the back". The Pharaonic Egyptian term for "strength" NkHT is similar to KAT "load, carry work". The Linear B sign B52 has been regarded to be a porcupine back by some, an understandable "bristly" interpretation, but that view is in error.






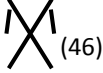





Syllabic Grid Figure 20 -- the Syllable NU
 The Syllable NU in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
						
INANNA The night sky as an interval between setting and rising Sun NIN2 "the eye of night sky" Jaritz #165	NUT "night sky" Egyptologists NUT is a sky goddess, but she is the NIGHT sky only. The "sky hieroglyph" is pt "visible sky, day" (pāriet). <i>hrw</i> are the "hours of the day".	NU "the night" vúξ vuktós Egyptian hieroglyphs  are read <i>grH</i> "night" but correct is <i>vak-ar-ā</i> see vakars	NU2 night stars as the firmament of heaven Harappa see Sparavigna see the modern Yes Zulu Watch	NU The heavenly firmament with dots to represent the stars in the night sky on the sweep of heaven's arc. vúξ vuktós	NU Two half circles represent night as the period of darkness between the setting and rising sun(s). vúξ vuktós "night"	NE (NU) The Cypriot sign is most similar to the Sumerian sign and combines the semi-circles into one contiguous jagged two-halved line interval.

NU signs symbolize the concept of "night". Linear B has two half circles dividing the day as the dark period between setting and rising sun(s). Sumerian, Cypriot and Elamite signs are variants of this idea. The Phaistos Disk and Luvian show night stars. "Nine" will be homophonic with "night". Symbolizing night pictographically was not that simple *in ancient eras*, for you had the day sky, the night sky, dawn and evening to consider. The Chinese symbolize night as "roof+person+ evening (nightfall)" as follows 夜. The Pharaonic Egyptian

[hieroglyphs](#)  are read as *grH* "nightfall", but correct is [vakars](#) (*vak-ar-ā*) "evening (in the)", as in Indo-European e.g. Latvian. The "[hanging scepter](#)" is a determinative in view of Latvian e.g. [kar-](#) "hang", [karas](#) "bar to hang things on".










Syllabic Grid Figure 21 -- the Syllable LA
 The Syllable LA in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (46)	
LU2 Jaritz #611 "person, man"  LUD small bowl Jaritz #575 Cuneiform  (LÚ) for people and professions	nDs "commoner" laity Nasal N instead of L i.e. a form closer to palatalized Latvian laudis „folk” and similar to my first name ANDIS (i.e. "a man of the people")	LA λαός "a person" This is simply a frontal view as opposed to the Phaistos Disk which shows a side profile.	LÁ λαός "a person" — Axe of Arkalochori  or  LA λαός "a person"	LA λαός "a person" The face mark may be a tattoo or an earring. The term is derived from the concept of "the people, folk, laymen, laity".	JE Currently JE but correct is LA λαός "a person" — Sumerian and Cypriot LUD "small bowl with handle" is homophonic with LUD "person".	LA A container on the ground. A troublesome sign originally thought to be a person as in the Linear B sign, but the one side shows a handle or grip λαβή on a small bowl.

LA

Linear B had "L"-based syllables! Ventris and Chadwick erred in alleging that Linear B was written in Mycenaean Greek but had no "L". Ancient and modern Greek both have an "L". Mainstream scholars have simply followed this error. [λαός](#) means "person, people, laity", an L-based term widespread in Indo-European languages and definitely present in Linear B. The [Wiktionary](#) has [Old High German liuti](#), also [liudī](#), ... Old Norse [lýðir](#) ... Old Saxon [liudi](#), Old English [lēode](#) "people" (*lads* and *lassies*), Russian [люди](#), Bulgarian [люде](#). Archaic Indo-European Latvian has a palatalized L-form in [laudis](#) "people, folk", which is not that far from Pharaonic [nDs](#) "commoner".

Syllabic Grid Figure 22 -- the Syllable LE
 The Syllable LE in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (27)	
LE4 Jaritz #14 "a plant top"  Ll2 "oil vessel" Jaritz #456 LI "fine oil"	The LILY (perhaps erroneously identified as a lily by Egyptologists) is the plant determinative in Ancient Pharaonic Egyptian hieroglyphs	LE "olive" The olive meaning is not currently assigned to this symbol, but that is what it represents.	LA 3 top leaves The above symbol is currently read as LA but should be read LE "olive"	LE ἐλαία „olive" The Linear B sign is an abstract of the archaic Phaistos Disk sign.	LE ἐλαία "olive" Read in error as RE.  (122) archaic ? or another sign?	LE Puzzling-- are these olives? or perhaps a rounded version of the more jagged older signs?

LE

LE was represented by the symbol of the "olive" in most ancient cultures, although older uses in Sumerian and Pharaonic Egyptian suggest an older meaning of "plant". Linear B sign B27 is read by mainstream linguistics in error as RE instead of LE.

Scholars suggest a two-way use of RE to also represent LE, e.g. alleging that the Greeks on Crete wrote **re-u-ka** instead of **le-u ka** for "white", or **re-wo** instead of **le-wo** for "lion" or **re-po-to** instead of **le-pot-to** (lepto) for "thin". That analysis does not hold water. The syllable RE is actually LE. The Linear B sign is an abstract of the comparable archaic Phaistos Disk symbol.

"The olive", *olea europaea*

Symbols for the Syllable LE show 3-flanged leaves



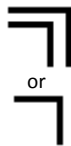










[Hermann Adolph Köhler, Köhler's Medizinal-Pflanzen](#) in naturgetreuen Abbildungen mit kurz erläuterndem Texte :Atlas zur Pharmacopoea germanica, austriaca, belgica, danica, helvetica, hungarica, rossica, suecica, Neerlandica, British pharmacopoeia, zum Codex medicamentarius, sowie zur Pharmacopoeia of the United States of America -- herausgegeben von Gustav Pabst., with color lithographs by Walther Müller and C.F. Schmidt, [Plate 109, Volume 2](#), Verlag Franz Eugen Köhler 1887, Printed by Herm. J. Ramm, Leipzig.

The [Wikipedia](#) writes that:

"[T]he olive ... is of major agricultural importance in the Mediterranean region as the source of olive oil.... The word derives from Latin *olīva* which in turn comes from the Greek *ἐλαία* (*elaía*) ... ultimately from Mycenaean Greek ... *e-ra-wa* [**sic**] ("elaiva"), attested in Linear B syllabic script.

Syllabic Grid Figure 23 -- the Syllable LI
 The Syllable LI in the Kaulins Ancient Sign Concordance

See the incredible *haliaetus* "osprey catching fish video" at [Arikive.org](http://www.arkive.org):
<http://www.arkive.org/osprey/pandion-haliaetus/video-00.html>








Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
 or 					 (33)	
LA ₂ Jaritz #832 & #833 "fly_wings"  LID or LIT Jaritz #759 depiction uncertain beak head? may not belong here	AL, Ē, HE no later L in hieroglyphs — "In Minoan times, Matala was most likely the port for the Palace of Phaistos, which is about 10 km north of the village." quoted from crete- guide.info	LI Abstracted drawing of a bird wing, talon & prey, with sky at line. — Wikipedia Osprey image below	LI perhaps a bird wing or feather  or  ARI. Variants?	LI ὀλιάετος archaic "sea eagle, osprey" "On the south coast, near Matala, you can find ospreys." creteguide.info .	LI ὀλιάετος An abstract sign of talons, beak and wings. In Linear B, not E-RAI-WO but E-LAI-WO for <i>ἔλαιον</i> "olive oil".	LI ὀλιάετος A bird in the air with the line below the wing as the ground, i.e. the earth, surface, as in other Cypriot signs also.



LI

LI represented the concept of "flight" as in ancient Indo-European e.g. Latvian [lidot](#) "to fly". In ancient signs for LI the sea osprey, sea eagle or similar large bird of prey predominates. The Phaistos Disk depicts an osprey or sea eagle, archaic Greek [ὀλιάετος](#). Linear B is arguably an abstracted sign of talons, beak and wings. Sea ospreys nest at the port Matala near Phaistos. The Linear B sign is correctly read LI (viz. LAI) and not RAI, as currently thought, so that **in Linear B**, the correct reading is not E-RAI-WO but E-LAI-WO for *ἔλαιον* "olive oil".

Syllabic Grid Figure 24 -- the Syllable LO
 The Syllable LO in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
	Egyptian 	no Elamite sign known yet		Axe of Arkalochori 	 (02)	
LIL3 sign at Ryan "slippery" "wet" ? Jaritz #918 #908+#823 LIL2 "rain" Indo-European e.g. Latvian lija "rain(ed)" is cognate with words for "pour(ed)"	UAH In the Old Kingdom UAH was surely an L (!) even if lost over time. Egyptian UAH grow, increase, or "libation" is comparable to Indo-European e.g. Latvian LIELs - "big" or LĒJ- LĒJU "pour(ed)"	Egyptian To UAHIT "libation" compare Indo-European e.g. Latvian LĪT "to pour," „to rain”. Since it almost never rains in Egypt, the sign became archaic.	WA8 The sign is not currently assigned a specific meaning but surely depicts raindrops or fluid coming down on a structure on earth or dropping into a receptacle.	LO There is no comparable sign on the Phaistos Disk but a comparable sign in perhaps two variants (or the same sign) is found on the Minoan Axe of Arkalochori (see also right)	LO λοξ-ός "crosswise" Currently read in error as RO . Axe of Arkalochori  possible variant	LO λοξ-ός "crosswise" Henry George Liddell, Robert Scott, A Greek-English Lexicon : <i>"slanting, crosswise, Hp.Off.11; λοξή (sc. γραμμή), ἡ, a cross-line, E.Fr.382.9"</i>

LO

LO in the older signs, when there was no "O", represents the concept of "rain" or [λοιβ-ή](#) and [λείβ-ω](#) "pour liquid, fluid, libation" but perhaps also [λείος](#) "smooth, even" [λεαίνω](#) "smooth, polish, grind" (using fluid). The Sumerian libation sign as also Old Kingdom Pharaonic Egyptian hieroglyphs for libation are virtually identical to the "dropping drops sign" on the Axe of Arkalochori, presumably showing "drops" as rain from the firmament above. Linear B and the Cypriot Syllabary use a crosswise sign for LO, Ancient Greek [λοξ-ός](#) "crosswise".

This sign helped pave the way for our decipherment of the Axe of Arkalochori, a decipherment which reads as follows:

βασιλεύ(ς) **The overseer of smiths**
λειο- θείνω **smoothened**
ύπείρο- λειο(ς) **this super (hyper-) smooth**
πέλεκυ(ς) **axe**
ᾶροχο(ν)τε(ς) **(for the) ruler.**

Syllabically that is read:






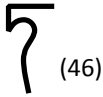



PA[BA]-SE-LA **The overseer of the smiths**
 (Latv.: *PA-CĒL-ais* "he who is raised up")
LO-THI-NE **smoothened**
PA-RU-LO **this super-smooth**
PA-LA-KU **axe**
(A)RO-KU-TE **for the ruler.**

In this connection, we found written at the *Dartmouth University Prehistoric Archaeology of the Aegean, Lesson 25: The Linear B Tablets and Mycenaean Social, Political, and Economic Organization* [as follows](#) in discussion of Linear B QA-SI-RE-U:

"QA-SI-RE-U: The connection of Linear B QA-SI-RE-U with Homeric basileus meaning "king" is undeniable, but it is equally clear that the Mycenaean **quasileus was nothing more than some kind of chief or leader of a small group, in one case a group of bronzesmiths.**"

We find that to be true on the Axe of Arkalochori. But recall, however, that in our analysis the RE syllable should be LE and the syllable QA should be BA, so that the purported Minoan word *quasileus* is actually quite clearly the word *basileus*.







Syllabic Grid Figure 25 -- the Syllable LU
 The Syllable LU in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
						
<p>LU originally "antelope"</p> <p>LULIM "stag, hart"</p> <p>(male of the red deer)"</p>	<p>WP "ox horns" Latvian LOPI "livestock" pronounced LUOPI Greek ἄλαφος "stag" Egyptian  DJA "fire drill"</p>	<p>LU "twisted horns" or "flames".</p> <p>All of the LU signs except Sumerian could also mean "flame", "light" or "lamp".</p>	<p>LU The single horn is read SU while doubled is thought to mean "flames"  Perhaps similar L-based terms covered both concepts.</p>	<p>LU ἔλιξ "twisted horn(s)" εἰλικόεις "crooked horns" Horn images are found at Minoan antelope horns and Wallachian Cretan sheep</p>	<p>LU currently read as JU</p> <p>Linear B ru-wa-ni-jo is not "Luwia (country)" as currently read but ὄρειαιλος "of the mountains"</p>	<p>LU ἔλιξ "twisted horn(s)" ?</p> <p>Both Linear B and the Cypriot Syllabary could also represent λύχνος "lamp" and the rest of the signs "flames".</p>

LU

[Linear B ru-wa-ni-jo](#) is not "Luwia (country)" as currently read, but [ὄρειαιλος](#) "of the mountains". Older LU signs seem to derive from the shape of twisted or crooked horns of antelopes or deer, e.g. Ancient Greek [ἔλιξ](#) "twisted horns", [εἰλικόεις](#) "with crooked horns". The newer LU signs could also represent the concept of Ancient Greek [λύχνος](#) "lamp", but not the older signs, as Sumerian has no word relating to fire in any form that begins with an L sound. As concerns the current JU reading for the Linear B sign, it can not be excluded that the sound "L" in some cases shifted later into "J" as e.g. "elbow" in Indo-European is [ἄγκών](#) in Greek but [elkon\(s\)](#) in Latvian.

Syllabic Grid Figure 26 -- the Syllable TA
 The Syllable TA in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (59)	See DA
TI "arrow" Jaritz #117	SN Compare Latvian DZIN- "propel" See image of Greek archer at NYPL Digital Gallery	TA τόξ-ευμα arrows	TU ₃ fletch of an arrow	TA τόξ-ευμα "arrow" τοξεύω "to shoot an arrow"	TA Arrows sticking in a target.	The Cypriot Syllabary is said to have only one sign for T and D syllables but this one better fits the syllable DA than TA.

TA

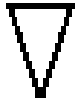











Greek [τόξευμα](#) "arrow". There is no doubt whatsoever that all of these signs relate to an ancient term for "arrow" or its fletch, although assigning the right vowel to the corresponding T-sound proved difficult.

The Wikipedia writes:

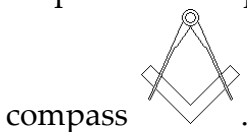
"fletching is the aerodynamic stabilization of arrows ... with materials such as feathers, each piece ... referred to as a **fletch**."

Ancient fletching can be primitive compared to modern bow and arrow constructions and are so drawn in some of the ancient signs.








Syllabic Grid Figure 27 -- the Syllable TE
 The Syllable TE in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
			 or 		 (37)	
DU ₃ "build, fix, make, do" Jaritz #454  TÙ The triangular sign as a rectangle? see Elamite sign	DI  DJRT to do, make — Cf. Latvian darīt "to"	TE This sign maintains the same triangular form as Sumerian and the Phaistos Disk. Sumerian also has a rectangular variant.	TA ₃ "hands in action" This concept is at the root of later Latin dexter  TU ₅	TE τέκτων square edge See also TEKTONIKO and ΒΙΩΜΑ and shape of Freemasonry square & compass 	TI τέχνη τέκτων compass (should TI and TE values be reversed here?)	TE The Cypriot Syllabary is said to have only one sign for T and D syllables but this one better fits the syllable TE than DE.

TE signs predate modern signs of free masonry and craftsman's guilds. Ancient Greek terms are [τέκτων](#) viz. [τέχνη](#) "carpenter, builder, mason, joiner, craftsman, master of an art, author creator, planner". The Cypriot Syllabary also uses the square edge but it is unclear why the ground (the bottom horizontal line) is included in the Cypriot sign unless it is intended to apply to the building of buildings. Compare here the general shape of this approximation of the [Freemasonry](#) square &



Syllabic Grid Figure 28 -- the Syllable TI
 The Syllable TI in the Kaulins Ancient Sign Concordance









Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (04)	
DR in concatenations „a serpent“ but surely in meaning ηIDRU "scepter" This is likely the origin of the aesculapius or caduceus	WDJ cord on stick Gardiner V25 The thyrsus sign represents a staff and the windings around the staff.	TI staff See Thyrsos image thumb at squidoo.com Dionysus, the Dual God: Tales of the Ancient Greeks	TI TA5 Thyrsus See a Thyrsos at Thor's Hammer Woodcraft online.	TI θύρσος θύρσα A thyrsus is "a wand wreathed in ivy and vine leaves with a pine-cone at the top, carried by the devotees of Dionysus".	TE (should current TI and TE values be exchanged for Linear B here?)	TI The Cypriot Syllabary is said to have only one sign for T and D syllables TI fits here best.

TI viz. **THY** (see also [Τειρεσίας](#) and the [caduceus](#))

The TI sign depicts a [θύρσος](#) viz. [θύρσα](#), (thyrsus viz. thyrsos) "a wand wreathed in ivy and vine-leaves with a pine-cone at the top", seemingly locating the earliest "scepter cultures" to locations where the [European spruce](#) is found, for [picea abies](#) (Scandinavian *tall*, Greek [ερυ-θρελάτη](#)) forms such cone-topped father(ing)-like scepters naturally. The Greek [caduceus](#) and the myth of **Tiresias** [Τειρεσίας](#) belong here.

Given this THY or TI value of Linear B, the sign combination $\frac{\text{TI}}{\text{R}}$ thus for example reads PA-THYR, Greek [πατήρ](#) *pater* "father" and not merely PA-TE (without the R) as currently thought by Minoan scholars.

Syllabic Grid Figure 29 -- the Syllable TO
 The Syllable TO in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (05)	
GUD6 watercourse Jaritz #935	tA "irrigated" Gardiner N23 Egyptian  DJATT "irrigation tunnels"	TO irrigation water-course — See irrigation image at historyforkids.org	I and IÁ Does the variant to the right have the added mark below to show that variant as irrigation?	TO τάφρος "irrigation ditch, trench".	TO τάφρος "irrigation ditch, trench"	TO Two of five "T-syllable" Cypriot signs better match D-based signs in Linear B but here TO is better than DO.






TO

The TO sign depicts irrigation ditches, trenches or watercourses as in Ancient Greek [τάφρος](#) "irrigation ditch, trench". The vertical line in Linear B holds up the two horizontal lines representing the irrigation facility. The question for Luvian is whether the irrigation ditch is marked at the bottom of the right variant, or is that a grammatical sign, or a sign of plurality?

The Cypriot Syllabary is said by mainstream scholars to apparently *not* distinguish D, T and TH, but I withhold final judgment on that issue. Two of the five "T-syllable" Cypriot signs better match D-based signs in Linear B, but the other three are better suited to T-based signs. Here the TO seems clear.

See also Egyptian  DJATT "irrigation tunnels".








Syllabic Grid Figure 30 -- the Syllable TU
The Syllable TU in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No sign known yet.	 or 	No comparable sign.	 (69)	See DU
DE3 "fire, flame" TAKA Halloran : "to start a fire"	tKA "candle, lamp" compare tKA to the Sumerian TAKA	An image of <i>Verbascum thapsus</i> L. can be seen at Hippolyte Coste	TÍ or TA4 Candle wick flame or smoke The second variant is very similar to the Sumerian sign.	See the <i>Verbascum</i> plant pod image at Forest & Kim Starr online.	TU τάφρος "irrigation ditch, trench"	For TU see DU, where the Cypriot sign better fits a D-based syllabic value.

TU

The TU sign depicts a candle-like fire or lamp or a plant from which wicks for burning were made in ancient days. The concept of "to start a fire", "to burn, slowly consume in smoke" in Ancient Greek was [τύφω](#). The Linear B sign shows a plant pod used to make candlewicks. A [wick](#) was called a [θουαλλίς](#). [Wicks](#) were made from plants such as the plantain, *Plantago crassifolia*, [which grows on Crete](#), or from varieties of *Verbascum thapsus* ("Aaron's rod", mullein or common mullein). [λυχνίτις](#) is another term for [candlewick](#) in Ancient Greece. See LU. Indo-European e.g. Latvian [DEG\(t\)](#) "to burn" and [DEGLis](#) "wick" help to explain the older terms found in Sumerian and in the Pharaonic Egyptian hieroglyphs as TAKA.

Syllabic Grid Figure 31 -- the Syllable DA
 The Syllable DA in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
	 "loaf" part Pharonic Letter T	No sign yet. Axe of Arkalochori 			 (01)	
DIM12 "separate" Budge has TESH for "divide"	T Latvian dona "loaf (part)"	DA δαίω "divide, division, fork"	TA or TU5	DA δαίω "divide, fork" See modern road fork sign online at Wikimedia	DA δαίω See modern T-roadsign online at Wikipedia	TA Indo- European DAL- e.g. Latvian dalīt means "to divide, fork, separate"

DA

The DA sign depicts [δαίω](#) "divide, division, fork (in a path, way or road)". The Sumerian and Egyptian signs show this also, and we have in other **Indo-European** languages e.g. Latvian DAL- meaning "to divide, fork, separate". See Latvian [dalīt](#).

Note that two similar signs on the Axe of Arkalochori thought to be the same syllable are not the same sign! One is the DA sign and the other is the SE syllabic sign (for more, see the syllable SE on this grid).The signs on the Axe of Arkalochori as others have seen them appear to this observer to be based on photographs made of an erroneous simplified copy of the Axe of Arkalochori.

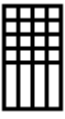





Syllabic Grid Figure 32 -- the Syllable DE
 The Syllable DE in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
						For DE see TE.
<p>GIR(I) "to cut, dagger" Jaritz #011</p> <p>It should perhaps be TSIR- as in Indo-European e.g. Latvian CER- viz. CIR- "cut" to describe "cutting (tools)".</p>	<p>Tp "dagger"</p> <hr/> <p></p> <p>See image at TourEgypt.net. An apparatus to siphon fluids (like Linear B sign B45).</p>	<p>DE A dagger</p> <hr/> <p>Ancient Crete (Malia)</p> <p>A similar dagger or short sword was found at Malia, Crete.</p>	<p>TÁ A dagger in hand.</p> <hr/> <p>Ancient Crete See ancient dagger at salimbeti.com Greek Age of Bronze: Swords/Daggers. ca. 1700 B.C.</p>	<p>DE A dagger</p> <p>διά- διακόπτω</p> <p>"to cut through"</p> <p>See the dagger from Malia, Crete at link at the left.</p>	<p>DE διάβασις "pass through". A wine or other liquid transfer apparatus (see the Pharaonic column). See also B44 (KE) for a similar apparatus.</p>	<p>The Cypriot Syllabary allegedly did not distinguish T, D and TH syllables.</p> <p>The Cypriot sign here better matches the other TE signs.</p>

DE

The DE signs seem to have originated in the concept of [διά-](#) viz. [διάγω](#) "passage, pass through, cut through". Two types of signs seem to have been used to depict this concept. One type of sign represents the idea of "passage through" via siphons or liquid transfer apparatus for grape wine and/or other liquids, e.g. pomegranate juice, and the other type of sign is the dagger or knife for the (like concept of "cutting through". The Phaistos Disk dagger sign might be retained in Linear B sign B91, a dagger-shaped object. Sumerian GIR(I) should perhaps be TSIR- as in Indo-European e.g. Latvian CER- viz. CIR- "cut" to describe "cutting (tools)".

Syllabic Grid Figure 33 -- the Syllable DI
 The Syllable DI in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
				no similar sign	 (07)	For DI see TI.
<p>EDU "house builder" depicted as edifice with pillars</p> <p>DIMUŠ "reed shelter"</p> <p>DURU7 "house" Jaritz #599</p>	<p>XA "pillar hall"</p> <p>Perhaps more correct here is Egyptian AAUT "pillars, colonnade"</p>	<p>DI "2" or Two columns?</p> <p>— Ancient Crete (Malia) See dagger image sclimbeti.com at Greek Age of Bronze: Swords/Daggers. ca. 1700 B.C.</p>	<p>TI2 Palace as in Linear B with three pillars.</p> <p>— Pillars were used to depict edifices. Compare Linear B pillars with Knossos.</p>	<p>It is possible to see  as a similar sign, but a KA syllabic value has been assigned to it on this syllabic grid.</p>	<p>DI δῶμα "palace, hall" Compare an image thumb clip of Knossos photo by Laplaender at the Wikimedia Commons:</p>	<p>The Cypriot Syllabary allegedly did not distinguish T, D and TH syllables. The Cypriot sign here better matches the other TI signs.</p>











DI

The DI signs seem to have originated in the concept of [δέμω](#) DEMO "to build" [δῶμα](#) DOMA "palace, hall, house". Compare Sumerian EDU "build" and DIMUŠ "reed shelter". **EDIFICE** is the modern derived word in English – so immensely long are the lexical arms of history. The [Online Etymology Dictionary](#) writes as follows on the etymology of [edifice](#):

"L[atin]. *aedificium* "building," from *aedificare* "to erect a building," from *aedis*, variant of *aedes* "temple, sanctuary," usually a single edifice without partitions, also, in the plural, "dwelling house, building," originally "a place with a hearth" + the root of *facere* "to make"."

Syllabic Grid Figure 34 -- the Syllable DO
 The Syllable DO in the Kaulins Ancient Sign Concordance








Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
	 DI	No Elamite sign yet.			 (14)	For DO see TO
DAR2 "shear, split" Jaritz #892 — 	"half a loaf"  DS "knife" determinative for "cut"	See at the left our illustration of an old vineyard cutting tool. See photo image at Wine Harvesting Antiques	TU5 Annick Payne in Hieroglyphic Luvian: an introduction with original texts has tup(a)i "to incise"	DO δορῖς "a special knife", Perhaps also used for cutting through leather, vines or shearing sheep?	DO διαρροή represents the pipe in Minoan plumbing. Sign B34 may derive from a similar concept.  (34)	Linear B Signs 15, 12 and 14 all have bent vertical holder lines and at that bend the symbols represent the midsection, channel and pipe in Minoan plumbing.

DO

Originally there were no O syllables. The older signs for DO have a root probably related to the DE signs for daggers, here in the sense of "shear, split, cut through": **δορῖς** is "a special knife" used to skin, flay animals, **δέρω**. Is DORIS Egyptian DS and Sumerian DAR2 ? Indo-European e.g. Latvian **durt** viz. **caur** "stab" viz. "through" show the common concept of „cut through".













DO signs in Linear B seem to have originated in the concept of **διαρροή** "a channel pipe". Linear B signs 15, 12 and 14 represent piping in the [Minoan clay pipe plumbing system](#) using symbols not unlike [modern symbols](#) for plumbing.

Syllabic Grid Figure 35 -- the Syllable DU
 The Syllable DU in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
 Jaritz #651  Jaritz #326		No Elamite sign yet.			 (51)	
<p>ŠU- DU8 "captive" (hand+tie?)</p> <p>ŠU- DU3 "handcuffs"</p> <p>————— Sumerian</p> <p>Are those rib-like elements "ties"?</p>	<p>XFTY "enemy"</p> <p>—————</p> <p>Egyptian A tied prisoner can be seen in the Pharaonic Man-prisoner Battlefield Palette (Wikipedia)</p>	<p>Egyptian The Wikipedia has a tied prisoner of Kefri at Man-prisoner of Ramses II</p>	<p>TU "ingot" ? "tied" ?</p> <p>—————</p> <p>Based on the Uluburun Shipwreck discussed in this work, the Luvian sign could surely be an ingot for this particular syllable</p>	<p>DU δυσμενής "enemy" as tied man</p> <p>—————</p> <p>Tied Peleset captives . from the Ramses III Mortuary Temple, Medinet Habu can be seen online at BibleArchaeology.org</p>	<p>DU δυσμενής "enemy" with tied hands</p> <p>—————</p> <p>One can see clearly how the Linear B sign is a more abstract version of the Phaistos Disc sign</p>	<p>TU δυσμενής "enemy"</p> <p>—————</p> <p>The Cypriot sign for DO is not slanted and has no double slashes right and is thus not to be confused with this TU sign.</p>










DU is represented by signs which derive from a concept such as [δουλεία](#) "slavery, bondage". The tied arms of the prisoner viz. captive on the Phaistos Disc are abstracted in Linear B and the Cypriot Syllabary, seemingly to represent the term [δυσμενής](#) "enemy". Various terms in the different languages focus on the act of "tying the captive" or "submission", or may denote a status of a prisoner, e.g. as a slave. Signs thus may differ depending on the level of subjugation depicted. The Luvian sign, originally thought to be a tied item, may in fact be an ingot, TU, on the basis of the signs on Uluburun copper ingots.

Syllabic Grid Figure 36 -- the Syllable SA
 The Syllable SA in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
						
eSSa₂ Jaritz #131 "a plant" ——— Safran in the ancient world was cultivated primarily on Crete and in Iran.	SHA Gardiner M8 Akhet season , This is translated as "inundation" but correct is "growth"	SA a flower Luvian  SS	SA, SI a flower Luvian variants  SA  SAX  SU	SS "Plural" Latvian aSS "sharp" same as Egyptian  "'the coil'" "plural" is an ear Latvian auSS	SA ξανθός "yellow flax" or yellow saffron Persian زعفران (za'ferân)	SA The Cypriot sign appears to be a simplification of the Linear B sign

The oldest SA signs seem to mark flowers, perhaps originally "safran". The word-ending Phaistos Disk slash is comparable to the Egyptian coil as meaning "plural" viz. "dual". By [dictionary pages](#), 48% of words in Greek starting with S are SU, but **only 3% SA**. When compared to an archaic Indo-European language such as Latvian these stats are reversed, so that **45% of S-words start with SA** in Latvian and only 3% with SU, showing a shift from North to South. In Linear B agricultural texts, flax (linen) is called [flaxen](#) by its color [ξανθός](#) "yellow", representing perhaps also "blossoms" [συνεξανθέω](#). Signs in ancient scripts are not limited to two-letter syllables but can stand for a full word or extended syllable such as SAN, so that [a-re-ka-sa-da-ra](#) in Linear B is thus rightly probably "a-**le**-ka-**san**-da-ra", i.e. Alexandra. For the arguably less ancient SA signs showing "loops" as in Luvian compare also e.g. Latvian [osa](#) "loop", perhaps marking plural in Luvian as well.



Syllabic Grid Figure 37 -- the Syllable SE
 The Syllable SE in the Kaulins Ancient Sign Concordance


Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite sign known yet			 (09)	
SE Jaritz #104 "to part" The most ancient SE signs show hand-like "finger" combs.	Sny <i>schnj</i> "hair" Gardiner D3 at Hieropaedia	Vinča culture  signs at theapricity.com	SE  Sl2	SE χαίτ-η <i>chaite</i> "hair" συζάω σύζυγος "wife"	SE σύρος , σαίρειν "to brush, sweep"	SE Axe of Arkalochori  SE

SE









The concepts of "(long) hair", "brush" viz. "to part" seem to be at the root of the older variants of these signs, in Ancient Greek [σύρος](#), [σαίρειν](#) "to brush, sweep", [χαίτ-η](#), (*chaite* "(long) hair"), the latter a potential root origin for the name of the ancient Indo-European Luwian "Hittites" viz. [χαίτη](#) "long-hairs".

[Roger L. Omanson](#) notes that *syzyge* (*yokefellow*) is used as a term for "wife" in ancient Greek literature, i.e. [σύζυγος](#) viz. [σύζευξις](#). The term may or may not be related. It is unclear

On the Axe of Arkalochori the sign  is the syllable DA but the alleged reverse sign  does not exist and is correctly drawn as

the sign . The error has occurred via scholars using a photograph of an imperfect copy of the axe. Our tracing of an older photograph of the original axe gives the comb sign.

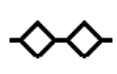





Syllabic Grid Figure 38 -- the Syllable SI
 The Syllable SI in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
						
<p>ZUBUD Jaritz #962 "fish"</p> <hr/> <p>Compare Latvian zivīte dim. of zivs Lithuanian žuvis "fish" Latvian žāvēt "to dry"</p>	<p>SICHNT "Food rack prop" O30, Gardiner</p> <hr/> <p>Santorini (Thera)</p> <p>For a Minoan fisherman with "mackerel or tuna" see Wikipedia image from Akrotiri.</p>	<p>SI</p> <p>A rack for drying fish.</p> <hr/> <p>For a photo of a fish drying rack in our day see http://blog.tra velpod.com/t ravel- photo/margre et98/1/12465 58734/fish- drying- rack.jpg/tpod .html</p>	<p>SI, SÁ fish hook</p> <hr/> <p>Usage for Å e.g. Latvian āķis „hook"</p>	<p>SI</p> <p>"SI" is for fish.</p> <hr/> <p>See also Sparavigna and Harappa</p>	<p>SI</p> <p>A rack for drying or smoking fish.</p> <hr/> <p>The illustration to the left is of a fish drying rack in a shape still used today.</p>	<p>SI</p> <p>A propped tent</p> <hr/> <p>Phoenician Semk (samekh or simketh)</p> <p></p> <p>Hebrew samekh means "support" while samak is "fish" in Arabic</p>

SI

This is a spectacular syllable because it shows clearly that the letters of the alphabet derived from syllabic signs, as here. The SI signs relate to fish and show a fish symbol, hook or a rack or tent for drying fish. The Phaistos Disk fish sign is seen by some to be a [mackerel or tuna](#). A "[horse-mackerel](#)" was called [σαῦρος](#) in Ancient Greek, a term similar to [σειραίνω](#) and [σειρέω](#) meaning "to dry, dry out, parch". The non-fish signs are supports viz. drying racks for dried fish. In Ancient Egypt fish were [dried in the sun](#). The Phoenician, Hebrew and Arabic terms for *samekh* involve the related concepts of "fish" and "support, prop, rack" (presumably for drying fish) and thus mesh with signs in the other languages.

Syllabic Grid Figure 39 -- the Syllable SO
 The Syllable SO in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite sign known yet.				
SA3 ZA Jaritz #957 Ryan: "necklace, human body" SU Halloran : "body"	SHE viz. Z "man, individual" in view of Indo- European e.g. Latvian ES "I" one must view the demonstrative pronouns	— For a Minoan fertility goddess see the image at TravelPod Aegean Sea Islands part I: Crete	SA3 (shaman ?, i.e. healer of the body) — Similar kinds of tasseled caps are found on ancient shamans.	SO σωμα "the physical body" fertility, wellness	SO σωλήν "channel, groove" σωμα "physical body" Bennett signs 12, 14, 15 are related as applicable to plumbing	SO Arguably a "channel" of some kind as the two lower lines usually mark the ground, here the intended channel?









SO

The SO signs relate to "channels", especially those of the human body, as sources of health, fertility and well-being.

Linear B and the Phaistos Disk appear to use two variant ideas to obtain the $\Sigma\omega$ syllable: [σωλήν](#) "channel, groove" and [σωμα](#) "physical body".

A similar match of concepts is also [found in Sumerian](#) where the same symbol has a meaning as a necklace (a "channel" of sorts) or as "the human body". In Linear B, the Bennett signs 12, 14, 15 are related to one another as applicable to the channels of Minoan plumbing installations.

Syllabic Grid Figure 40 -- the Syllable SU
 The Syllable SU in the Kaulins Ancient Sign Concordance











Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (58)	
SA ZUR Jaritz #650 "knobby container" "spout(ed), flow"	Xnm "eared pitcher" Gardiner W9 — Egyptian  "the coil" is an ear Latvian auSS "plural"	SU Long-eared object — The Cretan Hound is one of the oldest (hunting) dog breeds in Europe.	SÙ "(eared, flanged) container" similar to Sumerian spouted container — For Cretan Hound see http://www.kritikosich.nilatis.gr/	SU ζῶov "(eared) animal" —	SU animal head & body? or ear? —	SU This could be a man holding an animal tether or line or an ear with a decoration. The bent line seems to mean "side"

SU



The older SU signs relate to an eared container, pitcher or vessel of some sort with a spout or opening to permit liquid flow. The newer SU signs seem to have as their concept the idea of [ζῶov](#) (zoion) "animal" viz. [κῦov](#) "dog, bitch", in SU form as Indo-European e.g. Latvian *suns* "dog". Perhaps this is originally related to e.g. Latvian *ausains* "eared" viz. *auss* "ear", and that "eared" concept would be shared with "eared" containers.


Sumerian SU "hand" does not seem to be the appropriate SU syllabic comparable here and is probably generic with Indo-European e.g. Latvian [SAUJA](#) "inner palm (of the hand), handfull (in that sense)", but it could mean "side", which might be a related idea to the "side" ears.

Syllabic Grid Figure 41 -- the Syllable KA
 The Syllable KA in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (77)	
KALAM "Sumer, land, nation" Jaritz #578  KI, KIRI "place" GAGAR "area" Jaritz #812	XA "pillar hall" See the syllable DI where this Egyptian hieroglyph is also noted	KA The sign appears to use two double axes to mark a location. Luvian There are several possible Luvian variants.	KA "pointer"  HAR  HA	KA town, city, village or crossroads, also perhaps walled or pillared building, palace or fortification	KA This is the sign for a "ground" location such as a town, city, village, or crossroads and corresponds to Egyptian NTW.	KA The lower horizontal line is the ground surface and the arrow represents the location marker.

Signs for the syllable **KA** viz. **XA** represent the ground as earth [χαμαί](#) (Latvian *zeme*), or copper [χάλκ-ειος](#), or mark a ground location as a geographic crossroads, such as a town, village, city, or other settlement. Ancient variants of the Linear B sign

 of "X marks the spot" are found in Egypt  (NTW) and

China  "city symbol" (this sign was first seen by this author at [Norman Crowe, MIT Press](#) via [Notre Dame](#)).

Sumerian KALAM is arguably cognate with Greek [κεραμ-εοῦς](#) "of earth" with KALAM = KERAM. Scholars read KA-KE in Linear B as "copper" but we think one must consider XA(L)-KE [χάλκ-ειος](#) as the more correct alternative reading.

Syllabic Grid Figure 42 -- the Syllable KE
 The Syllable KE in the Kaulins Ancient Sign Concordance


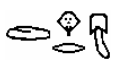








Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite sign known yet				
<p>KURUN Jaritz #431+#810 "brewer, alcoholic drink"</p> <p></p> <p>Jaritz #627 QAR GAR2 KAR3 read as "hair" but similar to signs B44 and B45 in Linear B</p>	<p>hQT "beer" IE-KALTE "(to) kiln-dry" Pharaonic K like Latvian KALns "hill" κέλευθος "passage of fluid" brewing. Egyptian k3mw 'vineyard' like כרם kerem</p>	<p>Cypriot Syllabary</p> <p></p> <p>RI "rowers, oars"</p> <p></p> <p>NI "boat" water as the line</p> <p></p> <p>KE "boatswain – rudderer"</p>	<p>HÁ "KHETA" Kittim</p> <p>The Luvian sign is similar to the Sumerian "hair" sign.</p> <p>In view of χαίτη chaite, arguably the "longhairs" i.e. Westerners</p>	<p>KE κέδρος "cedar" The cedar may be connected to objects used to depict the syllable KE in other languages as the wood out of which ancient boats were made.</p>	<p>KE κέλευθος "winepress" Compare German KEiter for winemaking Luvian Are Luvian Kheta (Khelta) the later so-called Kaldu, i.e. Chaldeans? as allies of Elam, of Sumerian stock</p>	<p>KE Oar (see RI) and boat sign (see NI) plus a rudder. This sign can only represent κέλευστής "boatswain, i.e. he who gives the time to the rowers" a homophonic term with κέλευθος "passage"</p>

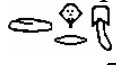


Signs for the syllable **KE** denote [κέλευθος](#) "fluid passage viz. conversion, brewing and wine-making". The Pharaonic hQT is correctly transcribed as [IE-KALTE](#) "kiln dried" as in Indo-European e.g. Latvian. The Linear B signs B44 "KE" and B45 "DE" are similar to a siphon apparatus used in Ancient Egypt









to collect ("in passage") fermented wine or brewed beer. The apparatus at the left is my illustration of part of a larger wine press installation found in a larger image at [TourEgypt.net](#).

Syllabic Grid Figure 43 -- the Syllable KI
 The Syllable KI in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
					 (67)	
<p>KUŠ</p> <p>"skin, hide leather" Jaritz #008 Greek κῶας "fleece" found as „animal skin, pelt" in other Indo-European tongues e.g. Latvian KAŽoks or Russian кожа „pelt"</p>	<p>DCHR</p> <p>"leather" Alone, the sign  is a determinative for leather. Egyptian  [alchAr] or XAr "sack" Gardiner V19 Perhaps cognate with Greek κώρυκος ?</p>	<p>KI</p> <p>"sack with contents ?" ———</p> <p>A cylindrical bag was found in Tomb KV54 in the Tutankhamun embalming cache: see the image at the Met Museum</p>	<p>KI</p> <p>"sack with contents" or is this the same sign as RI ?</p> <p></p> <p>KWI KWA</p> <p>This variant is similar to the KI sign of the Cypriot Syllabary</p>	<p>KI</p> <p>animal hide, skin, pelt</p> <p>Greek κῶας "fleece"</p> <p>Russian кожа „pelt"</p> <p>Latvian KAŽoks "pelt, fur coat"</p>	<p>KI</p> <p>animal skin bag with a closure</p> <p>κώρυκος (korykos)</p> <p>"leather knapsack"</p> <p>See "What's in the Bag?"</p>	<p>KI</p> <p>animal skin bag with a closure ? similar to Luvian variant The lower horizontal line is the ground. The upper parts could represent a bag with a closure.</p>

Signs for the syllable KI represent leather or an animal skin, hide or bag as in Ancient Greek [κώρυκος](#) (korykos) "leather knapsack", [κέροκος](#) "tail of an animal" (pelt ?) and [κῶας](#) "fleece", found in other languages as "animal skin, pelt" as in the Sumerian KUŠ, Latvian [KAŽoks](#) or Russian [кожа](#) „pelt". Even Egyptian hieroglyphs offer a confluence at  which is read as DCHR or DHR to mean "[leather](#)" whereas  alone is seen to be used as a [determinative](#) for "leather", etc. Egyptian , read as [\[alchAr\]](#) viz. [XAr](#) "sack", [Gardiner V19](#), is arguably cognate with Greek [κώρυκος](#) ?

Syllabic Grid Figure 44 -- the Syllable KO
 The Syllable KO in the Kaulins Ancient Sign Concordance


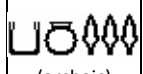


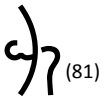






Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite sign known yet.			 (70)	
KUIA KuSu ₂ UH ₃ "insect, bug" Jaritz #927 looks like a 1-sided abstract depiction	KHpr HPR "dung beetle, scarab beetle, Khepri" Gardiner, L1	Latvian Latvian Daina 1160 sings of the dung beetle vabule rotating the ball of the Sun, just as in the Pharaonic Egyptian pantheon. HPR=VBL?	Kl _x A more abstract sign of a bug with arms body and legs?	KO κόρις "bug" κώνωψ "gnat, mosquito"	KO κόρις "bug" κώνωψ "gnat, mosquito" This sign is similar to the hieroglyphic tail sign at Kl	KU κόρις "bug" κώνωψ "gnat, mosquito" (Should one exchange the Cypriot Syllabary KO and KU values?)

Signs for the syllable **KO** represent scarab beetles viz. insect bugs such as in Ancient Greek [κόρις](#) "bug" or [κώνωψ](#) "gnat, mosquito". Compare Indo-European e.g. Latvian [kukainis](#) "bug" and Latvian [kost](#) "to bite".

The Pharaonic Egyptian fascination with the scarab or dung beetle may be thought unique, but there is mention of that beetle rolling a ball of dung also in the primordial [Latvian Dainas](#) ([Latvian Daina number 1160](#)).

Is the Phaistos Disk bug [Heteroptera](#)? It could be the Cretan Soldier Beetle *Lygaeus saxatilis* viz. the German soldier beetle *Lygaeus equestris*, or *Graphosoma creticum* "striped shield bug" or *Eurydema* "shield bug" or just "bug" generally.








Syllabic Grid Figure 45 -- the Syllable KU
 The Syllable KU in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
	 (archaic)	No Elamite sign known yet.			 (81)	
KUR3 Jaritz #013 "cut"   KIRI6 KI+RU5 Jaritz #812+#786 "orchard, plantation" field plus plant and root	K3NW "garden" K3NW "gardener" note the three trees as the determinative ——— Indo-European e.g. Latvian KOKS Lithuanian kuokas "wood"	No Elamite sign known yet. Axe of Arkalochori  or  KU Variants of a plant sign, one also with roots (these could be 2 different signs)	KU "field ("cleared field" ?)  currently read as I(A) ??	KU KU κορμός "trunk of a tree (with the boughs cut off)" ——— Indo-European e.g. Latvian KOKS Lith. kuokas "wood"	KU Tree trunk as a chair ? See the stump chair at the Bayard Cutting Arboretum by sonyguy at pbase	KO a stump chair Should KO and KU be exchanged in the Cypriot Syllabary? A stump chair image is found at Kingdom of Style

Signs for the syllable **KU** seem to represent "wood" as fields, gardens, or woods, but often in the sense of land cleared for agricultural use and pertaining to its uses and products, such as cleared land for planting, e.g. Ancient Greek [κῆπος](#), "garden, cultivated area" and/or the use of resulting tree stumps for furniture, the most basic wooden chairs and presumably tables.

A very speculative interpretation for Linear B -- if the sign is not a wooden chair -- is that someone thought to place youth and age abstracted side by side as a cane and as a pregnancy with fetus. The terms would match but it looks like a large stretch: [κυλλώω](#) "crook, flex" [κυμάς](#) "pregnant woman". It is mentioned here to show that many options were examined.









Syllabic Grid Figure 46 -- the Syllable GA [ΓΑ]
 The Syllable GA in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite sign known yet.			 (57)	
<p>GANĀ Jaritz #840 "field; area (geometric figure)"</p> <p></p> <p>KA5 ("billy-goat") Jaritz #657</p>	<p>SCHSA Gardiner F6 antelope ?</p> <p>gHs gazelle ?</p> <p>likely intended is gazelle</p>	<p>No Elamite sign known yet.</p> <p>Egyptian See the Ancient Egyptian bestiary at André Dollinger online.</p> <p>A Cretan Goat image is found at Mtiedemann Wikimedia Commons</p>	<p>TANA This is a triangulation land survey matrix currently "perhaps misread" as TANA, although more likely correct is GANĀ to refer to a land plot, as in the Sumerian sign GANA.</p>	<p>GA αἶνελοϝ "of a goat"</p>	<p>JA The "land plot" sign is currently read as JA but correct is likely GA.</p> <p>GA γαῖα "land" land parcel γύνηϝ2 "a piece of land"</p>	<p>GA αἶνελοϝ</p> <p>Logically in the context of the other language signs, this must be an abstracted goat with horns.</p>

Signs for the syllable GA use two homophonic (same-sounding) terms in the concepts of [γαῖα](#) "land" and [αἶξ, αἰγός](#) "goat" (compare Latvian [kaza](#) "goat"). It is unclear to this author's zoologically untrained eye whether the Egyptian hieroglyph is an [antelope](#) or a [gazelle](#). The Cypriot sign looks like an abstraction of an animal with two horns. The Cretan Goat **Kri-kri** (*Capra aegagrus creticus*) viz. Cretan Ibex is native to the Eastern Mediterranean, but now found almost only on Crete.

The Luvian land survey triangulation sign is fantastic evidence of the existence of sophisticated [land survey](#) in ancient eras, known already for [Ancient Egypt](#). Sumerian and Linear B show land plot signs. **All the G-based syllables are "earthy"**.










Syllabic Grid Figure 47 -- the Syllable GE [ŒE]
 The Syllable GE in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite sign known yet.			 (78)	
<p>KI Jaritz #812 geo- "Earth" as the four directions: 4 corners  Jaritz #124 ŠEN3 "quail" abstracted</p>	<p>GE Together with D58: this syllable also surely represents GEB, "the Egyptian god of the Earth"</p>	<p>Egyptian CHENNU "quail" CHENNU See the quail image at the NYPL Digital Gallery</p>	<p>LI3 ?? presumably the four directions  SA4 could be the Sun and thus may not belong here</p>	<p>GE Χέννλιον <i>quail</i> (Egyptian <i>chennu</i>) χέννας "goose"</p>	<p>GE geo- Κεντρώω "occupy a cardinal point" of the four directions Linear B has all four directions</p>	<p>GE geo- Κεντρώω "occupy a cardinal point" of the four directions The Cypriot Syllabary has one direction</p>

Half the signs for the syllable GE are rooted in the concept of GEO in the sense of "earth", whereas the other signs relate to terms for GEESE or perhaps quail, Egyptian CHENNU. The signs may vary because of language differences in the hard and soft G as in the hard G in GEESE but fricative DZH sound GEO. In Ancient Greek we find as "earth words" the general prefix [geo-](#) and the more specific [κεντρώω](#) "occupy a cardinal point" of the four directions of Earth, whereas terms for birds are [χέννλιον](#) "quail" (Egyptian *chennu*), Sumerian ŠEN3 and [χέννας](#) "goose" (*Anser cinereus*). Luvian LI3 appears to be an error.

[GEB](#), "the Egyptian god of the Earth" may have the same syllabic GEO word root as the other languages but Indo-European viz. Latvian [kēpa](#) "disorder, chaos (of the void), semen" as the mythical origin of the earth is likely for GEB.


Syllabic Grid Figure 48 -- the Syllable GI [GI]
 The Syllable GI in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite sign known yet.			 (21)	
<p>GIMU Jaritz #919 "woman" as a simple anatomical feature Sumerian</p>  <p>GAN Jaritz #271 "to bear young"</p>	<p>MN-DJ "breast" Gardiner D27A variant "wet nurse" Compare Linear B sign B89</p>  <p>with the Sumerian sign for childbearing</p>	<p>_____ Egyptian These Old Kingdom hieroglyphs</p>  <p>represent the Pharaonic word for "birth" (<i>i-z-mes</i>) asmes (according to Budge).</p>	<p>ZI (or DZI ? or GI ?) "breast ?" Currently read as "man" but correct is DZI or GI "human" e.g Latvian DZIM- and Lithuanian GIM- "birth"</p>	<p>GI "breast, woman" in connection with γίννομαι "to be born" γυνή "woman" and representing the suckling young.</p>	<p>Currently read as QI but correct is GI Used in Linear B texts for ῥίς "sheep". See also sign B89 to the left.</p>	<p>Currently read as JA but correct is GI „breast, woman" A softer Jl pronunciation later is of course possible in Greek.</p>

The "earth root" of the syllable GI is not "Mother Earth" but rather the concept of human birth, symbolized by childbearing images or a mammary image of the human breast-feeding mother. In Ancient Greek there is not a whole lot of word dissimilation between these concepts: [γίννομαι](#) "to be born", [γυνή](#) "woman" and [γένεσις](#) "genesis", Latvian [DZIM-](#) and Lithuanian [GIM-](#) as the roots of "birth". That GI rather than JA is correct in the Cypriot Syllabary can be demonstrated by the Cyprian term which is currently read as [i-ja-sa-ta-i](#) to mean [iasthai](#) "to heal". Cypriot [ύγιαστός](#) in Greek means "capable of restoration_to health, curable" so that the Cyprian term * 𐤀 𐤁 𐤂 𐤃 * does not read [i-ja-sa-ta-i](#) i.e. [iasthai](#) "to heal" but rather with a "GI" has the "hygiene" root *hugieia* [ύγίεια](#) "good health so that [ύγιαστός](#) means "healing".

To GIMU in Sumerian compare Indo-European e.g. Latvian [DZIM-](#) "be born" as in the phrase *es DZIMU* meaning "I was born" in Latvian. Lithuanian has *GIM-* for the same concept, thus giving the GI form for purposes of our syllabic grid.

Only the second half of the Egyptian term above, i.e. DJI, actually means [breast](#) while the MN hieroglyphic element is used in variants together with DJI and in hieroglyphs such as [Gardiner B5](#) to mean "wet nurse".

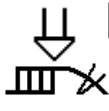





The following Egyptian (Old Kingdom) hieroglyphs  represent the Pharaonic word for "birth" (*i-z-mes*) **asmes** (according to [Budge](#)). **MSJ** viz. **MSN** are current "birth" terms in Egyptological transcriptions. These have Indo-European comparables.

The term [IZMEST](#) in Indo-European e.g. Latvian means literally "out throw" i.e. **iz-mes(t)** in the sense of "birthing", which is the same as the Pharaonic. Latvian [miesa](#) viz. **miesiņa** (diminutive) means "flesh" and is said of "birthing", conceptually meaning "to flesh out" so that Latvian [maiss](#) means "placenta" or "sack".

Marie Parsons at [TourEgypt.net](#) has a feature story on [Childbirth and Children in Ancient Egypt](#) in which she writes: "One spell to assist the birth-process went like this: "Come down, placenta, come down!", showing the Pharaonic appreciation of the physical nature of the birth process.

There is very little doubt in this author's mind that all of these birth terms in the various languages are defined by a common lexical origin.

Syllabic Grid Figure 49 -- the Syllable GO [ŪO]
 The Syllable GO in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
	 see hieroglyphs.net	No Elamite sign known yet.		No similar sign on the Phaistos Disk.		
GUD-APIN "plow team" Jaritz #563+#097 GU10  "sprouting seed" Jaritz #102	SKA "to plough" Latvian SKALDI "fork on the plowshare" see škelt The image thumb right shows plowing in Ancient Egypt, Image source right.	Egyptian See a plowing image from Egypt at Tomb of Sennedjem . The Yorck Project: 10.000 Meisterwerke der Malerei . DVD-ROM, 2002. ISBN 3936122202. as distr. by DIRECTMEDIA Publishing GmbH.	HU Not recognized as such by Luvian scholars but this is surely a plow share abstraction	The lack of this sign on the Phaistos Disk is a product of the fact that "O" was a later addition to syllabic writing. Some signs will overlap with older GU-based concepts.	Currently read as JU but correct is GO plough (plow) with upside down olive, signifying seed viz. seeding	GO The horizontal line marks the ground so the rest is a plow or similar tool in simplified abstract form.

GO is a GU-based "earth" syllable rooted in the concepts of plowing and seeding the earth. Terms in Ancient Greek are [γονικός γονή](#) "of the seed" and [γεωτόμος](#) "plowing".

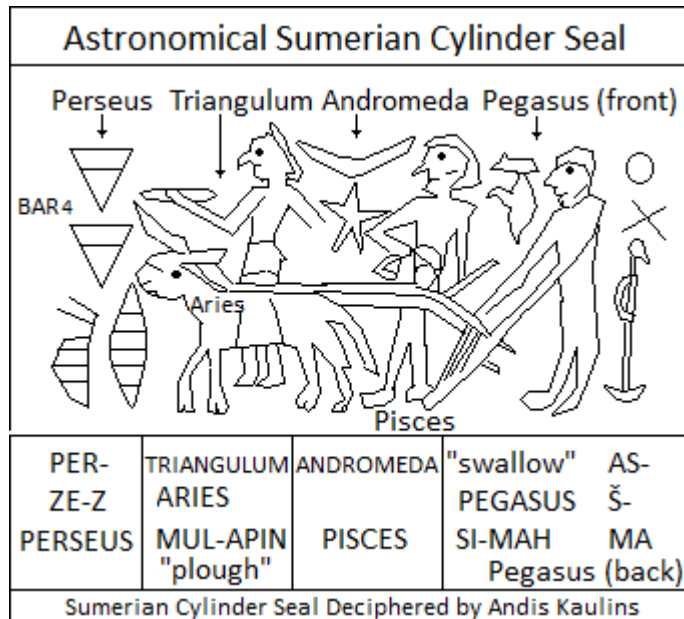


Our illustration of a Sumerian cylinder plow seal with men and ox plowing a field. See the photo online at [Crystal Links](#).

With the help of the Kaulins Ancient Sign Concordance it was possible to decipher the foregoing cylinder seal as follows, and more such decipherments by others will be assisted viz. enabled by a judicious use of AnSignCon™ in the future.

As one can see, the cylinder seal is astronomical²⁸ and represents

star groups along the path of the ecliptic from Perseus to Aries and Triangulum at the Sumerian [MUL.APIN](#) "plow" which takes in Pisces & Andromeda with Pegasus as SIM.MAH, the swallow.



The Sumerian MUL.APIN series of stars was first published to the Internet by this author many years ago at [LexiLine.com](#).

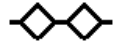








²⁸ Note here for Sumerian **SIMMAH** that Latvian [asmīte](#) is a surface measure = 1/8 of an ancient "**Haken**". The root of the term is an ancient word for "[eighth](#)", as e.g. Lithuanian [āšmas](#), Old Prussian [asma-](#), and Old Slavic [осмь](#)). One (1) Prussian Haken was a surface measurement = 31065 square meters = 7.676 328 675 3 acres so that the Latvian [asmīte](#) as 1/8 of a Haken was the equivalent of about 1 acre. **Preussische Regesten, Bis Zum Ausgange Des 13. Jahrhunderts**, 1973, Georg Olms Verlag, Hildesheim--New York. Reprint of original publication by Dr. M. Perlbach, 1876, Königsberg, Prussia. To obtain a copy of the book, contact Olms - Verlag Booksellers in Germany at: <http://www.olms.de/> or E-mail their Customer Service office at info@olms.de. See <http://home.arcor.de/potilkow/heinrichl.htm>. See also <http://www.daniel-stieger.ch/masseinheiten.htm#h>.

Syllabic Grid Figure 50 -- the Syllable GU
 The Syllable GU in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite sign known yet.				
GURUM GAM Jaritz #664 "bent" Sumerian tuKUL viz. tuHUL "thigh" Latvian gūža , gurns "hips, thigh bone" iegūž "to obtain"	ISU Jsw Gardiner F44 The "joint of meat hieroglyph" meant ancestry & inheritance. In Latvian the two concepts as gūž- are homophonous.	Indo-European e.g. Latvian gūža "hips, thigh bone" iegūž "to obtain" kauli "bones"	HU plow share <hr/> The Luvian GO sign may belong here since GO was not a syllable in early days.	GU yuioṽ "joints" gūža "hips, thigh bone" κωλη Latvian kauli "bones"	Currently read as QO but GU could be the correct reading. yúnç The curved wood in a plough-share.	GU The Cypriot GO sign may belong here since GO was not a syllable in early days.

The Egyptian hieroglyph "leg bone with meat" is called the "[joint of meat](#)" hieroglyph. Bones stood for ancestry and inheritance and this was therefore an important sign. The GU signs overlap with GO since O-syllables are a later development. The basic root focus of GU syllables here is the essence of living flesh and the skeletal system, including ancestry, inheritance and heritage, i.e. "the old bones" of the clan. Latvian [gūža](#) means "hips, thigh bone" and [iegūž](#) or [gūž](#) mean "to obtain", so that also here there is a GU syllable for a term that means both "hips, thigh bone" and "obtain" (also of course inherit), as in the Pharaonic Egyptian hieroglyphs. The root concept here is "bent" as in "joints" and hence perhaps also related is Ancient Greek [yúnç](#) "the curved piece of wood in a plough, to which the share was fitted, the tree" at the joint, whence [yuioṽ](#) "joints" and [κωλη](#) "thigh bone with meat".

Syllabic Grid Figure 51 -- the Syllable ZA
 The Syllable ZA in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite sign known yet. —			 (17)	
<p>ZA "necklace" or "man as a being" Jaritz #957</p> <p>ZI (see ZE) "life"</p> <p>Indo-European compare Latvian SAITE "necklace" DZĪVE "life"</p>	<p>ZA SA "protection fetter for animals"</p> <p>Egyptian </p> <p>ANKH Latvian anka loop that holds the sail to mast</p>	<p>Egyptian ANKH and Sumerian</p> <p> AN+</p> <p> ZAG ANZAG "boundary" Jaritz #014 + Jaritz #625 one above the other could be related.</p>	<p>ZA "horizon, boundary"</p> <p>Luvian The ZA and ZI signs (horizons without the Sun?) differ only in terms of the bottom "sash" which could make the vowel longer ?</p>	<p>ZA protection fetter for animals or collar ζώνν</p> <p>See images of modern horse collars at the Wikipedia</p>	<p>ZA "life, alive" The Egyptian ankh is the same sign.</p> <p>An alternative explanation can be based on Sumerian ANZAG as a "border of heaven, (Sun?) horizon".</p>	<p>XA XEIO ?</p> <p>Other Cypriot signs suggest that these symbols are "sides" as the arms of "man as a being". but that could be speculative.</p>

Signs for the ZA syllable stand mostly for "life, to live" and variant ideas such as "man as a being" or "protector". Ancient Greek has [ζάω](#) "to live", with many variant forms and cognates. Other archaic Indo-European terms such as e.g. Latvian [dzīve](#) "life" may show an ancient root in the fricative DZ- format. **Sumerian** „man as a being" and „necklace" are homophonic (same-sounding) terms, so that one of several possible explanations for the Egyptian ANKH's origin as a looped amulet of protection is this double-sided naming aspect. The Sumerian ANZAG has two signs: a star and a **similarly formed bowtie** in terms of extensions that could represent the measurement points of the solstices and equinoxes and hence could have been used as the sign for boundary or horizon.

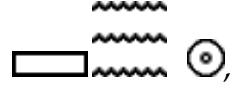
Syllabic Grid Figure 52 -- the Syllable ZE
 The Syllable ZE in the Kaulins Ancient Sign Concordance


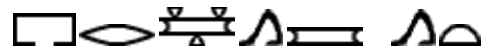
Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
						No Cypriot sign known.
<p>ZE</p> <p>Jaritz #130 Ryan says: "stick with pennant stuck upright in water, used as a height-marker for its rising"</p> <p>Jnbw-n-JTY gnomon at Memphis R. Hannig</p>	<p>DJED</p> <p>Died Pillar</p> <p>Sumerian</p> <p>ZA4 (Jaritz 133)</p> <p>Did the above Sumerian sign precede DJED?</p>	<p>ZE</p> <p>measuring stick</p> <p>Sumerian</p> <p>ŠE</p> <p>"grain, barley" (Jaritz #669)</p>	<p>ZI</p> <p>"horizon, boundary"</p> <p>Luvian</p> <p>The ZA and ZI signs (horizons without the Sun?) differ only in terms of the bottom "sash" = vowel longer ?</p>	<p>ZE</p> <p>ζειά "Einkorn" <i>triticum monococcum</i></p> <p>Sumerian</p> <p>ZIZ</p> <p>"emmer wheat"</p> <p>Egyptian</p> <p>ZWT</p> <p>"wheat"</p>	<p>ZE</p> <p>measuring stick</p> <p>_____</p> <p>Idealized Nilometer illustrated in our drawing</p> <p>19 cubits Highest mark 18 cubits Disaster 16 cubits 15 cubits Security 14 cubits 13 cubits 12 cubits Hunger</p>	<p>Egyptian Nilometer</p> <p>Arabic miQYAS</p> <p>"measurement"</p> <p>See source as found at WaterHistory.org</p>

Signs for the syllable **ZE** represent measuring sticks or seed heads of grain, which look similar to a marked measuring stick. In the case of Sumerian, the two separate symbols have the syllabic values **ZE** and **ŠE**. Ancient Greek has [ζειά](#) "Einkorn" *triticum monococcum*. There may be overlap with the earth prefix [geo-](#) and **GE**: e.g. one might normally expect for earth measure the term [γεωμετρέω](#) (geometry – "earth measure") but one sees that there was also a Z-syllable earth term such as Ancient Greek [ζείδωρος](#) "epithet of the earth" or Sumerian [zikura](#) "the Earth". [Strabo](#) for "measure a country" has [χωμετρέω](#). Compare also [γεόομαι](#) "to become Earth" with Latvian [zeme](#), Lithuanian [žeme](#), and Old Prussian [semme](#) "Earth".

Egyptologists have long debated the origin of the DJED pillar and this syllabic grid would seem to resolve the issue in favor of an origin as a simple measuring stick. The **Djed** Pillar in Ancient Egypt was associated with Pharaonic Memphis, the Summer Solstice and immortality, and is said to have **measured** the seasons of life. An Egyptian Nilometer measured the flooding of the Nile, according to which there were 3 flood stages and thus only 3 seasons, as explained in [the flooding cycle of the Nile](#), via Wikipedia:

The three stages of the Egyptian flood cycle were **Akhet** ..., **Peret** ..., and **Shemu** ... **Akhet** was the first season of the year, between the months of June and September. **Peret** ... marked the time when ... crops grew in the fields and were harvested, running from October to mid-February. **Shemu** was the third and last season of the Egyptian year which ran from mid-February until the end of May.... [links added by author]

Egyptologists recognize that , the hieroglyphs they transcribe as SHEMU, mean "[low water](#)", equivalent to Indo-European e.g. Latvian ZEMU e.g. [zemu ūdens līmeni](#) "low water level". Current transcriptions and explanations for [Akhet](#)

 and [Peret](#)  are, however, correctable. AKHET, as we know from our syllabic grid's SA syllable is improvable to a transcription of IESACHAT which is surely comparable to Indo-European e.g. Latvian [IESĒT](#) "to sow", viz. [IESĀKT](#) "to start", whence [SAKNE](#) "root". i.e. this was "a time to plant", whence the plant hieroglyph. PERET shows "the legs hieroglyph", in Indo-European e.g. Latvian [IET](#) "to go", whence a correct reading of PERET as PĀRIET which is the equivalent of Indo-European e.g. Latvian PĀRIET as in [Ūdens pāriet](#) "water overflows".







Syllabic Grid Figure 53 -- the Syllables ZI and ZO
 Syllables ZI & ZO in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
ZUM "run, flow" Jaritz #935	iTi Gardiner V15 "move" Indo-European e.g. Latvian	IETI ἔω running man (our value for this sign)	TI ἔω "ieti" to go Luvian leg symbol	ZE ἔω "run" See an image of an "ancient potter's wheel" at the Wikipedia	ZO ἔω Perhaps "a torch" "a potter's wheel" or a "molten cast" of metal ΧΥΤΡΕΥΣ "potter" ἔω "flow, stream, casting (metal)"	ZO ἔω "flow, go, run" ἔωμα "flow, stream" If ZO is ZI then Sidon might be zo-ta-i-le-wo-se and obscure e-pi-zo-ta would be a-po-zi-ta ἀπόξυσσις "sharp points" for weapons
	IET	Sumerian ZUM compare				
IZI	IET	Egyptian				
IZIM "fire, hurry" Jaritz #339	IETI "to go"	DJATT "irrigation tunnels"	TA6			
	IESI "will go"					
ZI5 Jaritz #798						

The root for the signs here is found in concepts of movement: to move, to walk, to run, to flow, e.g. Ancient Greek [ἔω](#) "flow, go, run", [ἔωμα](#) "flow, stream, casting (metal), molten", [ἔω](#) "to run. Is [ἔω](#) derived from [ἔω](#) in Mycenaean Greek? [Wikipedia on THETA](#) writes: "In Ancient Greek, θ was an aspirated voiceless dental plosive /tʰ/. In Modern Greek it is the voiceless dental fricative /θ/ (as 'th' in "thing")."

Sumerian had no "O", so ZI or ZO syllabic roots are Z-based terms with other vowels. ZO in Mycenaean Greek is doubtful. Classical Greek starts few words with ZI or ZO. [Palaeolexicon](#) has no words beginning with ZI or ZO for Linear B.

Syllabic Grid Figure 54 -- the Syllable ZU
 The Syllable ZU in the Kaulins Ancient Sign Concordance

Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite sign known yet.			 (87)	No comparable sign known.
ŠUDUN ŠUDUL „yoke” ŠŪ2 "cover" Jaritz #908 +#645)  ZI3 Jaritz #893 "belt"	WSICH Gardiner S11 determinative "neck collar" ——— Michael Williams writes: "[O]xen achieved [power] via a ... collar or yoke ... held in place by an ox-bow..."	An image of British oxen before industrialization can be found at The Foxearth and District Local History Society, East Anglia, England, UK (see quote left from that source)	ZU Compare Latvian ZOBI pronounced ZUOBI "teeth" ——— Indo-European e.g. Latvian SIKSNA "belt" SAKTU "brooch"	ZU ζυγός ζεῦγος "double yoke" Indo-European e.g. Latvian JŪGS „yoke” ŽOGS „enclosure"	ZU read in error as TWE ζυγός ζεῦγος "double yoke" ζώνη zóni "girdle, belt sash"	See an image of a double yoke for oxen at the website Notable Dakotans

Signs for ZU incorporate the idea of girdle, belt, sash, yoke or collar, e.g. Ancient Greek [ζυγός](#) "yoke".

See also Latvian [jūgs](#) "yoke", [žogs](#) "enclosure". Sumerian *šagadu* ([ša3-ga-du3](#)) as "special type of garment" is the same as Latvian *sakta* "brooch".

Saktu is a grammatical form in Latvian of *sakta* and is equivalent to Sumerian *šagadu* = SAKTU "brooch". As an example, an image of a *sakta* brooch can be found at [Latvianstuff.com](#).

W-BASED SYLLABLES and VOWELS





With ZU we have finished the consonantal syllables, i.e. those involving a consonant plus vowel. We now turn to what we call the W-based syllables and the vowels, which share a genetic relationship: W-based syllables preceded the vowel signs. The initial W-based syllables followed a format that we described at the [Lingwhizt](#) in our March 23, 2006 posting titled [Vowel Sounds in Pharaonic Egyptian Hieroglyphs](#) as follows.

Pharaonic Egyptian Vowels in Hieroglyphs

The current view of the Egyptian hieroglyphs is that they contained no "vowels". Although this is true in terms of "modern" vowels as used to separate consonants, the Egyptian hieroglyphs do in fact have symbols for vowel-type sounds which did not function as "vowels" per se but which represented separate language elements as specific sounds.

Decipherment of the Vowel-Sound System of Ancient Egypt

The graphic below shows my decipherment of the ancient Old Kingdom Pharaonic Egyptian vowel-sound system.

Aleph A	j	"Breath" Vowel A, E, I	 Lapa (Vārpa) = Leaf Alpa / Elpa = Breath Alpa became Alpha "LABIAL"	 ĒRglis = Eagle leRiklis = In throat t (in Egypt a vulture) "PHARYNGEAL"	(A)	"Throat" Vowel A, E, I	He E
Waw V, W	w	"Nasal" Vowel W, UO	 Vista = Chicken Uosta = nose W as an UO sound "VELAR"	 Loka (Roka) = Arm Vowel is "bent" (tongue is "curled") "UVULAR"	c	"Palatal" Vowel L, Y, J	Yod Y, J

In the early days of the Pharaonic Egyptian hieroglyphs, the ancients did not yet have words or specific concepts for "vowel" or "consonant". Even in modern times, things like "vowels" are complicated subjects. See the writings of Louis Goldstein of Yale University on "[vowel theory](#)". In order to devise a written language, the ancients had to have some primitive essential "linguistic" understanding of sound and its connection to symbols as signs in order to devise a workable writing system. I rediscovered how that Pharaonic "vowel" system worked.

***Matres Lectionis* - Early vowels in the Hebrew Alphabet**

The Pharaonic "vowels" show that the Egyptian hieroglyphs were a direct predecessor system to what is known as the [matres lectionis](#) of the Hebrew alphabet in which the letter *Aleph* is mostly an A, the letter *He* mostly an A, the letter *Waw* is mostly an O or a U, and the letter *Jod* (also spelled *Yod*) is mostly an I, E or AE.

The Linguistics of Sound and Vowel Theory

Matres lectionis derives out of the [limited number](#) of ways in which vowels can be formed by human speech.

Early Vowel Theory

As [Goldstein](#) notes: Indian grammarians as early as the 7th century already divided vowels into three distinct types:

- (1) **palatal** (so-called "mouth vowels")
- (2) **labio-velar** (so-called "lip vowels")
- (3) **pharyngeal** (so-called "throat vowels")

Modern Vowel Theory

Modern linguistics has expanded that list to four types of vowels as follows:

- (1) **palatal** ("mouth vowels")
- (2) **velar** ("lip vowels")
- (3) **uvular** ("tongue vowels")
- (4) **pharyngeal** ("in the throat vowels")

The Egyptian Vowel-Type Hieroglyphs mark Vowel Sounds

What I have discovered in the most ancient Pharaonic Egyptian hieroglyphs is that their makers recognized four qualities of vowel-type sounds - and consciously selected homophonic (same-sounding) symbols to mark these sounds -- sounds which are similar in function to modern linguistic vowel theory, but of course not as advanced in their nature 5000 years ago.

These four vowel-type sounds in ancient Egypt were:

- **The Breath Sound** -- the "LEAF, reed LEAF" Hieroglyph
- **The Throat Sound** -- the "EAGLE" (vulture) Hieroglyph
- **The Nasal Sound** -- the "CHICKEN" Hieroglyph
- **The Palatal Sound** -- the "BENT ARM" Hieroglyph

In order to represent these "vowel-types" with symbols, the makers of the hieroglyphs -- on the evidence of Indo-European Latvian lexical comparisons -- selected homophonic (same-sounding) symbols for the vowel sound description.

The Four Pairs of Homophonic Hieroglyphs and Vowel Sound Functions

The following four pairs of words are homophonic in the archaic Indo-European language Latvian - and fit the Egyptian hieroglyphs perfectly. I find that these same homophonic pairs are found clearly in the Egyptian hieroglyphs:

1. [ALPA](#) (ALPHA) viz. [ELPA](#) "breath" is homophonic with [LAPA](#) ("leaf") viz. VĀRPA "ear of grain, head of grass" whence also [VĀRPATA](#) "wheatgrass, [Elymus](#)". Note that the Phoenician alphabet used the homophonic "steer, ox" symbol for [ALPHA](#) as [ALEPH](#), livestock in Latvian being [LOPs](#), LOPI (plural). In ancient Old Kingdom Egypt, the "leaf" or "reed leaf" symbol thus represented the "breath sound" in the ancient hieroglyphs.

2. IE-[RĪKLIS](#) ("in the throat") is homophonic with [ĒRGLIS](#) "eagle" (vulture in Egypt). The "eagle" viz. "vulture" symbol thus represented the "throat sound" in the ancient hieroglyphs. It is comparable to the [He](#) sound in [matres lectionis](#).

3. [OST](#), [OSTĪT](#) ("to smell", i.e. use the nose) is homophonic with [VISTA](#), [VISTENE](#) "hen, small hen (chicken)". The "small hen, viz. chicken" symbol thus represented a "nasal sound" in the ancient hieroglyphs. It is [Waw](#) in [matres lectionis](#).

4. [ROKA](#), ROKAS ("arm, arms") is homophonic with LOKA, "to bend", [LOKS](#) "bent"). The latter is probably the root concept for the arm through R and L shift. The "bent arm" thus represented a "palatal (bent) sound" in ancient hieroglyphs. Even today [LOCĪŠANA](#) in Latvian is applied as a word in linguistics, applying to declension, conjugation and inflection (bending). It is [Jod \(Yodh\)](#) in [matres lectionis](#).

Consequences of the Hieroglyphic Vowel-Sound Rediscovery











This above rediscovery now permits us to recognize that the hieroglyphs were not just chance symbols selected at random or solely because of religious or other considerations, but were selected primarily for their pronounced SOUND as being similarly sounding - homophonic - to an intended linguistic sound FUNCTION.

Accordingly, it is logical to expect a similar intelligence and rational reasoning to be at work in the formulation of the remainder of the hieroglyphs, also for the "consonants" (which - as we have already seen in the case of the syllables -- were also seen combined with vowel sounds). Even though the ancients did not have the precise equivalent concept of "consonant" in ancient days, they recognized similar sounds.

W-BASED SYLLABLES and VOWELS in the SYLLABIC GRID


The vowel placement in the grid in this work highlights some key observations but is not and can not be as convincing in analysis as some of the previous consonantal syllables, for the Phaistos Disk has no vowel signs at all, indicating that full-fledged vowels must have developed later at other locations. In Luvian one could also ask whether the W-based signs are a form of vowel determinants. In Luvian, that means markers for labial, pharyngeal, uvular or velar sounds. Hence, in Luvian, it might be speculated that the W-based symbols are not pronounced per se but instruct the reading of the so "modified" vowels. That might explain transcriptions having too many vowels in Luvian words, far beyond what is required for normal writing.

Syllabic Grid Figure 55 -- the Vowel "A"
 The Vowel "A" in the Kaulins Ancient Sign Concordance

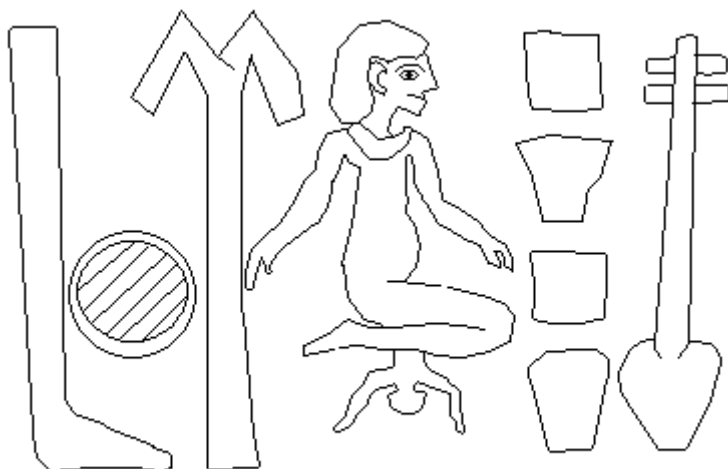
Sumerian	Pharaonic	Elamite	Luvian	Phaistos	Linear B	Cyprus
		No Elamite signs known yet.		The Phaistos Disk has no vowels or W-based syllables	 (08)	
"A3" but also WA WE WI WU Jaritz #688 "ears" Ryan	"A"  "J" "ears of grain" LABIAL  WAs scepter of dominion	Egyptian  NFR lungs, windpipe heart It means an aspirated "breathlike" windpipe sound.	WA  "eye ?" e.g. Latvian acs „eye"  "hook?" e.g. Latvian ākis „hook"	— Egyptian The Kom Ombo "birth" relief at Wikimedia by G. Blanchard arguably shows the "first newborn breath"	"A" There seems to be a genetic relationship between the W-based syllables and the vowels.. "A" is LABIAL	"A" The vowel "A" as the mouth "full, open, even" Relative Articulation Cypriot Syllabary signs show how the vowel sound is made

A "short A, ah", א "Alef" -- the breath sign

Vowels and [matres lectionis](#) were preceded in ancient scripts by the W-based syllables which derived out of an original sign signifying an *outward* breath. The Sumerian "A3" sign, for example, not only represented "A", but also **all the W-based syllables WA, WE, WI or WU** and thus could only have stood for "breath", using "ears" as a homophonic same-sounding word image. [ALEPH](#) is a word that surely derived out of BREATH in archaic Indo-European, as e.g. [elpa](#) viz. [alpa](#) in Latvian, meaning "breath". Since "the breath" is hard to draw as a sign, however, it was written using homophonic (same-sounding) signs such as [lapa](#) ("leaf, ear") or [lop\(s\)](#) "livestock (ox)".

The Pharaonic Egyptian NFR sign  arguably represents an aspirated outward "breath" sign, as opposed to an inhalation.

KOM OMBO BIRTH HOUSE HIEROGLYPHS, EGYPT



KOM OMBO BIRTH HOUSE HIEROGLYPHS, EGYPT


See the [Egyptian Relief from Kom Ombo in a photo by G. Blanchard at Wikimedia](#)



The [Kom Ombo birth house relief](#) (see our approximate illustration above) shows the NFR sign clearly. It depicts the windpipe, lungs and heart. NFR arguably represents the "first breath of life" of the newborn infant in that image (our reading).

The next hieroglyphs have no reading that we have been able to find online and we read provisionally PR ([Gardiner 01](#)) and perhaps NU ([Gardiner W24](#), uncertain), i.e. [bērnū](#) ("of children, of fertility"), plural because of the doubled glyphs.

The image of a mother bearing her child-- which is the subject of the hieroglyphs on either side of her -- is shown in a kneeling birth position, common in ancient Egypt. See S. Ashoush and A. Fahmy, [Motherhood and Childbirth in Pharaonic Egypt](#).

The birthing female is followed by a Kom Ombo hieroglyph that is similar to the Sumerian A3 sign. There are two possibilities for the origin of that hieroglyph.

The Pharaonic  *jd̄t* depicts the uterus viz. womb ([Gardiner F45](#)) (*Latvian dzemte*).

The similar  *rtach* hieroglyph is viewed by Egyptologists as a "baker's tool" ([Gardiner U31](#)), which has its comparable term in Indo-European e.g. Latvian *rag-*, *radz-* "horns" whence *rags* "baking tray". The sign could be related in origin to *jd̄t*, or not. On the relief it is followed by the sieve sign  *kh* ([Gardiner AA1](#)) and the foot sign *B* ([Gardiner D58](#)) (*Latvian pēda* "foot").

If Pharaonic *jd̄t* is the appropriate hieroglyphic sign value, a reading similar to Latvian *dzemdības* "childbirth" is possible. If one uses the *rtach* value of the baker's tool, perhaps also a womb symbol originally, then a reading like *radība* "creation" on the basis of *radīt* "to give birth to" is very possible. In such a case, the core reading would still remain "childbirth" for the entire relief in the combination of "child" and "creation". Compare Arabic: *رضيع* (*ar*) (*raDii3*) *m* "baby, infant" and Russian *роды* (*ru*) (*ródy*) *m pl*, *рождение* (*ru*) (*roždénije*) *n* "birth". Indo-European e.g. Latvian *rad-*, *radz-* "creation" is homophonous with *rag-*, *radz-* "horn", i.e. the shape as the origin of the name of the horned tool used for baking.

The Luvian and Linear B signs are similar to the Sumerian sign in apparently showing an "eared" symbol, which could also be a two-sided scepter, while both Luvian and Linear B signs also have similarities to the Egyptian signs just discussed. Note that the Cypriot Syllabary signs show how vowel sounds are made physically in the mouth, so-called [relative articulation](#).

Syllabic Grid Figure 56 -- the Vowel "E", 𐤁 "He"

The Vowel "E" in the Kaulins Ancient Sign Concordance

Please note the changed headings! Now showing vowels and W-based syllables.

No Vowels or W-based signs are found in Elamite or on the Phaistos Disk.

Sumerian	Pharaonic	Luvian	Linear B W-based Syllables	Linear B Vowels	Cypriot Syllabary W-based Syllables	Cypriot Syllabary Vowels
"E" temple dominion Jaritz #574 Egyptian WAs see also Figure 55	"AE" He PHARYNGEAL The "eagle" viz. "vulture" hieroglyph is the "throat A" comparable to the He sound in matres lectionis .	WA "dominion" The Luvian sign for dominion is turned upside down from the Linear B sign.	WA temple dominion WA see also Figure 55	"E" The vowel "E" A rounded "temple dominion"	WA This sign is "upside down" of MA and the prefix of Cyprian 𐤀𐤃-𐤀𐤃 . Whether that was intended is debatable.	"E" The vowel "E" The mouth is "full, open", but also more from the throat or side" "E" is PHARYNGEAL

E, AE "long A", 𐤁 "He"





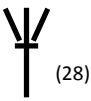






The vowels were preceded in ancient scripts by the W-based syllables from which the vowels and [matres lectionis](#) later derived. The "E", "AE" viz. "long A" vowel in Hebrew was 𐤁 "He" and is written in some languages as "a long E" as in Indo-European e.g. Latvian [ēka](#). Similar to short "A" the signs for long "E" or "AE" also derived from the concept of "dominion", not by the scepter of rule but rather by the temple of rulership. Representative terms are Ancient Greek [οἶκος](#) "[house](#), dwelling place" and Latvian [ēka](#) „large building, edifice, hall". The original concept for WA, however, was Pharaonic WAS, correctly [VARS](#), also found in Indo-European e.g. Latvian in the R to L variant [valds](#) "rule" and [valdīšana](#) "rulership, governing".

Syllabic Grid Figure 57 -- the Vowel "I", ' "Yod"

The Vowel "I" in the Kaulins Ancient Sign Concordance

Please note the changed headings! Now showing vowels and W-based syllables.

No Vowels or W-based signs are found in Elamite or on the Phaistos Disk.

Sumerian	Pharaonic	Luvian	Linear B W-based Syllables	Linear B Vowels	Cypriot Syllabary W-based Syllables	Cypriot Syllabary Vowels
						
<p>"I" Jaritz #270 "five" i.e. as hand, arm</p> <p>Luvian </p>	<p>"IE" "hand and arm" UVULAR</p> <p>Yod viz. Yodh means hand and so there are many hand variants.</p>	<p>"I"  WÍ  and  I, IÁ</p>	<p>WE Luvian S "Ax"</p>	<p>"I" The vowel "I" as a fork- like hand, i.e. a scepter with protrusions like fingers</p>	<p>WI WA and WI might mark relative articulation either forward pronunciation as here or back in the throat pronunciation as in AE.</p>	<p>"I" The vowel "I" is shown as "less full or open, and more spoken from the mouth top" "I" IS UVULAR</p>

I, ' "Yod" (also written Jod, Yodh)

The vowels were preceded in ancient scripts by the W-based syllables from which the vowels and [matres lectionis](#) later derived. The sign Yod ' (Yodh) derived from concepts related to the hand (*Yad* is Hebrew for "hand"). Perhaps Ancient Greek [εὖλιος](#) , *ov*, (*ις*) "with stout fibers" is related in showing extended protrusions, as in Linear B28 and Luvian as well. Related here in Indo-European may be terms such as e.g. Latvian [iedot](#) "to give to", i.e. the extension of the arm and hand to give something to someone. Numerous of the signs here appear related but divining the origin of each is difficult.

Syllabic Grid Figure 58 -- the Vowel "O", ι "Waw"
 The Vowel "O" in the Kaulins Ancient Sign Concordance

Please note the changed headings! Now showing vowels and W-based syllables.
 No Vowels or W-based signs are found in Elamite or on the Phaistos Disk.

Sumerian	Pharaonic	Luvian	Linear B W-based Syllables	Linear B Vowels	Cypriot Syllabary W-based Syllables	Cypriot Syllabary Vowels
Sumerian had no "O" and thus also no WO sign						
Pharaonic & Sumerian U was surely like Latvian "O", which is an "UO" sound as in the word OLA "egg" pronounced UOLA, i.e. nearly like "whoah-la"	"W" "WOO" "U" Described as: The vocalization is between the "oo", for 'u'; the "woo", for 'w'.	WA5 — Note that Pharaonic "O" is also reproduced at "U" because the sound is like Latvian "O", i.e. "UO".	WI One sees the symbol "I" within the tent-like sign whereas Cypriot has just the "I"	"O" The vowel "O" This looks like a building but in this case marking the outside roof	WE The concept here is a long vertical line "inside" the horizontal lines to show the idea of "inner".	"O" The vowel "O" "toward the bottom" with the line marking the ground "O" is VELAR"

O, ι "Waw"











The vowels were preceded in ancient scripts by the W-based syllables from which the vowels and [matres lectionis](#) later derived. The Hebrew sign ι "Waw" corresponds here to an "O" pronounced toward the bottom of the mouth, i.e. a velar. It is represented in the symbols by signs that correspond to the concept in Ancient Greek signified by the term [ὄντα](#), which applies to all that which one has as possessions or property *inside* the house. The next grid section, by contrast, applies to the house that one has *outside*, over one's head, and the signs show that difference quite distinctly, especially in Linear B. Obviously, some signs need correction in current transcription.

Syllabic Grid Figure 59 -- the Vowel "U", ı "Waw"

The Vowel "U" in the Kaulins Ancient Sign Concordance

Please note the changed headings! Now showing vowels and W-based syllables.

















No Vowels or W-based signs are found in Elamite or on the Phaistos Disk.















Sumerian	Pharaonic	Luvian	Linear B W-based Syllables	Linear B Vowels	Cypriot Syllabary W-based Syllables	Cypriot Syllabary Vowels
 U3			 (42)	 (10)		
 U7 Jaritz #805 keeping an "eye on the domicile"  Ú, U5, U11 Jaritz #122, 123 "raised high"	"W" "WOO" "U" Described as : The vocalization is between the oo for 'u' and the woo for 'w'. [Pharaonic "U" is also included at "O" here]	WA6 "terra"  WA "terra" Perhaps the connection here is the concept outside or raised high .	WO having an eye on one's domicile" (outside)	"U" The vowel "U" "raised high" ??	WO "house, roof or eye over one's head" (outside)	"O" The vowel "U" "mostly closed and the lips out" "raised high" "U" is a HIGH BACK CLOSE VOWEL















U, ı "Waw"





























W-based syllables preceded [matres lectionis](#) and the vowels. The Hebrew sign ı "Waw" corresponds to both O and U vowels. Perhaps there was an original "UO" sound as in the Latvian word [OLA](#) "egg" pronounced UOLA, i.e. nearly like "whoah-la". In terms of Ancient Greek, the signs represent a house, roof or eye over one's head (that which one has a domicile), namely [οὐσία](#), one's own substance and property, *outside* the house, viz. the dwelling. Indo-European homophonic (same-sounding) is e.g. Latvian [UZ](#) "on, above".















**Derivation of the Alphabet from Syllabic Signs
(according to Andis Kaulins, 2012)**








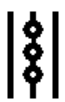



Greek & Latin (Roman) Letters	Closest Syllabic Sign(s) by language	Originating Syllable(s) for the letter	Phoenician signs (others if required)
<p>A</p> <p>α</p> <p>Alpha</p>	 Sumerian  Linear B  Luvian	<p>A (WA, WE, WI, WU)</p> <p>Originates as a "breath" sign: Latvian elpa, alpa "breath"</p>	 <p>Aleph</p> <p>For "breath" one used homophonic terms like lapa ("leaf, ear") or lop(s) "livestock" whence the "ox".</p>
<p>B</p> <p>β</p> <p>Beta</p> <p>—</p> <p>Comparable Indo-European terms are Swedish BILA or German BEIL.</p>	 Pharaonic  Linear B  Cyprus  Luvian  Elamite  Sumerian	<p>PI / BI</p> <p>Classical Greek πέλεκυς "pelekus" was a double-sided axe, a term later applied to all axes,</p>	 <p>Beth</p> <p>The root here is PI viz. BI as in Pharaonic miBT "axe" Gardiner T7 and has nothing to do with "house".</p>
<p>Γ</p> <p>γ</p> <p>Gamma</p> <p>G</p> <p>C</p>	 Sumerian  Linear B  Sumerian	<p>GI / GU /</p> <p>The word root here is GIM- as in Lithuanian gimimas "birth"</p>	<p>Phoenician</p>  <p>Gimel</p> <p>Latin</p> 











Greek & Latin (Roman) Letters	Closest Syllabic Sign(s) by language	Originating Syllable(s) for the letter	Phoenician signs (others if required)
<p style="text-align: center;">  δ Delta D </p> <p>Interesting here is how the Indo-European terms as in Latvian darīt "to do, to make" and dalīt "divide" became mixed in the delta sign development.</p>	<p style="text-align: center;">  Pharaonic  Luvian  Sumerian  Elamite  Phaistos Disk </p>	<p>DO, TE the word root here is like the Pharaonic Hieroglyph</p> <p></p> <p>DJRT "to do, make"</p> <p>— Latvian darīt "to do, to make"</p>	<p style="text-align: center;">  Daleth </p> <p>Apparently non-sailing scholars think this is a "door" sign. But were the seagoing Phoenicians triangular? and would they make landlubber door signs in script?</p>
<p style="text-align: center;"> E ε Epsilon </p> <p>In Latvian pūst means "to blow" and *pūsļins would be a diminutive breath variant equal to psilon, so this is "the E-breath".</p>	<p style="text-align: center;">  Sumerian  Linear B  Luvian  Linear B  Cyprus (turn some signs 90° to get the "E") </p>	<p>E, WA</p> <p>"He" is long E as in Indo-European e.g. Latvian ēka. "edifice, hall" which is like Ancient Greek οἶκος "house, dwelling place".</p>	<p style="text-align: center;">  He </p> <p>The ancients turned signs every which way as if they were dyslexic.</p> <p>See Writing Origins: Pharaohs, Moderns, Dyslexics and Waren die Pharaonen Legastheniker?</p>












Greek & Latin (Roman) Letters	Closest Syllabic Sign(s) by language	Originating Syllable(s) for the letter	Phoenician signs (others if required)
<p style="text-align: center;">Z</p> <p style="text-align: center;">ζ Zeta</p> <p>The concept here could be a belt or sash.</p>	<p style="text-align: center;"> Linear B</p> <p style="text-align: center;"> Luvian</p> <p style="text-align: center;"> Cypriot</p> <p style="text-align: center;">Syllabary  ZI₃ Sumerian belt</p> <p style="text-align: center;"> ZA Sumerian necklace</p>	<p style="text-align: center;">ZA, ZU</p> <p style="text-align: center;">(I, WE)</p> <p>Signs for the syllable ZU stand for "girdle, belt, sash, yoke, collar" while ZA has a necklace</p>	<p style="text-align: center;"></p> <p style="text-align: center;"> Zayin</p> <p style="text-align: center;">_____</p> <p>The I-vowels probably were words with a vowel at the front followed by a Z-sound.</p>
<p style="text-align: center;">H</p> <p style="text-align: center;">η Eta</p>	<p style="text-align: center;"></p> <p style="text-align: center;">Luvian HÁ No H in older written scripts.</p>	<p>KE, Luvian HÁ as in "KHETA" Kittim Eta seems to have derived from a weak and palatalized K-form, k, the K-cedilla.</p>	<p style="text-align: center;"></p> <p style="text-align: center;"> Heth</p>
<p style="text-align: center;"></p> <p style="text-align: center;">θ Theta</p> <p style="text-align: center;">an "eye" type sign</p>	<p style="text-align: center;"> ZI₅ "eye" Sumerian "eye" and theta are a good match in terms of syllabic value and letter value.</p>	<p style="text-align: center;">ZI, ZO</p> <p>In archaic Indo-European, e.g. Latvian, the "eye" is acs pronounced like "uhtts" so the origin of theta is surely in the TS letter character TSADE. See image chart below.</p>	<p style="text-align: center;"></p> <p style="text-align: center;"> Teth</p>














<p>The chart right is based on an idea in a table at Wikipedia, Proto-Sinaitic Script, with some additions and subtractions by the present author.</p>	<div style="text-align: center;"> <p>Development of "EYE" signs. →</p> <table border="1" style="margin: auto;"> <tr> <td style="padding: 5px;">Proto-Sinaitic</td> <td style="padding: 5px;">Phoenician 'en "eye" 'Ayin</td> <td style="padding: 5px;">Hebrew</td> <td style="padding: 5px;">Greek</td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> <td style="text-align: center;"></td> </tr> </table> <table border="1" style="margin: auto;"> <tr> <td style="padding: 5px;">Tsade</td> <td style="padding: 5px;"></td> </tr> </table> </div>			Proto-Sinaitic	Phoenician 'en "eye" 'Ayin	Hebrew	Greek					Tsade	
Proto-Sinaitic	Phoenician 'en "eye" 'Ayin	Hebrew	Greek										
													
Tsade													
<p style="text-align: center;">I ι Iota</p> <p>Sumerian has the hand variant of five fingers while Pharaonic has hand and arm.</p>	<p style="text-align: center;"> Cypriot Syllabary</p> <p style="text-align: center;"> Linear B</p> <p style="text-align: center;">hand signs</p> <p style="text-align: center;"> Pharaonic</p> <p style="text-align: center;"> Sumerian</p>	<p style="text-align: center;">I, WA, WI, WE</p> <p>The I in WI in Linear B is seen inside the tent. The alleged sign derivation of the "I" sign from a hand sign is not easy to follow.</p>	<p style="text-align: center;"></p> <p>Yodh has the same concept of hand as other variants.</p> <p style="text-align: center;"> Yodh "hand"</p>										
<p style="text-align: center;">K κ Kappa</p> <p>Kappa is essentially one side of a beetle, bug, skin or pelt.</p>	<p style="text-align: center;"> Sumerian</p> <p style="text-align: center;"> Pharaonic</p> <p style="text-align: center;"> Phaistos Disk</p> <p style="text-align: center;"> Luvian</p> <p style="text-align: center;"> Cypriot Syllabary</p>	<p style="text-align: center;">KI, KO</p> <p>The K sign clearly is an abstract for a beetle or bug or for a skin or pelt as on the Phaistos Disk:</p> <p style="text-align: center;"></p>	<p style="text-align: center;">  Kaph</p> <p>The upper Phoenician variant is not recognizable as a K to this viewer.</p>										








Greek & Latin (Roman) Letters	Closest Syllabic Sign(s) by language	Originating Syllable(s) for the letter	Phoenician signs (others if required)
<p>Λ λ Lambda L</p>	<p> Sumerian  Sumerian  Cypriot  Syllabary  Elamite  Luvian  Phaistos Disk</p>	<p>LA Scholars have speculated that lambda was a sign that stood for a cattle prod, goad or shepherd's staff, but it is clear that it originated from the original representation of the wing of a bird, as can easily be seen from the great number of corroborating signs for this syllabic value.</p>	<p>  Lamedh</p>
<p>M μ Mu</p>	<p> Linear B  Phaistos Disk  Cypriot Syllabary</p>	<p>MO, MU The letter M developed out of various signs used for the concept of "middle". There are more signs than these three that mean "middle" but these three best show the typical M-form.</p>	<p>  Mem</p>

Greek & Latin (Roman) Letters	Closest Syllabic Sign(s) by language	Originating Syllable(s) for the letter	Phoenician signs (others if required)
<p>N</p> <p>v</p> <p>Nu</p>	<p> Sumerian</p> <p> Cypriot Syllabary</p> <p> Linear B</p> <p> Elamite</p>	<p>NU</p> <p>The letter N clearly derived from a number of similar signs for the NU syllable that represent the night as an interval between setting and rising suns on the horizon.</p>	<p></p> <p></p> <p>Nun</p> <p>The curved Phoenician variant is hardly recognizable as an N.</p>
<p>[X]</p> <p>ξ</p> <p>Xi</p> <p>X</p>	<p> Linear B</p> <p> Elamite</p> <p> Cypriot Syllabary</p>	<p>SI</p> <p>Xi as also Samekh and evolved out of fish signs and signs representing fish drying racks having two or three levels upon which to place the fish.</p>	<p></p> <p></p> <p>Samekh</p>

Greek & Latin (Roman) Letters	Closest Syllabic Sign(s) by language	Originating Syllable(s) for the letter	Phoenician signs (others if required)
<p style="text-align: center;">O</p> <p style="text-align: center;">o</p> <p style="text-align: center;">Omicron</p>	 Luvian	<p>O, WAW</p> <p>The most ancient scripts had no O but only a U or a UO form.</p>	 <p>'Ayin</p>
<p style="text-align: center;">Π</p> <p style="text-align: center;">π</p> <p style="text-align: center;">Pi</p> <p style="text-align: center;">P</p> <p>The Greek sign is presumably the side view of a brazier.</p> <p>The old Indo European term for "fire" is also found e.g. in Latvian pirts "sauna" and the combined form pirtskuris "sauna fire" (kurināt is "stoke a fire, burn").</p>	 Sumerian  Cypriot Syllabary  Linear B (turn sign 90° to the left to see the brazier)  Elamite  Luvian  Phaistos Disk  Pharaonic Egyptian Hieroglyph	<p>PE</p> <p>The PE syllables stem from words for brazier and fire: Greek πῦρ (pyr) "burn" or Old English fȳr ("fire").</p> <p>The hypothetical proto-Indo-European root is *peh₂ur "fire", e.g. Hittite 𐎶𐎠𐎧 (pahhur). See also Latvian piekurināt viz. pakurināt "fire, heat up".</p> <p>The Egyptian hieroglyph combines brazier and fire into one sign.</p>	 <p>Pe</p> <p>The Phoenician sign is presumably an abstracted depiction of the flame of a fire.</p> <p>This has nothing to do with the pictogram of a mouth, which is a current errant theory found in the literature.</p>

Greek & Latin (Roman) Letters	Closest Syllabic Sign(s) by language	Originating Syllable(s) for the letter	Phoenician signs (others if required)
<p>P</p> <p>Rho</p> <p>ρ</p>	<p> Sumerian</p> <p> Linear B</p>	<p>RA</p> <p>The Sumerian RA sign is Jaritz #609 meaning "to roll a seal into clay".</p>	<p></p> <p> Resh</p>
<p>Σ</p> <p>σ</p> <p>ς</p> <p>Sigma</p> <p>S</p> <p>The name of Sigma derives from Indo-European e.g. Latvian segt "to cover" and hence segums meaning "covering, coverage" = Sigma.</p>	<p> Linear B</p> <p> Cypriot</p> <p> Luvian</p> <p> Pharaonic</p> <p> Sumerian</p> <p>These syllables are evidence that once the right term is found, it can easily explain the name of the letter in ancient days.</p>	<p>SE</p> <p>The concepts of "(long) hair", "brush" viz. "to part" are at the root of the older variants of these signs. The name of Sigma thus derives from Indo-European e.g. Latvian segt "to cover" and hence segums meaning "covering, coverage".</p>	<p></p> <p></p> <p>Sin, Shin</p> <p>Sin or Shin in Phoenician may be Phoenician variants of Arabic shar or Hebrew saara or se'ār "hair".</p>

Greek & Latin (Roman) Letters	Closest Syllabic Sign(s) by language	Originating Syllable(s) for the letter	Phoenician signs (others if required)
<p>T</p> <p>τ</p> <p>Tau</p>	<p> Sumerian</p> <p> Cypriot</p> <p>Syllabary</p> <p> Elamite</p> <p> Phaistos Disk</p> <p> Luvian</p> <p> Linear B</p>	<p>TA, TI</p> <p>The letter T derives from T-syllables at the front of words for arrow(s), as also depicted by the arrow fletch.</p>	<p></p> <p></p> <p>Taw</p>
<p></p> <p>υ</p> <p>Upsilon</p> <p>U,V</p>	<p></p> <p>Cypriot Syllabary</p> <p> Sumerian</p>	<p>U, WAW</p> <p>The Hebrew sign "Waw" corresponds to both O and U vowels.</p>	<p></p> <p></p> <p>Waw</p>
<p>Φ</p> <p>φ</p> <p>Phi</p> <p>F</p>	<p>Ancient Greek πέλεκυς "double-sided axe" but perhaps later used as the basis for creating an F-sound sign in this symbol</p>	<p>Foreign travel and consonant sound shifts forced an F-sign to be created.</p>	<p>A consonant sound shift is e.g. English pepper but German Pfeffer.</p>

Greek & Latin (Roman) Letters	Closest Syllabic Sign(s) by language	Originating Syllable(s) for the letter	Phoenician signs (others if required)
<p>X</p> <p>χ Chi</p>	 Linear B  Luvian  Phaistos Disk  Elamite	<p>XA, KA</p> <p>Signs for the syllable KA viz. XA represent the ground as earth χαιμᾱί and locations.</p>	<p>CH is earth χαιμᾱί and the sign marked ground locations as e.g. settlements towns, villages, cities.</p>
<p>Ψ</p> <p>ψ , Psi</p>	<p>This is a Greek invention to deal with the combination of P and S.</p>	<p>This letter was invented after the era of writing discussed here.</p>	<p>Psi does not appear in the Phoenician alphabet.</p>
<p>Ω ω</p> <p>Omega</p>	 Luvian  Linear B <p>Other signs represent "raised high", e.g. Sumerian</p>  <p>i.e. heaven? This may be an old symbol of passing.</p>	<p>The first letter of the alphabet ALPHA is like Latvian ALPA meaning breath and the last letter is OMEGA like Latvian IEMIEGĀ "in sleep."</p>	<p>That is why Alpha and Omega signify the beginning and end as life from the first breath to the eternal sleep.</p>

The Phaistos Disc, Greece & the Origins of Writing in Western Civilization: Other Questions arise such as "Where was Troy?" "Where did Paris take Helen of Troy?"

The study of ancient artifacts and languages is a matter of evidence, but not all disciplines understand evidence the same way that the law or hard science does. John F. Hughes, Professor of Computer Science at Brown University, [provides](#) us in his "Musings" with the following anecdote about the way in which archaeologists treat evidence:

"In 2001, archaeologists discovered a ship sunk in the middle of the Mediterranean, surrounded by amphorae. From this they concluded that the ancient Greeks actually HAD sailed offshore. What's remarkable was that until this discovery, they'd been convinced that they DIDN'T. Why? Well, because they found all the wrecks near shore. This ignores several important things: (1) Wrecks tend to HAPPEN near shore -- that's where the rocks and shoreline are. (2) Near shore was where they were looking for the wrecks. (3) The written record documents many long sea voyages, but these were all discounted as fanciful. (4) Crete is out of sight of the mainland, and yet Greece traded with it. Makes you wanna smack them upside the head, no?"

As you read the remainder of this analysis, please keep the above instance in mind as an example of the haphazard way in which archaeologists can be prone to handle evidence. Their past failings bear on the origins of writing in Western Civilization, and on the history of Crete, Ancient Greece and ancient sea voyagers.

Critical analysis of probative evidence leaves no alternative but to challenge many assumptions of mainstream archaeology and linguistics, especially as regards the Phaistos Disc, Ancient Greece, Ancient Crete, the location of ancient Troy, and the identity of Helen of Troy and Paris (her abductor or elopement consort).

The Phaistos Disc: An Ancient Enigma Solved: Two corroborative Old Elamite scripts can be deciphered using the Greek syllabic values obtained for the [Phaistos Disc](#) by A. Kaulins in 1980

[Version 1.2, amended 7 March 2012]

by Andis Kaulins [1]

A Paper Presented on 31 October 2008 at the INTERNATIONAL CONFERENCE ON THE PHAISTOS DISK on the 100th anniversary of its discovery in 1908 by the Italian archaeologist Luigi Pernier. *Conference location:* Society of Antiquaries, London, [Burlington House](#), Piccadilly. *Organization and sponsorship:* [Minerva](#), the International Review of Ancient Art & Archaeology, Jerome M. Eisenberg, Ph.D., editor. [See Eisenberg's [Focus on Iraq](#) regarding the looting of Iraq and Mesopotamian antiquities as presented to the annual meeting of the International Law and Practice section of the American Bar Association in New York].

Figure 1

The [Phaistos Disc](#) (from the left, sides B and A) as pictured at the New York Times [TierneyLab](#)



Introduction

Ladies and Gentlemen, thank you for attending my presentation and thank you to the organizers and staff of this conference for making it possible for me to be here. We are in the halls of the arts, the sciences and antiquity at [Burlington House](#), and today we may see history being made – in the field of communications. The [Phaistos Disk](#) is after all a communication and storage device.

In the modern era we all have our mobile phones and digital devices, iPods, iPhones, Blackberrys, CDs and DVDs, and many of us take them for granted, but technology was not always so easy to understand. In the early days of telecommunications, for example, [Albert Einstein](#) explained *radio* [by saying](#):

"You see, wire telegraph is a kind of a very, very long cat. You pull his tail in New York and his head is meowing in Los Angeles.... And radio operates exactly the same way: you send signals here, they receive them there. The only difference is that there is **no cat**." [emphasis added]

In the case of the Phaistos Disk, we have a cat, but our cat has no tail and worse still, it is not meowing, and the issue has rightly been raised now as to whether we have a real cat here at all.

TO BE OR NOT TO BE. REAL or FAKE?

That is the Shakespearean question being posed here today.

WHO DISCOVERED THE ANCIENT GREEK LETTERS?

Dr. Jerome Eisenberg has observed – correctly in this author's view – that the symbols on the Phaistos Disk were compiled piecemeal in part from other ancient sources. I agree. The only question is, was this done in the modern era, or 3 to 4 thousand years ago? Dr. Eisenberg has concluded that it was a modern forger, an archaeologist, who did it. But I think that it was the ancient Greeks themselves who did it. And I have evidence for this conclusion.

[Gaius Julius Hyginus](#) (ca. 64 BC – AD 17), who lived at the time of Christ, passed on many Greek tales in unadulterated form in his *Fabulae*, of which **Number 277** deals with "Ancient Inventors". He writes [as follows](#):

"CCLXXVII. FIRST INVENTORS. The Parcae, Clotho, Lachesis, and Atropos [The Parcae are the Fates, in Greek Morae, and named Nona, Decima and Morta] invented seven Greek letters - A B H T I Y. Others say that Mercury invented them from the flight of cranes, which, when they fly, form letters. **Palamedes**, too, son of Nauplius, invented eleven letters; Simonides, too, invented four letters – Ó E Z PH; Epicharmus of Sicily, two - P and PS. The Greek letters Mercury is said to have brought to Egypt, and from Egypt Cadmus took them to Greece. Cadmus in exile from Arcadia, took them to Italy, and his mother Carmenta changed them to Latin to the number of 15. Apollo on the lyre added the rest..." **[material in brackets added, emphasis added]**

The ancient record therefore confirms that the initial Greek letters, which constitute the origins of writing in Western Europe, were in fact a conglomeration of inputs, just as Dr. Eisenberg claims for the Phaistos Disk [please note that we use the spellings Disk and Disc interchangeably here for the sake of the search engines since both terms are used]. Accordingly, this characteristic is no proof that the Phaistos Disk is not genuine. Quite the contrary, it is exactly what we would expect from ancient Greek letters, based on the historical record. The first Greek letters viz. symbols (or signs) were in fact taken from numerous ancient sources.

One of the inventors of Greek letters mentioned by Hyginus has a clear connection to Crete: [Palamedes](#), son of [Nauplius](#) and [Clymene](#) (Asia), the daughter of [Catreus](#), king of Crete, son of the first king of Crete, [Minos](#), and grandfather of [Menelaus](#), the Greek husband of [Helen of Troy](#). Catreus of Crete was thus the grandfather of Palamedes.

Grandfather Catreus had numerous children. His two daughters he is said to have given to a merchant mariner, Nauplius, to be married off in foreign lands. This mariner instead [by legend] took Clymene for himself and sailed off into the sunset. Where did they settle?

Clymene in ancient Greek sources is also called **Asia**, which some allege is how the continent Asia got its name, thus pointing to a possible geographic Asian destiny. Indeed, Herodotus is puzzled by Ancient Greek usage of women's names to describe large areas such as Asia or Europe ([Europa](#) of [Tyre](#)). But the answer – royal settlement - seems clear to us.

It is Clymene's son Palamedes who subsequently surfaces (from a location thus far unknown) as the greatest inventor in the history of Greece, for Palamedes not only allegedly invented eleven of the Greek letters, but it is also said that he invented counting, currency, weights and measures, military ranks, dice, pessi (a type of chess), and made improvements in winemaking.

Amazing enough, but all of this could very well be true in the ancient era if the inventions of Palamedes were obtained by technology transfer from a foreign land, for the Roman [Mercury](#) (viz. Greek [Hermes](#)) is "the bringer of letters", and also has the same meaning as "merchant".

These inventions were thus brought to Greece from a distant land via traveling merchants, just as the story of Catreus and his daughter Clymene and merchant Nauplius would suggest.

As we have discovered, this foreign land is (viz. could be) [Elam](#), the land – we claim here - where Clymene and Nauplius ultimately settled. **Elam is the land in which letters were first stamped onto clay, just as on the Phaistos Disk, but long before the [Minoans](#) of [Crete](#).** An existing technology was thus - in our opinion -imported into ancient Crete from one of the most ancient cultures of the [Ancient Near East](#). We will discuss this in detail subsequently.

WHY IS THERE A LACK OF CORROBORATIVE TEXTS?

The second major argument raised by Dr. Eisenberg against the genuineness of the Phaistos Disk is the lack of corroborative texts.

When Dr. Eisenberg initially asked me to present a paper at this conference, I declined, saying it was a losing proposition for me, since no probative proof of authenticity would be possible without corroborative texts.

To my knowledge at that time, there were no such texts available, so it was pointless to come to the conference.

At Dr. Eisenberg's friendly insistence, however, I finally agreed to present a paper merely presenting my point of view that the Phaistos Disk was quite genuine, and giving my reasons for so believing.

But in the course of research for this paper, a remarkable thing happened. I discovered two texts that contained symbols with a great deal of similarity to a number of symbols on the Phaistos Disk.

These texts were from Elam and were written in [Old Elamite Script](#).

Could the Phaistos Disk and Old Elamite Script be connected? Indeed, when I applied the [syllabic values](#) for the Phaistos Disc that I had obtained 30 years previously, I was able to read those Old Elamite Scripts without difficulty.

They were written in Ancient Greek language, and the author was - presumably - Palamedes, the son of Clymene, and the inventor of Greek letters. From Crete, Clymene (Asia) and Paris had gone to Elam (in Asia). They were thus arguably the "Minoan Connection" to Elam viz. the "Elamite Connection" to Crete and [Mycenae](#).

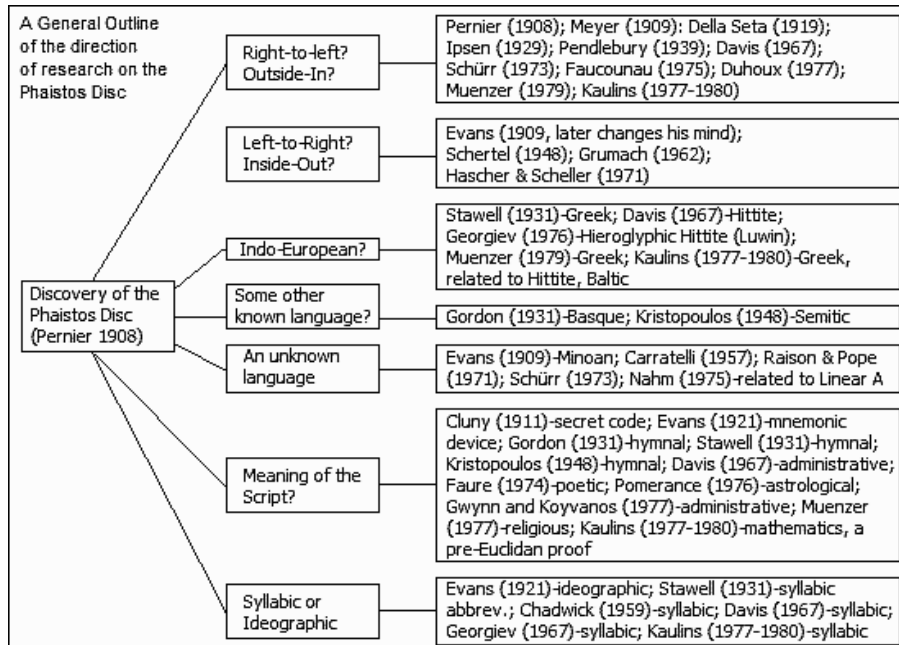
Was there any evidence to prove this? Let us begin at the beginning.

The 1980 Decipherment of the Phaistos Disc by Andis Kaulins

In [*The Phaistos Disc: Hieroglyphic Greek with Euclidean Dimensions*](#), this author wrote as follows: [2]

"In ... 1977 a colleague ... at the University of Kiel departed on a vacation to Crete.... [S]he brought back a book from the Heraklion Museum in which a photo of Side A of the Phaistos Disc was pictured... Was it ... written in an Indo-European language? ... [if yes, this author concluded], it would have to bear a close relation to the Baltic languages [the most archaic still spoken Indo-European tongues], and ... in that case [yes, it should be decipherable]...."

Figure 2
Previous Research on the Phaistos Disc (prior to 1980)








































































Three years later, this author's decipherment was published.[3] The method used for decipherment of the Phaistos Disk began with a detailed review of previous publications about the Phaistos Disc as available to the author at that time - 1977 to 1980 (Figure 2):[4]

Had anyone found the right path?

Did the incomplete [1952 Ventris decipherment of Linear B](#) as Ancient Greek indicate that Greek was the most likely language?

The 45 pictographs on the Phaistos Disc appeared 241 times and appeared to be divided into words by vertical lines.[5]

Figure 3: Syllabic Grid of the Phaistos Disc by Andis Kaulins (1980)

VOWELS FOLLOWING INITIAL CONSONANTS ↓	Short Vowel <u>ü</u> = Ä, Ö, Ü	EI-Diphthong = IE, EI, AI, IA, <u>ŋ</u>	Short EI = <u>ĩ</u> , EÍ, Ę	ü-Diphthong = UO, EU, OI, <u>ω</u>
P				
R				
M				
N				
L				
T				
D				
S				
K				
Y (jot)				
C, X, θ, ts, š (affricates)	           	        	    	  

Were the symbols syllabic? A chart was made of the distribution and frequency of the pictographs.[6] This frequency was then compared to the distribution of letters and letter combinations found at the beginnings of words in [Ancient Greek](#),[7] and [Latvian](#) and [Lithuanian](#) languages, the most archaic still spoken [Indo-European](#) tongues.[8]

Based on those stats and supported by Greek, Latvian and Lithuanian terms[9] for the objects presumably depicted by the symbols, syllabic values were derived and analyzed in a comprehensive [Michael Ventris – Alice Kober](#) type of [syllabic grid](#), which included the major language consonants and vowels [although it became clear early in decipherment that only 4 types of vowel sounds were used, but at that time the author knew nothing of *matres lectionis* or the fact that the most ancient scripts in fact had no vowel "O"]. (**Figure 3**).[10]

As applied to the Phaistos Disc, the syllabic grid of Andis Kaulins then resulted in the Ancient Greek transcription found in **Figure 4**.

**Figure 4: Greek Transcription of the Phaistos Disc
by Andis Kaulins [11]**

Πά-ρει-κω-θεω-νεοσ (παρεξω-τινος, παρεκτεινος) νο-μαι-ρα (νυμερσ)
 συ-τοι-γισ (συνδεωγισ) συ-σ-χι (συσταξει). Πά-ρα-δεω-με-ζι
 κά-τη-γο-ρια (κατηγορια) κά-φε-ρω πά-ρα-σει-ον-θεα (περιστελλω) αλ-λη-λα
 (αλληλα) πά-ρα-γω-δο-λι θεο-ξο-μαι-γισ (τυκω-μειξω) πά-ρα-γει-με-νοσ.
 Πή-μα (λεμμα): πά-κά-λευω-τε-με-νι (μων) ποι-τεωσ (ποιησαι) πά-ρα-λη-λοι
 (παραλληλοι) πά-ρα-κο-κο-λου-τει-χο εχω-με πά-ρα-λη-λοι.
 πά-κά-λευω-τε-με-νι ποι-τεωα πά-ρα-λη-λοι πά-ρα-κε-γω-γει-νω-κά
 (παραχωγη). Συ-νω-θεα-δα (συντευξις) λι-λοι-ρα (αλληλα) πά-ρα-κε-θεω
 με-δα-λα (μεταλλα-μεσο-) τε-λεω-να πά-ρα-κο-κο-λου-τει-χο (περι-κυκλο-
 τικι, παρα(κε)κελλωτιζω) κε-θεωα τε-λεω-να.
 Πά-ρα (περι) κει-μα κά-τη-γεο (κατοικια, καταγω) επι-τει-με-σοσ και-λειοσ-κε
 χου-νοσ-μω-ροσ (εξ-αναμαλαι) δια-με-τι-ροσ (διαμετρεωσ) κε-θεω-ρε-ζω (ρωτοσ)
 πά-γη-κευ-θεω-νω και τει-νω-λευ γι-νο-μαι-λα (γυγνομαλια) πά-λοι-κυο-μαι
 (πολλοι-ξαιμαι) κά-λευ-να-θεω συ-να-να-μυο-λα (συν-ανα-μαλαι) δια-γω-νω
 συ-ξε-θεω (συξεξει). Σιε-λα-γη-ριε-σι (συλληγη-ρεξω) πά-ζω-κά-θεω (αεπεζευκται)
 συ-κυο-γι-ρω (συ-ξυγιοσ) συ-ρω-κε (συρω-) συ-τοι-γι (στωι-) και συ-κυο-γι-ρωοσ
 (συγκυρωσ). Κά-θι-με-λευ (καθημαι-) γι-νεο-λα γι-τοι-γισ (γυξ) γι-με-νω-νο
 και συ-κυο-γι-ρωοσ (και συγκυρωσ) ζω-γα-ριε-νι-γι (ζευγατεω). Πά-σιε-λα-με-γι
 (παυ-σολη-) συ-θι-με-λευ δω-γι (δουγαι).

In English, that Greek text could then be read (transliterated) as follows:

SIDE A:

- *Foreseen (are) - as given - standing straight lines (perpendiculars)*
- *to be constructed (drawn). - To the side - of either such line segment*
- *extend - a partner line - running - alongside.*
- *The Problem (LEMMA):*
- *Consider - whether these - Parallel Lines - extended - stay - Parallels.*
- *Consider -whether these - Parallels - extended converge (diverge).*
- *The synthetic - added line - would foresee - a medial (uncertain) - termination.*
- *Extended (beyond bounds) - a fixed (converging) - termination.*

SIDE B:

- *Next to - the categorized - just constructed lines - and flat to*
- *the side walls' - diameter - inscribe - a closed arc - and make it so that*
- *the new line - curve - in its course - the side walls - diagonally - joins.*
- *Tie together - yoked - the branched lines.*
- *Connect - the standing straight lines - and branched lines.*
- *Run a line so that - the newly created*
- *geodetic lines - are met - and the branched lines - pair is yoked.*
- *The promised -solution - is given.*

A modern English mathematical version of the text would then read as follows: [12]

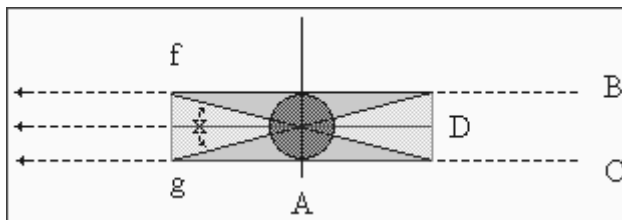
*If the parallel lines B, D and C [see **Figure 5**] are extended to f and g [and beyond but short of infinity], then the resulting angle x varies, [nearing 180 or 0 degrees] depending on where line f and g is drawn. Hence, the termination is uncertain.*

As the parallels B, D and C are extended beyond bounds (i.e. to infinity, or infinite ends), then the angle x [measured from the center of the circle to the lines drawn to the ends of the extensions of the parallel lines B and C] will get smaller and smaller towards D as the lines B, D and C are extended, thus suggesting a converging termination.

Figure 5 shows the resulting geometric figure. [13]

Figure 5

The Geometric Problem Presented by the Text of the Phaistos Disc

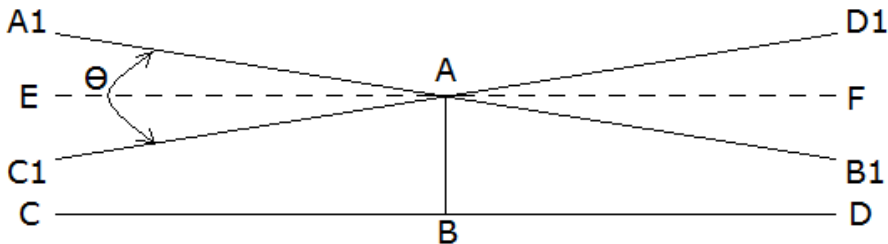


This [pre-Euclidean](#) "proof" anticipates a modern analysis of parallel lines by [non-Euclidean](#) geometry. It suggests that [Euclidian geometry](#) was known to the Greeks prior to [Euclid](#), which, in view of such mathematically sophisticated ancient sources as the [Rhind Mathematical Papyrus](#), [14] should no longer surprise us.

Indeed, the fact that Side A of the Phaistos Disc starts with 4 "knots" and Side B of the Phaistos Disc starts with 5 "knots" could indeed indicate that these are the ancient predecessors of Euclid's later 4th and 5th postulates, or, that both sides could represent the 5th postulate. *[New close-up photos allegedly indicate there are also in fact 5 knots on Side A instead of 4 knots, but either way, this is not critical to our analysis, since either way supports the 5th postulate].* The 4th postulate postulated that all right angles equal one another (the Phaistos Disk speaks of perpendiculars) and the 5th postulate is Euclid's "parallel postulate" (as on the Phaistos Disc). [15]

The Russian mathematician [Nikolai Lobachevsky](#) [16] in fact derived a proof in the 19th century which is similar to the mathematical proof found on the Phaistos Disk (quoting the Wikipedia) (**Figure 6**): [17]

Figure 6
Lobachevsky and Parallel Lines : A Modern-Day Phaistos Disc Figure



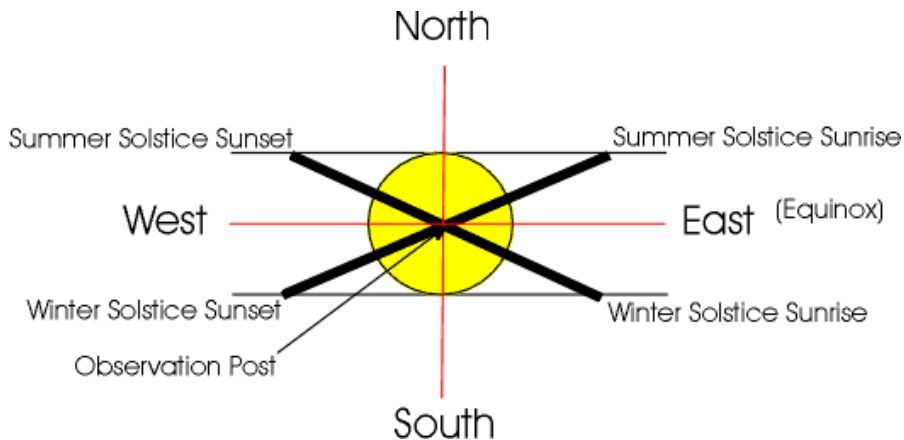
"... [In the figure above] line AB is perpendicular to CD. If we permit it to rotate about A counterclockwise, it will intersect CD at various points to the right of B until it reaches a limiting position EF, when it becomes parallel to CD. Continuing the rotation, it will start to intersect CD to the left of B. Euclid assumed that there is only one position for the line, namely EF, when it would be parallel to CD. Lobachevsky assumed that there were two such positions, represented by A1B1 and C1D1, and further, that all lines falling within the angle θ , while not parallel to CD, would never meet it, no matter how far extended.

Now this is an assumption, and there is no sense in arguing from the diagram that it is evident that if A1B1 or C1D1 were intersected sufficiently far, they would eventually intersect CD. If, as Professor Cohen has pointed out, we rely wholly on our intuition of space, which is finite, there will always be an angle θ which grows smaller as our space is extended, but which never vanishes, and all lines falling within θ will fail to intersect the given line.

[The reference is to [Morris Raphael Cohen](#) [a famed New York City legal scholar], [Reason and Nature](#), p. 137.]"

As Steve Burdic informed this author some years ago, this mathematical figure is found not only in Euclid but also in ancient astronomy as marking the major lines of the Spring and Autumn Equinoxes and Winter and Summer Solstice Sunrises and Sunsets (see **Figure 7**). [18]

Figure 7
Steve Burdic - The Same Figure is found in Astronomy



Nevertheless, in spite of our apparent success in deciphering the Phaistos Disc as an ancient mathematical proof written in Ancient Greek, we were – as an alleged decipherer - very unhappy with the result.

Who was going to believe that the Phaistos Disc represented a pre-Euclidean text that encompassed a lost postulation regarding the paradox of parallel lines? [19]

No one was going to believe that and no one has believed it.

This author would have been much happier to find a text involving a mundane funerary script or a royal laudation to a king, which is what the archaeological community could at least have treated as plausible.

But to allege that this was pre-Euclidean mathematics was – for the mainstream - beyond the pale.

Moreover, there was a much more serious problem to be faced. There were absolutely no corroborative texts. How was one going to prove the soundness of an alleged decipherment if there was no way to check the correctness of the assignment of syllabic values to the pictographs, or even to prove that the disk itself was genuine?

Mainstream Archaeology and the Evaluation of Evidence

Real or fake?

That is the question being asked here today about the Phaistos Disc – and it is indeed an appropriate question to be asked in view of some of the evidentiary blunders committed recently by mainstream archaeology, [20] exemplified by the fake [James Ossuary](#), which, prior to its removal, was presented to over 100,000 visitors at the [Royal Ontario Museum](#). [21]

As Andis Kaulins wrote to Dr. Eisenberg in correspondence leading up to this paper:

"The presence of so many fakes and hoaxes in archaeology is a function of the fact that your average archaeologist is virtually untrained in decipherment work or in the critical analysis of evidence. Archaeologists claim to have the expertise to interpret ancient texts and artifacts but in fact they generally do not have that competence. Archaeologists are for the most part diggers rather than decipherers or interpreters, who in their written allegedly scholarly work in fact often rely gullibly and uncritically on secondary sources (so-called authorities) within their own ranks, rather than engaging in independent critical thought or inquiry. The world's great decipherers have generally not been mainstream archaeologists.

What the archaeologists should be doing and what they are good at is to examine the evidence of the actual PHYSICAL disk by modern dating methods to see if its age can be confirmed or amended, but exactly that is what they have not been doing. Hence, it is thus not surprising that persons such as [Dr. Eisenberg] challenge the genuineness of the Disk, an undertaking which is welcome to this writer, since it may help to force the archaeological community to get their act together and do what they are supposed to do and what they are good at doing.

At the root of the problem is also the hunger for power and authority, combined with wishful thinking. People tend to believe what serves their interests, what they want to believe and not necessarily what the evidence indicates to actually be true. Neutral objective fact-finding is thus not always present in science. One needs merely to read *Breaking the Maya Code* [22] by Michael D. Coe, Professor Emeritus of Anthropology at Yale University, for a moving account of how one self-serving and woefully erring academic authority torpedoed the correct Maya decipherment efforts of his opponents for nearly 40 years, and was even knighted for his folly to boot."

In [*The Phaistos Disc: Hieroglyphic Greek with Euclidean Dimensions*](#), this author covered the decipherment problems involved with the Phaistos Disc in detail, writing as follows and initially quoting J. J. Gelb: [23]

""As a test of decipherment, we should insist on translation of a full text, not simply excerpts. It is frequently possible to provide a persuasive interpretation for a small portion of the text, such as a phrase or even a sentence, but this cannot be a decipherment if the rest of the text is gibberish."

E. J. W. Barber in *Archaeological Decipherment, a Handbook* (Princeton University Press, 1974), raises a particularly sober test for "decipherment" of the Phaistos Disc:

"For determining any particular sort of linguistic information, of course, larger amounts of text give us more reliable statistics. Anyone who claims to have deciphered a script for which only 241 signs of non-alphabetic text are known must expect his genius to go unrecognized until more texts turn up. Not only is there not enough statistical information for him to prove his claim, but by the same token there is not enough for anyone else to disprove it."...

Insofar as the Phaistos Disc is concerned, Barber's point of view must be regarded as sound in principle.

Indeed, the crucial step in the work of Ventris was the subsequent discovery of additional Linear B tablets which verified in general the syllabic values assigned by him to Linear B symbols.

Similarly, it is unlikely that any decipherment of the Phaistos Disc will be able to convince everyone unless additional texts in the same script can also be deciphered by the use of syllabic (or other) values assigned to those symbols found on the Disc." ...

In a similar vein, Hiller also cites the work of G. Neumann, "Zum Forschungsstand beim 'Diskos von Phaistos', *Kadmos* 7, 1968, pp. 27-44, which views this matter from the practical side and thus continues the work of G. Ipsen (1929) in this regard. Neumann identifies four major problems which have thus far hindered the decipherment of the Disc:

- the Disc is the only text of its kind yet discovered in Crete
- 2) the text is allegedly too short to allow sufficient statistical analysis of the distribution of symbols
- 3) the circumstances surrounding its discovery give few clues as to the nature of the writing, nor does the Disc itself offer much assistance (as opposed, for example, to a grave inscription), and,
- 4) the Disc stems from a very early period of history which allows no "antehec data" to be discovered in other sources....

One area in which progress has been made, as Hiller notes, is in the suggestion that the Phaistos Disc is not an imported isolated object but stems out of the "native" Aegean culture which existed at the time that the Disc was made (even though this culture may of course have been imported at some previous time).

Accordingly, C. Devaras in "Zur Herkunft des Diskos von Phaistos", *Kadmos* 5, 1967, pp. 101-155, pointed out that the "crown" on the top of the head of the most frequent symbols on the disc ([the graphic in the original book is excluded here]) finds comparables in the Aegean.

This observation supported work by Chapoutier (CRAI, 1937, 277f.) in showing that the symbols on the bronze axe of Arkalochori and the stone altar of Mallia were similar to those on the Phaistos Disc.

Moreover, I. Pini in "Zum Diskos von Phaistos", *Kadmos* 9, 1970, p. 93, showed that clay impressions similar to one of the symbols on the Disc were found elsewhere on Crete as well.

Lastly, comparisons to Linear A have been made by J. Raison and M. Pope in "Index to Linear A", *Kadmos* 14, 1975, pp. 97-101, as Hiller points out, thereby supporting similar efforts by G. Pugliese Carratelli, "Sulle epigrafi in Lineare A di carattere sacrale", *Minos*, 5 (1957) and Simon Davis, *The Decipherment of the Minoan Linear A and Pictographic Scripts* (Witwatersrand University Press: Johannesburg, 1967).

All of this work has contributed to keeping scholars from looking too far away from "home" for answers to help in the decipherment of the Disc.

A critical and much disputed question over the years has been the direction of the writing of the Disc, and similar technical questions, such as which side was written first, etc.

Hiller notes further in his article that great progress in this area has been made in recent years.

Although it had long been suggested that the direction of the writing on the Disc was from right to left (and hence from the outer rim inwards), H. J. Hacker and E. Schellen in "Ein neues Argument für die rechtsläufige Leserichtung des Diskos von Phaistos", *Kadmos*, 10, 1971, pp. 20-27, challenged the old assumption with new arguments and thus forced the opposing side to establish its position on a sounder basis.

This culminated in the works of J. Fauccounau, "La sens de L'écriture du Disque de Phaistos", *Kadmos*, 14, 1975, pp. 94-96, J. P. Olivier, "Le Disque de Phaistos, Edition Photographique, BCH 99, 1975, pp. 5-34, A. Bradshaw, "The Imprinting of the Phaistos Disc", *Kadmos* 15, 1976, and Yves Duhoux, *Le Disque de Phaistos. Archaeologie. Epigraphie. Edition critique. Index.* (Louvain, Éditions Peeters, 1977)....

Based on careful analysis of the original Disc itself, Duhoux determined, among other things:

- that the Disc was likely written with a ready-made "model" at hand
- 2) that Side A was smoothed and flattened by hand and that Side B was smoothed and flattened as a result of the pressure applied on Side A
- 3) that the clay had begun to dry during the writing process, on the basis of which the order in which the sides were stamped can be determined: namely, Side A first and Side B second
- 4) that the spiral lines were drawn from the outside inwards
- 5) that the symbols were stamped from the outside inwards
- 6) that the separating lines were added after the symbols had been stamped, and,
- 7) that the writing runs from right to left."

Corroborative Elamite Script for the Phaistos Disc

Thanks to the friendly persistence of [Dr. Jerome Eisenberg](#), I finally agreed to attend this conference and present a paper, even though I had done no work on the Phaistos Disk in the nearly 30 years since my own publication. As I wrote to Dr. Eisenberg:

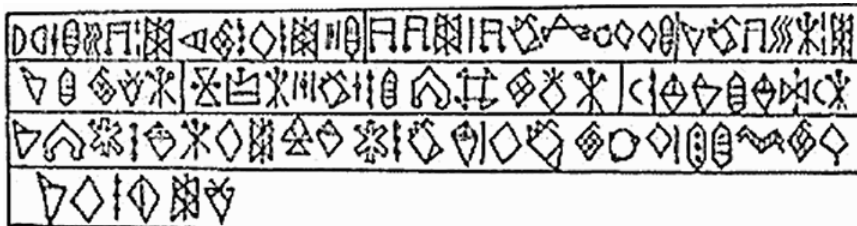
"I am happy to see you have tackled this fun topic and that you thereby are keeping the Phaistos Disk in the public eye. The idea that the Phaistos Disk is a forgery is not new to me and there is no question that the lack of additional Minoan scripts using these symbols is a serious problem, not only in terms of the question of the genuineness of the Disk but also in terms of validation of any alleged decipherment of the Phaistos Disk."

For this paper, I thus searched for a corroborative script which might have surfaced somewhere in the Ancient World as a genuine artefact in the last 30 years, and, to my own great astonishment, I did locate such a script at [Omniglot](#) (see **Figure 8**):[24]

Figure 8
An Old Elamite Script as Corroboration for the Phaistos Disc





Figure 9
Old Elamite Script in Figure 8 (above) turned to horizontal
























What struck me immediately was the similarity, shown at **Figure 10**, between the first word on the Old Elamite text and the symbols on the Phaistos Disc, whereby the [Old Elamite](#) script looked like a more cursive version of the Phaistos Disc script.

Figure 10
The First Word of an Old Elamite Script
and Phaistos Disc Symbols Compared

Old Elamite	
Phaistos Disc	

The Old Elamite script in **Figures 8, 9 & 10** is from [Elam](#), the ancient kingdom east of [Sumer](#) and [Akkad](#) (later [Babylon](#)), with its capital at [Susa](#), the source of the stele of the [Code of Hammurabi](#), in what is today [southwest Iran](#). Written records place the beginnings of Elamite culture at ca. 3200 BC. The script in question is referred to as Old Elamite, and - just like the script of the Phaistos Disc - it is still considered by the mainstream to be an undeciphered pictographic script, for whose symbols the syllabic values shown in **Figure 11** have in any case been alleged to apply to Old Elamite by some researchers: [25]

Figure 11
Syllabic Values alleged for Old Elamite Script by others

										
ki	in	shi	k	u	hal	pi	ri	lik	li	ni
										
nap	shu	na	nulhu	ku	me	hi	ir	la	si	

The entire matter became provocatively interesting because the Old Elamite script in **Figure 8** is clearly substantiated by a similar Old Elamite script found at **Figure 12**. This second script has a tremendous impact on the present subject because the second Old Elamite script has an Akkadian bilingual text, [26] which has been translated to mean that a monument of some kind was erected for or by an important personage in Susa. Since a number of symbol combinations are repeated identically on both Old Elamite scripts as found at **Figure 8** as well as at **Figure 12**, it is then logical to presume that both Old Elamite scripts have a similar content and relate to the dedication of monuments to or by important Elamite personages at Susa.

Figure 12
A Second Old Elamite script from Susa
has an Akkadian bilingual text



Based on the bilingual Akkadian text of this document, the above Old Elamite script has been read by others to mean as follows (our translation from the German is appended): [27]

[German] "Seinem Herrn Inshushinak, dem Menschenbildner (?), 2. habe ich Shilhak-Inshushinak, 3. der Statthalter von Susa, 4. der König des Landes Elam, 5. der Shempishhukische, 6. eine Säule (?) aus Kupfer (und) Zedernholz geweiht."

[Our English translation of that error-filled conversion which I found at Harald Haarmann, [Universalgeschichte der Schrift](#), Campus Verlag: Frankfurt and New York, 1991, Sonderausgabe 1998, Parkland Verlag, Cologne, p. 374,]

"For his master Inshushinak, the sculptor of human forms (?), I, Shilhak-Inshushinak, Administrator of Susa, King of Elam, has dedicated the Shempishhukische, an obelisk (or column) (?) of copper and cedar wood."

If we now apply the syllabic values derived by this author in the year 1980 for the symbols on the Phaistos Disc to the pictographs found in the Old Elamite scripts at **Figure 8** and **Figure 12**, what happens? What language results and what reading – if any – do these syllabic values provide? Based on the dual syllabic grid in **Figure 13**, the decipherment result is shown in **Figure 14** and **Figure 15**, which decipher both Old Elamite scripts using the Phaistos Disc syllabic values already obtained by [Andis Kaulins](#) in 1980 and applying those same syllabic values to similar symbols on the Old Elamite scripts.

The Ancient Greek text in **Figure 14 (Figures 8 & 9)** reads in English:

"Ruler over all (Pantarchas). In memory, the deceased in these walls of a new temple is laid to rest. The collected elders, ordained by God, and the lone (sole) companion of King Labynetus, Nitokris, administrator in death, in Susa erected this temple in memory, in sorrow created."

It is now also possible to decipher the Old Elamite Script at **Figure 12**, as follows in **Figure 15**:

Figure 13
Dual Syllabic Grid of Old Elamite Script and Phaistos Disc Symbols

Syllabic Grid of Symbols on the Phaistos Disc and in Elamite Script								
VOWELS FOLLOWING INITIAL CONSONANTS ↓	Short Vowel <u>ū</u> = ā, ō, ū		EI-Diphthong = IE, EI, AI, IA, ū		Short EI = ĭ, éí, ě		ū-Diphthong = uo, eu, oi, w	
	Old Elamite	Phaistos Disc	Old Elamite	Phaistos Disc	Old Elamite	Phaistos Disc	Old Elamite	Phaistos Disc
P								
R								
M								
N								
L								
T								
D								
S								
K								
Y (jat)								
c, x, θ, ts, š (affricates)								
Dual Syllabic Grid of Phaistos Disc and Elamite Script Symbols Deciphered by Andis Kaulins, Copyright © 2008.								

Figure 14
Decipherment of the Old Elamite Script at Figures 8 & 9
via the Andis Kaulins deciphered symbols of the Phaistos Disc



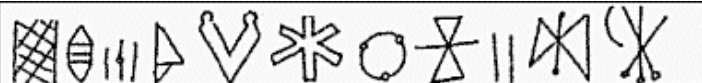





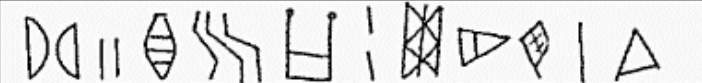
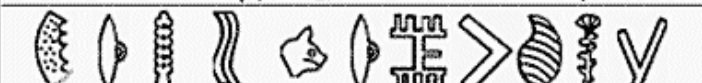
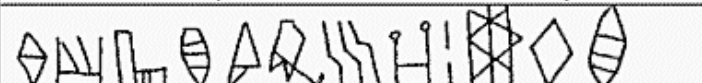
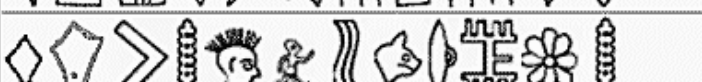
PHAISTOS DISK CORROBORATION				
OLD ELAMITE SYMBOLS FROM AN UNDECIPHERED TEXT ¹				
followed by comparable PHAISTOS DISK SYMBOLS via AK*				
		πα-ν-τ-α-ρ-χ-ια = pa-n-t-ar-ch-ia = "Rule Over All" πα-ν-τ-α-ρ-χ-ας = pa-n-t-ar-ch-as = "Ruler Over All" Ancient Greek terms http://www.operone.de/griech/wad1604.html		
		The above line is Old Elamite. This line shows the comparable symbols from the Andis Kaulins Phaistos Disk decipherment 1980.		
				
				
παρα-κατ-σώζω παρα-κατ-σώζω In memory,	νεκρικῶ νε-κ-ρι-κῶ the deceased	κατα-τειχέω κα-τα-τει-χέω in these walls	νεο-τεμένιος νεο-τε-μέ-νιος of a new temple	ἐκ-κομιδή ἐκ-κο-μι-δή is laid to rest
				
				
πάκτωσις πά-κ-τ-ω-σις The collected	παλαιός παλαιός elders of the	ζᾶ-θεος ζᾶ-θεος holy	θεο-κρήνις θεο-κρήνις theocracy with	μουνάξ μουνάξ the sole companion of King
				
				
Νίτωκρις Νί-τω-κ-λ-ις Nitokris as administrator	και ταμειύω και τα-μειύω in death for the pair	θάνατος θά-να-τος in Susa	και ζυγή και ζυγή erected [this temple]	Σοῦσα Σοῦσα in memory
ιστήμι ίσ-τη-μι In sorrow	μνεϊάν μ-νεϊά-ν created	τάξις. πάθος τεύχω		
¹ Text Source, Elamite, Omniglot http://www.omniglot.com/writing/elamite.htm * AK = Decipherment Copyright © 2008 by Andis Kaulins				

Figure 15
Decipherment of the Second Old Elamite Script found at Figure 12

			
			
Me-ga-s This Great	Pa-ri-ka-n περι-κίων Hall of Columns	Pe-lo-ro-ne-se Πελοπόννησος Peloponnesus	
			
			
SA-TIE-MI ἴσ-τη-μι was erected	in memory of	νεκρικῶ (νεκάς) VE-K-RI-Kῶ the deceased (Queen)	
			
			
Mu-ti-nai Μυκῆναι of Mycenae	Di-s-pei δια-σπειρω diaspora		
			
			
Νίτωκρις Νί-τω-κ-λις Nitokris	διά-στατος διά-σασις separated from her home in	Mu-ti-nai Μυκῆναι Mycenae	
			
			
νεο-παγής and now	πάθος in sorrow	διά-στατος separated	νεκάς in death

The Ancient Greek text in **Figure 15** (i.e. decipherment of **Figure 12**) reads in English:

"This great hall of columns, Peloponessus, was erected in memory of the deceased Queen Nitokris of Mycenaean descent, separated from her home in Mycenae and now in sorrow separated in death."

Was Nitokris the true "Helen of Troy" or Clymene of ancient Greek legend?

The ancient name for Troy was **Ilium** or **Ilion**: [28] (Greek Τροία, *Troia* or Ἴλιον, *Ilion*; Latin: *Trōia*, *Īlium*, Hittite: *Truwisa* or *Wilusa*).

Ilium thus bears a close word correspondence to the term **Elam**.

Did both identify the same place? In Persia?

We must recall that the currently accepted location of Troy [29] in Anatolia as popularized by [Heinrich Schliemann](#) and as defended in our day by [Manfred Korfmann](#) has been called a fantasy construction by [Frank Kolb](#). Indeed, there is no probative evidence that Hisarlik (also written Hissarlik) [30] in modern-day Turkey was ancient Troy.

Nothing in historical or archaeological data gives Hisarlik any great ancient importance.

Moreover, in order for the Troy hypothesis at Hisarlik to fit the Mycenaean chronology and the archaeological record, [a period of 400 years of non-occupation](#) has to be assumed from ca. 1100 to 700 BC, which is, however, not supported by the actual archaeological evidence.

Homer spoke of springs west of the city of Troy, but there are none at Hisarlik. But Richard Critchfield has written that there are underground springs on the Susa plain. He writes further: [31]

Many archeologists believe the earliest settlers of Mesopotamia came from Elam, where the villagers were of similar Sumerian-Semitic stock. But the origin of the Sumerians remains unestablished and we have only the Bible's "*And as men migrated in the east, they found a plain in the land of Shinar and settled there.*".

Susa and Elam are therefore of great historical and archaeological interest. [Jacque de Morgan](#), [32] famed for having found the Code of Hammurabi [33] at Susa and called the father of prehistoric archaeology by some, wrote: [34]

"In the Nile valley I developed the conviction that the first civilizations, from which the Egyptian empire arose, came from Chaldea and that the Mesopotamian plains had therefore been the cradle of human progress. Susa, because of its very early date, provided the possibility of solving the greatest and most important problem, that of our origins. This city, in my view, belonged to that primordial world that had witnessed **the discovery of writing**, the use of metals, the beginnings of art. If the great problem of origins was to be solved one day, it was in Chaldea, and especially at Susa, that it was necessary to seek the basic elements." **[emphasis added]**

As far as the origins of writing are concerned, in fact, some of the oldest seals and stamps ever discovered have been found at Susa in Elam. [35] As on the Phaistos Disc, the ancient technology of "writing" symbols onto seals consisted of stamping carved impressions onto clay. The Phaistos Disc thus does not implement an unknown technology, rather, it implements a technology otherwise unknown to Crete that was surely imported from elsewhere.

The geographic placement of Troy in the direction of Persia is also suggested by other evidence.

The *Iliou persis* [36] (Greek: Ἰλίου πέρσις, Latin: *Iliupersis*) is a lost Greek epic of the so-called Epic Cycle (also called the "Trojan Cycle") of Greek literature, of which fragments have survived. [37] The current mainstream translation of the title phrase *Iliou persis* as "Sack of Ilium" is unpersuasive and doubtful in view of the Ancient Greek root περσις- (persis-, "Persian"), whereby πέρσις (**pérsis**) "destruction" is surely a derivative meaning attached to the folk name. *Iliou persis* in its original context thus most likely actually meant "Elam in Persia" or "Hellas in Persia".

In any case, it was in fact the similarly named [Paris](#) (perhaps originally "**Persis**", i.e. the Greek person from Persia) who, according to the legend of the cause of the Trojan War, eloped with or abducted [Helen of Troy](#), [38] the stepdaughter of [King Tyndareus](#). That entire complex of ancient tales provides us with the necessary [Mycenaean connection to Crete and the Minoan Civilization](#), as follows, according to Greek legend, recited at the Wikipedia:[39]

" When it was time for [Helen] to marry, many ... kings and princes came to seek her hand.... Tyndareus [would not] send any of the suitors away for fear of ...giving grounds for a quarrel.... Odysseus proposed that ... all the suitors should swear a most solemn oath to defend the chosen husband against whoever should quarrel with the chosen one. This stratagem succeeded and **Helen and Menelaus were married**. Eventually, Tyndareus resigned in favor of his son-in-law and Menelaus became king of Sparta....

Some years later, **Paris**, a Trojan prince came to Sparta to marry **Helen**, whom he had been promised by Aphrodite. Helen fell in love with him and left willingly, (although it is also suggested that he may have simply kidnapped her, with neither theory being conclusively proven) leaving behind Menelaus and Hermione, their nine-year-old daughter....

Menelaus' attempts to retrieve Helen ... caused the Trojan War."
[emphasis added]

The Mycenaean connection to Crete is strengthened by the legendary account that on the night that Helen and Paris left Sparta, they were able to do so because [Menelaus](#) had left Sparta **to sail to Crete** for the funeral of his grandfather **King Catreus**: [40]

"The myth about Catreus [son of King Minos] and his children is proof (known as well from the archaeological findings) that in the so called "heroic age" a close relation existed between Crete, Mycenae, and the other places in the Peloponnese and also between Crete and the islands such as Rhodes."

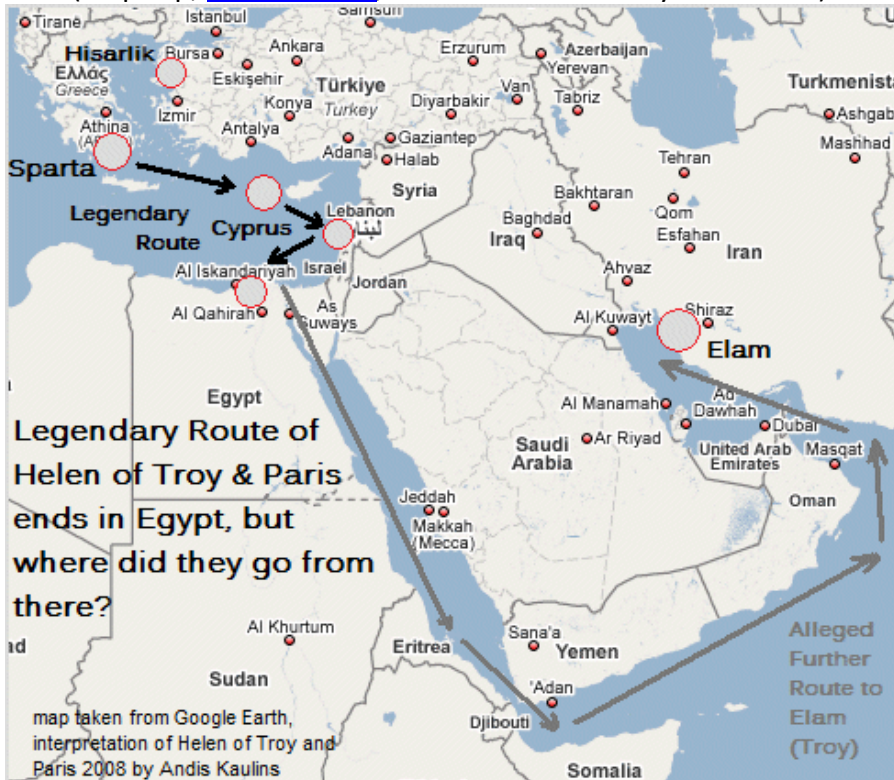
Events related to the Trojan War hold more surprises in the legendary account, some of which seem to be conveniently ignored by those who modernly discuss the location of Troy.

Robert von Ranke-Graves), [41] based on numerous Greek sources, writes that Helen and Paris, after leaving Sparta, sailed to Cyprus, Sidon (Phoenicia, near **Tyre**) and the Nile Delta of Egypt, where, at the latter, they founded a temple on the Canopic branch of the Nile. This could have been at Sais on the Canopic branch of the Nile. [42]

The patron goddess of the "Egyptian" city Sais was [Neith](#), whose cult at Sais is allegedly attested in texts clear back to the 1st Dynasty, but nothing archaeological has been found there earlier than the New Kingdom, in fact "*only a few relief blocks in situ*". [43] Interesting then, according to legend, is that ancient Sais was allegedly **built by Greeks**, not Egyptians, prior to the cataclysm. [44]

"Diodorus Siculus attested that it was the Athenians who built Sais before the cataclysm. While all Greek cities were destroyed during the cataclysm, the Egyptian cities including Sais survived. ... There are today no surviving traces of this town prior to the Late New Kingdom (c. 1100 BC) due to the extensive destruction of the city by the Sebakhin ... leaving only a few relief blocks in situ."

Figure 16
The Legendary Route of Helen of Troy and Paris
 (map clip, [Google Earth](#), route labels added by the author)



The legendary route of Helen and Paris to Troy does not speak for [Hisarlik](#) as Troy. Paris and Helen first went to Egypt, and they would not have gone that far South only to return even further to the North. [45] Indeed, Herodotus tells us that Helen stayed in Egypt:

"The Egyptians scolded Paris and informed him that they were confiscating all the treasure he had stolen (including Helen) until Menelaus came to claim them and that Paris had three days to leave their shores."

Our conclusion is thus that Troy is clearly elsewhere than Hisarlik.

According to Herodotus, [46] [the Greeks had trouble finding Troy](#), a fact which would seem to exclude Hisarlik as the location of Troy, since that location would easily have been known to them, being veritably in their own back yard in the Aegean.

The legend relates that the Greek warships in pursuit of Helen and Paris initially and mistakenly attacked the people called Teuthranians (we think this was the Tyransians, the people of [Tyre](#), near Sidon) who claimed that Helen was not in their land, and put up fierce resistance, inflicting serious losses on the Greeks.

Tyre would in that case then be the origin of the later name **Troy**, which became confused historically by the ancient writers with **Ilium** (Elam), the actual location of Helen and Paris, or Clymene and her husband?

[Gaius Julius Hyginus](#), previously mentioned, provides more evidence that the current identification of the ancient island of Tenedos as the tiny island Bozcaada ([39 square kilometers](#)) is wrong. According to the legend, Tenedos lay before Troy and Hyginus in [Fabulae 276](#) provides us with the following sizes of the ancient islands, here excerpted for Tenedos:

"CCLXXVI. LARGEST ISLANDS

Tenedos [*surely Rhodos, otherwise missing from this list*], **island near Troy, in circuit 1200 stades** [*since [1 stade = ca. 200 yards](#), then 1200 stades = ca. 220 km and that is the actual coastline length of Rhodos*] [*bracketed material added*]

Although the girth given to islands by Hyginus is flawed, it is remarkable that the island Tenedos is given the largest size of all these islands, so that it is unlikely that ancient Tenedos could be the tiny modern island Bozcaada. Indeed, the Hyginus list has only the larger islands in the Mediterranean, and Rhodes is missing from the list, so that *Tenedos* is most likely to be *Rhodes* for the size fits, as it is the largest island in the [Dodecanese](#).

Indeed, [Pausanias the geographer](#) connects the final fate of Helen of Troy to Rhodes. That the insignificant island Bozcaada would have been intended in the ancient legend is impossible.

Since all the large islands in the Mediterranean are otherwise accounted for, Tenedos can only be the island of Rhodes which is the most eastwardly Greek island prior to Phoenicia, i.e. the Fertile Crescent. Troy must thus lie east of Rhodes and this can only be Tyre. [Tyrus](#) (also spelled Tylos) was regarded as one of the legendary homes of the Phoenicians. **Tyrus is said to have the same Phoenician name origin as Tyre.** There is also a second island which is regarded as one of the legendary homes of the Phoenicians, it is **Aradus** (today [Arwad](#), Arabic: أرواد), the only Syrian island in the Mediterranean. Arwad has a legend which [holds that](#):

"Ashurbanipal ... compelled its king Yakinlu to submit and send one of his daughters to become a member of the royal harem (Rawlinson, [Phoenicia](#), 456-57)."

That legend has a connection to Queen Naquia (Naqia) (potentially the same as the legendary Clymene), for Naqia's husband, by current historical analysis of mainstream scholars, was allegedly Sennacherib, her son was Esarhaddon and her grandson was Ashurbanipal.

Catreus, the grandfather of Menelaus, had numerous children, but after an oracle prophesied that one of those children would kill him, he sent his sons off to distant places such as Rhodes. His two daughters, as previously mentioned, he is said to have given to a merchant mariner, to be married off in foreign lands:[47]

"Catreus [gave] two of his daughters, Aerope and **Clymene**, to the merchant sailor **Nauplius**, to be sold in foreign lands. Aerope [was] the mother of Agamemnon and Menelaus..., but Clymene was married by Nauplius, who had by her sons: **Palamedes** and Oeax." [emphasis added]

Clymene in ancient Greek sources is both *Clymene* and *Asia*, [48] thus pointing to a possible geographic Asian destiny for her together with Nauplius. It is her son [Palamedes](#) [49] who is subsequently of the greatest of interest as an inventor of letters:

"[Palamedes] is said to have invented counting, currency, weights and measures, jokes, dice and a forerunner of chess called *pestoi*, as well as military ranks. Sometimes he is credited with discoveries in the field of wine making and the supplementary letters of the Greek alphabet."

According to Gaius Julius Hyginus,[50] **Palamedes** is said to have **invented eleven of the Greek letters**: [51] [emphasis added]

"CCLXXVII. FIRST INVENTORS. The Parcae, Clotho, Lachesis, and Atropos invented seven Greek letters - A B H T I Y. Others say that Mercury invented them from the flight of cranes, which, when they fly, form letters. **Palamedes, too, son of Nauplius**, invented eleven letters; Simonides, too, invented four letters – Ó E Z PH; Epicharmus of Sicily, two - P and PS. The Greek letters Mercury is said to have brought to Egypt, and from Egypt Cadmus took them to Greece. Cadmus in exile from Arcadia, took them to Italy, and his mother Carmenta changed them to Latin to the number of 15. Apollo on the lyre added the rest...." [emphasis added]

This invention occurs in the era of the Trojan War, for Palamedes was a contemporary of Helen of Troy. [One account reads](#): [52]

"Cadmus, son of Agenor, first brought seventeen Greek letters from Phoenicia into Greece: alpha, beta, gamma, delta, epsilon, zeta, iota, kappa, lambda, mu, nu, omicron, pi, rho, sigma, tau, phi. Palamedes added three more to this at the time of the Trojan War: eta, chi, omega. After him the lyricist Simonides added three others (psi, xi, theta)."

Accordingly, for the **era** of Helen of Troy, we have substantial legendary evidence that the use of Greek letters was in its early stages at this time, and known to the Mycenaean and other Greek royal families that descended from Catreus, the son of King Minos of Crete. As far as the origin of writing in Greece is concerned, we thus have a persuasive connection between the Crete of the Phaistos Disc and early Greek texts.

What is also clear is that Helen of Troy and Paris spent the Trojan War either in Egypt or in a different land, to which they went from Egypt. The Elamite scripts suggest that Helen of Troy and Paris could have left Egypt and ultimately have arrived in Elam.

It should be noted, however, that another possibility exists for the origin of the Elamite texts, i.e. that they relate not to Helen of Troy but to Clymene and Nauplius, for which reason we include that alternative explanation at various junctures in this writing. For example, it is worth investigating whether *Naquia* (*Naqi'a/Zakutu*, viz. *Zakutu* is possibly Nitokris viz. Clymene and whether her sister *Abirami* is possibly Aerope.)

The Egyptian Queen Nitokris, who is thought to have ruled ca. 2150 B.C. according to current scholarship, is regarded to be a different Queen than the "Babylonian" Elamite Queen Nitokris, but we leave a discussion of that issue for a later date, since that is a question of chronology and other matters too broad to discuss here.

In a Mycenaean context - for our purposes - it is important to note as a matter of language that Nitokris is read *Neit-krety* in Egyptology and could in fact thus be read as "goddess (or woman) of Crete". In very archaic Indo-European (e.g. Latvian) the term *meita* is similar to *neit* viz. *neith* and means simply "girl" or "woman", so that the original meaning of *Neit-krety* might simply have been "girl from Crete".[53]

Sais ([Sa el-Hagar](#)) in Egypt was thus surely the **Temple of Neith** ([location site](#) of the transmission of the original Atlantis legend) and the similarly named **Susa** was the city of the Queen from Crete.

But that Queen could also be Clymene rather than Helen of Troy, whose husband hailed from Crete.

It is [asserted](#) in an ancient account that the eloped or abducted Helen of Paris was not the real Helen, [but that she had remained in Egypt](#), and had been reunited with Menelaus after the Trojan War. Apollodorus in [Epitome 6.29](#), translated by J. G. Frazer, relates that:

"Menelaus, with five ships in all under his command, put in at Sunium, a headland of Attica; and being again driven thence by winds to Crete he drifted far away, and wandering up and down Libya, and Phoenicia, and Cyprus, and Egypt, he collected much treasure. And according to some, he discovered Helen at the court of [Proteus](#), king of Egypt; for till then Menelaus had only a phantom of her made of clouds."

In any case, either Helen of Troy or Clymene, was thus arguably Queen Napirasu, as wife of King Untash-Napirisha (King Labynetus viz. Nauplius (viz. Naublius) of Elam.

The similar name Na-**Piris**-ha could speculatively be the **Paris** of ancient Greek legend who eloped with Helen - or in the alternative, or cojointly - Napirisha could be the name equivalent to Nauplius, which might seem more likely, but is uncertain.

A statue of Queen Napirasu, unique for its time, composed of 3760 pounds of bronze and copper, was found in Susa, and is today a part of the Iran collection in the [Louvre](#).

We see either Helen of Troy or Clymene as being the life-size statue of Queen Napirasu in Elam.

FOOTNOTES to the ARTICLE by ANDIS KAULINS

- [1] [J.D. \(Doctor of Jurisprudence\) Stanford University Law School](#). Former Lecturer in Anglo-American Law, Legal Research and Legal Writing, [FFA, University of Trier Law School](#). Co-author: [The Langenscheidt Routledge German-English English-German Dictionary of Business, Commerce and Finance \(4th ed. 2011\)](#). Author: [The Phaistos Disc: Hieroglyphic Greek with Euclidean Dimensions](#) (Darmstadt, 1980); [The Phaistos Disc: An Ancient Enigma Solved: Two Corroborative Old Elamite Scripts, International Conference on the Phaistos Disk](#), London, Society of Antiquaries, Burlington House, October 31, 2008.
- [2] Andis Kaulins, [The Phaistos Disc: Hieroglyphic Greek with Euclidean Dimensions: The 'Lost Proof' of Parallel Lines](#), Darmstadt, 1980, p. 18.
- [3] *Ibid.*, p. 19.
- [4] *Ibid.*, p. 14.
- [5] *Ibid.*, p. 22.
- [6] *Ibid.*, pp. 36-37.
- [7] *Ibid.*, pp. 26-28.
- [8] *Ibid.*, pp. 25-28.
- [9] *Ibid.*, pp. 30-33.
- [10] *Ibid.*, p. 38.
- [11] *The Phaistos Disk In Ancient Greek, Syllabic Script*, [LexiLine.com](#), <http://www.lexiline.com/lexiline/lexi164.htm>.
- [12] *The Phaistos Disc Decipherment*, [LexiLine.com](#), <http://www.lexiline.com/lexiline/lexi3.htm>.
- [13] *Ibid.*
- [14] Gay Robins & Charles Shute, [The Rhind Mathematical Papyrus: an ancient Egyptian text](#), British Museum Press, London, 1987, reprinted 1990, 1998. A. Henry Rhind was a Scottish lawyer who first acquired the papyrus in the 1850's. See <http://www.amazon.co.uk/Rhind-Mathematical-Papyrus-Ancient-Egyptian/dp/0714109444> and <http://www.jstor.org/pss/2299251>.
- [15] D. E. Joyce, [Euclid's Elements](#), <http://aleph0.clarku.edu/~djoyce/java/elements/book1/post5.html>
- [16] [Nikolai Lobachevsky, Wikipedia](#) http://en.wikipedia.org/wiki/Nikolai_Ivanovich_Lobachevsky.
- [17] Edward Kasner and James Roy Newman, [Mathematics and the Imagination](#) (with drawings by Rufus Isaacs), New York, Simon & Schuster, 1940/1967, pp. 136-137 (this drawing is our adaptation) <http://www.amazon.com/Mathematics-Imagination-Edward-Kasner/dp/0486417034>.
- [18] *The Steve Burdic Phaistos Page*, [LexiLine](#) <http://www.lexiline.com/lexiline/lexi155.htm>.
- [19] See D. E. Joyce, [Euclid's Elements](#) <http://aleph0.clarku.edu/~djoyce/java/elements/elements.html>.
- [20] Andis Kaulins, [LawPundit](#) http://www.lawpundit.com/blog/2005_12_01_lawpunditarchive.htm
- [21] *Criminal case 482/04, the State of Israel v. Oded Golan and others...one of the biggest forgery scandals ever in the history of archaeology.* [MSN] [Israel](#) <http://msn-list.te.verweg.com/2008-April/009736.html>.
- [22] Michael D. Coe, [Breaking the Maya Code](#), London, Thames & Hudson, 1992, ISBN 0500050619 <http://www.amazon.com/Breaking-Maya-Code-Michael-Coe/dp/0500281335>.
- [23] J. J. Gelb (assisted by R. M. Whiting), *Methods of Decipherment*, [Journal of the Royal Asiatic Society](#), 1975, No. 2, pp. 97-104, quoted in Andis Kaulins, [The Phaistos Disc: Hieroglyphic Greek with Euclidean Dimensions: The 'Lost Proof' of Parallel Lines](#), Darmstadt, 1980, pp. 8-11.
- [24] *Elamite, Omniglot* <http://www.omniglot.com/writing/elamite.htm>.
- [25] *Elamite, Omniglot* <http://www.omniglot.com/writing/elamite.htm>
- [26] Harald Haarmann, [Universalgeschichte der Schrift](#), Campus Verlag: Frankfurt and New York, 1991, Sonderausgabe 1998, Parkland Verlag, Cologne, p. 374.
- [27] *Ibid.*
- [28] *Troy, Wikipedia* <http://en.wikipedia.org/wiki/Troy>.
- [29] *Troja-Debatte, Wikipedia* <http://de.wikipedia.org/wiki/Troja-Debatte>.
- [30] *Hisarlik, Wikipedia* <http://en.wikipedia.org/wiki/Hisarlik>.
- [31] Richard Critchfield, [How Lonely Sits the City](#) <http://www.aliciapatterson.org/APF001970/Critchfield/Critchfield14/Critchfield14.html>.
- [32] [Jacques de Morgan, Encyclopaedia Iranica](#) <http://www.iranica.com/newsite/>.

APPENDIX 3 – Y-chromosome DNA in Crete, Greece & the Levant

Annals of Human Genetics, [Ann Hum Genet](#). 2008 Mar;72(Pt 2):205-14.

Excerpted from the **Abstract** to that cited article

"The earliest Neolithic sites of Europe are located in Crete and mainland Greece.... **An analysis of Y-chromosome haplogroups determined that the samples from the Greek Neolithic sites showed strong affinity to Balkan data, while Crete shows affinity with central/Mediterranean Anatolia....** This dichotomy parallels archaeobotanical evidence, specifically that while bread wheat (*Triticum aestivum*) is known from Neolithic Anatolia, Crete and southern Italy; it is absent from earliest Neolithic Greece. The expansion time of YSTR variation for haplogroup E3b1a2-V13, in the Peloponnese was consistent with an indigenous Mesolithic presence. **In turn, two distinctive haplogroups, J2a1h-M319 and J2a1b1-M92, have demographic properties consistent with Bronze Age expansions in Crete, arguably from NW/W Anatolia and Syro-Palestine, while a later mainland (Mycenaean) contribution to Crete is indicated by relative frequencies of V13.**"[emphasis added]

APPENDIX 4 – Which Y-DNA Haplogroup best defines the connection between Crete, Mycenae, Greece and Elam in Iran?

J2 (Y-DNA) - "[The Phoenician Gene](#)"

Excerpt from http://en.wikipedia.org/wiki/Phoenician_gene

Time of origin: 18500 (+/- 3500) thousand years ago.

Place of origin: Mesopotamia (Iraq, Syria, Turkey & Iran), or the Levant (Syria, Lebanon, Israel & Jordan) or Anatolia (Turkey) or Zagros mountains (Iran)

Ancestor: J, Defining mutations: M172

Typical members: Iraqiis 29.7%, Lebanese 29.5%, Syrians 29%, Sephardic Jews 29%, Kurds 28.4%, Turks 27.9%, Georgians 26.7%, Iranians 23.3%, Ashkenazi Jews 23.2%, Greeks 22.8%, Tajiks 18.4%, Italians 19.3%, North Indians 7.8% viz. 19.8%, Pakistanis 14.7%, South Arabia (Oman, Yemen, UAE) 9.7%."

APPENDIX 5 – THE TWO SISTERS : NAQUIA & ABIRAMI, Sarah Chamberlin Melville, *The role of Naquia / Zakutu in Sargonid politics*. Ph.D. thesis, Yale University, May, 1994.

<http://www.shc.ed.ac.uk/classics/undergraduate/ancient/documents/Zaquia.pdf>. As Sarah Chamberlin Melville writes at the very outset of her dissertation: "There is more evidence for Naqia/Zakutu than for all other Sargonid royal women combined." Why is that the case? One could argue that there was something very unusual about her that led to all of this ancient attention. Naqia's husband, by current historical analysis of mainstream scholars, was allegedly Sennacherib, her son was Esarhaddon and her grandson was Ashurbanipal. The current chronology is suspect, but too complicated to handle here. However, we think that ancient deeds and events were often misappropriated by later rulers. What is important for us to note here for purposes of our discussion is that Naqia entered her husband's harem while he was still a crown prince - and that her origin, as that of her sister, are unknown mysteries which have puzzled scholars. Solely on the basis of transliteration, her name is regarded to be West Semitic. We, on the other hand, note that the name Naqia is very close linguistically as a word to Neith and that the version Neith-krety or Neith-kety ("Nitokris") would explain her Akkadian name of Zakutu as deriving from Za-Kutu <*Aiz-Kretu meaning "from Crete". As Sarah Chamberlin Melville writes (p. 6 of the dissertation, page 23 of the .pdf): "We do not investigate the question of whether or not the memory of Naqia generated the later legend of **Nitokris of Babylon**.[6] That subject demands treatment as a facet of the wider problem of the perception of Neo-Assyria in later traditions." [emphasis added] Melville in fact devotes an entire chapter of her dissertation to Naqia's unknown origins (Chapter II) and she notes importantly - for our previous discussion of the two daughters of King Catreus of Crete - that Naqia also had a sister Abi-rami, whose origins are equally unknown. [at p. 24 of the dissertation, and at page 41 of the .pdf]. These two sisters mesh well potentially with the story of the two daughters of King Catreus of Crete who were sent away to be married off into foreign lands.

But if those two sisters, Clymene and Aerope, in fact match Naqia and Abi-Rami, then Queen Napirasu of Elam can only be Helen of Troy and her husband Napirisha (Na-PIRIS) can only be the Paris of the same ancient legend.

I was precocious as a child and could read, write and do arithmetic when I was 3 years old. As you can see in the photograph, I wore ties even before I started to go to school.



Andis Kaulins in Germany in childhood (three years of age, going on four)

My family emigrated from Germany to the [United States](#) at Christmas in 1950 when I was four. My first book was a [Webster's Dictionary](#) of English. By school age, I had read all books for elementary school, so I skipped the first grade, where they taught the three R's, which I already knew. In retrospect, skipping a grade at that early age had advantages and disadvantages. Obviously, my academic reputation was impeccable. I was also physically strong, but remained one of the smallest kids in my class until I grew 12 inches in my last years of high school. Today I am 6 feet and weigh about 210, but in those days, I was big enough only for sports like golf.

When asked in elementary school what I wanted to be when I grew up, I replied "[President](#)", and was devastated to learn that a



[Prescott Elementary School](#), Lincoln, Nebraska

naturalized U.S. citizen was not eligible for the nation's highest office. Why did the legal system permit two classes of citizens based on birth ~ contrary to the nation's principles?



[Irving Junior High School \(now Irving Middle School\)](#)

It was an inevitable separation of friendships, an event that left a lasting impact on many. Life had changed.

Irving Junior High School sat next to the [Country Club of Lincoln](#), where I first learned to play golf. My class then split going into high school-

between two high



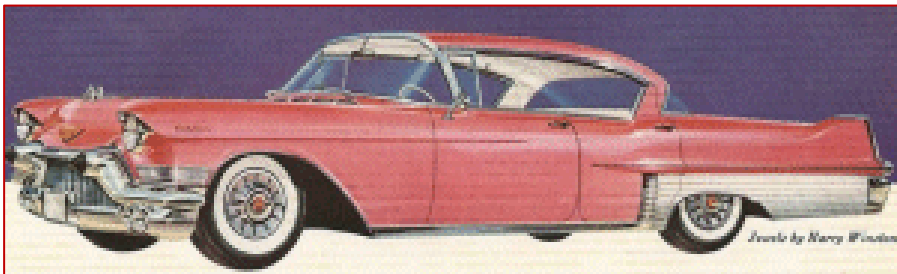
[Lincoln High School](#), Lincoln, Nebraska

At Lincoln High School, increased attention to the serious nature of academics was everywhere apparent. Friendly competition for a purpose replaced just having fun, not just in sports. I joined the debate team and competed in debate tournaments and extemporaneous speaking competitions against other schools. I don't recall losing. Our golf team, of which I was a member, won the State Class A



[Links Image Online](#) at the [Lincoln High School Website](#)

golf championship my senior year, so there was much to celebrate while following a college preparatory curriculum. High school days passed quickly, because there was a constant stream of activity. The days of innocence ~ did someone say girls? ~ were being replaced by the dawn of responsibility. Cars became a major commodity. I sometimes drove our 1957 Cadillac to school my senior year and



discovered it impressed the ladies. Above is a thumb of a clipped image of a General Motors advertisement for the 1957 Cadillac that can be found in original size at [OldCarAdvertising.com](#). You can't forget a car like that.

At the [University of Nebraska in Lincoln](#), the late [Wilbur Gaffney](#) and the late [Cedric Evans](#) stood out as professors. It was a revelation when I got a "D" on my first written paper in Gaffney's English composition class. If you thought your grades were not justified, Gaffney would hand out written pieces to you penned by great writers on the same topics you had written about. It was a humbling experience. Gaffney's courses were the most valuable courses that I took in college. I learned that I was not a great writer, but I did improve my writing substantially, which was necessary for my future work. Evans on the other hand taught philosophy and had an interest in the mesh of language and philosophical concepts. He helped me to understand that there were many levels of sophistication of the mind and that whenever you thought you had reached the top, there was still a long way to go.

After Nebraska, a top score on the LSAT -- the law school admission test -- was a must, and I did well, so that all 10 law schools to which I



applied sent me an acceptance. [Stanford Law School](#) had an "educational" edge. It had its own golf course and I was an avid golfer. [Stanford University](#) is known affectionately as "[The Farm](#)" to insiders because of its wide open spaces. Its [8180 acres](#) are nearly 10 times the size of New York City's [Central Park](#). [Frederick Law Olmsted Sr.](#) designed both of them.

I graduated with my entering class in 1971 in spite of being drafted out of law school studies to serve in the military, where I became one of only two people ever (so I was told, it may not be true) to obtain a perfect score on the [AGCT](#), an IQ test taken by ca. 2 million people. I got the answers to all the questions right, so my IQ is OK.

After Stanford, I went to New York City, the "Big Apple", to join [Paul, Weiss et al.](#), where I had been a summer associate the previous year. The last two appointments to the United States Supreme Court, Justice Sonia Sotomayor and Justice Elena Kagan, were both [Paul, Weiss](#) summer associates.

Paul, Weiss was a major law firm that I considered then to be the nation's best, and [it still may be that today](#). The pay was excellent, the clients were top, the intellectual level of people in the firm was superb, and the work was exciting and invigorating. I was 24 years old and I had it made. But what is life all about? Off to the next challenge?

One day in 1974, [Professor Dietrich André Loeber](#) of Kiel, a Visiting Professor of Law at Stanford at the time that I was a student there, showed up in my New York law office saying: "*We have a job for you. We need you to prepare materials in the event that Latvia regains its independence. There is no one else in the West with your credentials.*" Loeber's father had been a Latvian Supreme Court Justice prior to World War II and Loeber himself was an expert on the Soviet Union.

It was a tough decision, but I left for Europe to work on a Baltic project in Germany, thinking I would soon return.

That return to the United States never materialized. There was so much to do, and one year became two, and two years became five. Europe had me firmly in its grasp. Loeber in 1974 thought the [UdSSR](#) would disintegrate in 20 years. It actually fell in only 17, being formally dissolved in 1991.

Thus thrown unexpectedly into the eddies of history, I began to examine the rise and fall of empires in order to divine the causes of world political and economic conflagrations, but found that historians and related disciplines in the arts and sciences sometimes did not exercise the analytical skills that law so richly demanded and rewarded. To my great surprise, much of what I found written about human history, ancient and recent, appeared often to be based on speculative, unproven suppositions. Probative evidence was rare for many things that people took for granted as facts. What was true?

I recalled the teachings of my good friend and mentor, [Stanford Law Professor John Kaplan](#), whose primary rule of evidence was: "Go to the original sources." **I did and I do.**

The search for what really happened in man's history and in ancient days is at the root of my work and this book. I take nothing for granted and check nearly everything myself, not relying on what may be ~ and often are ~ faulty conclusions by others. Nevertheless, one is not an autonomous force.

Fifty percent of all Nobel Prize winners studied under Nobel Prize winners. Mentors and coaches in life are essential. Some of my "career" mentors down the road of life were *inter alia* ~ (as multitudes who contributed can not **all** be named):

- ✦ My father, the late Arvids Kaulins, and of course, my mother, the late Valda Kaulins, née Putelis.
- ✦ My Latvian instructors were Jesifers, Upite and Ozols.
- ✦ Top teachers in [Prescott Elementary School](#) were McCallum, Cooper, Gabus, Robbert, and Gerlach.
- ✦ The most valuable course I took in school ~ **10- finger typing** ~ was from Mr. Gump at Irving Junior High School, now [Irving Middle School](#). Keyboard-essential!
- ✦ My career counselor in school days was Louise H. Baugher, a friendship that lasted beyond high school.
- ✦ At [Lincoln High School](#), Ruth Buckner in German, and Irma Coombs in History, inspired new interests, [Phil Sprague](#) taught tough Physical Education, while [Dick Beechner](#) coached our golf team to a State Class A golf championship and a white Links "L" sweater.
- ✦ At the [University of Nebraska in Lincoln](#), the late [Wilbur Gaffney](#) never wavered in his efforts to improve my writing, and the late [Cedric Evans](#) merged philosophy and language. Membership in [FarmHouse Fraternity](#) was a tremendous human learning experience, with thanks to all the brothers.
- ✦ The Reverend [Darrel E. Berg](#), now over 90, is [still going strong](#). He was a candidate in Nebraska for the House of Representatives and his home was [A Piece of Blue Sky](#) during my adolescence.



[Wilbur Gaffney](#)

✚ The late [John Kaplan](#) was renowned among his peers for his brilliance and was my mentor during my law school studies at Stanford Law School. John authored a number of successful books, some of which I had the great pleasure and honor to edit while I was still a law student. We were good friends.



✚ At [Paul, Weiss, Rifkind, Wharton & Garrison](#) in

[John Kaplan](#)
(Scan from Stanford Law School Yearbook 1971)

New York City, [Peter R. Haje](#), later General Counsel and Executive VP of AOL Time Warner, and his law firm partner, the late Richard Paul, led me to become an associate at what I considered to be the [best law firm in America](#). The late [Simon H. Rifkind](#), originally from Lithuania, then as patriarch of the firm, defined [Paul|Weiss principles](#) *inter alia* as follows:

"We prize highly among our partners and associates these among other qualities: inventiveness and the cultivation of the growing tips of the law in all its branches; imagination coupled with a strong sense of the practical; a selfless and whole-hearted dedication to the best interests of clients; unflagging efforts to get their work done promptly, and with care and perfection of craftsmanship; readiness at all times to help others in these endeavors, whenever help is needed; and, most of all, integrity.

Finally, we are committed to achieving our objectives without wearing any client's collar or any political party's livery. And we believe that in the pursuit of these ends we can maintain a law firm in which all who are associated with it may justly take pride."

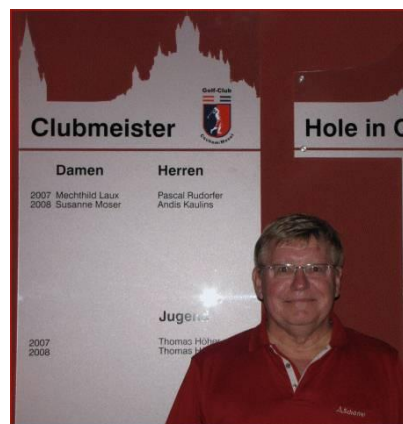
I apply those same principles in doing my scientific work, where I am beholden to no one, and certainly wear no academic discipline's collar or any authorities' livery. This permits an independence of mind and research that provides great analytical advantages over encrusted schools of thought in "peer group" academia.

✚ The late [Dietrich André Loeber](#) was a mentor and friend. André, whose father had been a Justice on the Latvian Supreme Court between WWI and WWII, convinced me to come to the University of Kiel to work for the future of Latvia. The similarity of Latin and Latvian first came to my attention, while translating a court decision by Loeber's father, which led to an interest in ancient languages and scripts. This book is one result.



[Dietrich André Loeber](#)
(Scan from Stanford Law School Yearbook 1971)

✚ As a child of **four**, I read dictionaries to help learn English. Now, as a freelance dictionary author, I help to write them for the world's top dictionary publisher. Ancient scripts are a lot like golf. You have to be able to read the greens and putt. **Fore!**



[Andis Kaulins, Golf Champion at 61 3/4](#)