On 3rd July 2008 while drinking coffee at Phaistos, PA-I-TO, at the Palace of Rhadamanthys, in the Mesara Plain in Central South Crete, the present author started thinking seriously about “Reading” the Phaistos Disk, while hearing about an American art dealer who had claimed that the Phaistos Disk may be a fake. This was a groundless claim with absolutely no supporting evidence but it achieved its aim which was to generate publicity for the American art dealer. On the very same day Professor Louis Godart, the authority on the Phaistos Disk and the Syllabic Scripts of Minoan and Mycenaean Crete, demonstrated that the false claims were groundless as many of the signs on the Phaistos Disk had been corroborated by similar signs on Minoan seal stones from excavations half a century later. QED.

The present author however considered that there was no such thing as bad publicity and remembered what the Americans preach, “don’t get mad, get even” and therefore decided to use the opportunity of the generated publicity for the commencement of a discussion on the Phaistos Disk as to whether it was indeed possible to i) TO “STUDY” ? ii) TO “READ” ?? iii) TO “UNDERSTAND” ??? the Phaistos Disk, the Enigma of Minoan Crete2. Then, and only then, could it be possible, perhaps, to one day to offer an “interpretation-decipherment-translation” of this Minoan text into both Greek and English.

The present author started considering best how to “Study” the Phaistos Disk and decided to attend the meeting called by the American art dealer in London at the Society of Antiquities in London, after discussing the matter with Professor Tom Palaima, a world expert on Linear B from the University of Texas at Austin, and it was announced that Professor Louis Godart, would be the key note speaker.

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1 Professor John Coleman is sine qua non for the “Reading” of the PD, his collaboration and teamwork and friendship is of inestimable value to the present author who would like to make it crystal clear that without Professor John Coleman it would not be possible to literally “Read” the Phaistos Disk with Syllabic Sound values of Mycenaean Linear B. Professor John Coleman is not however to be associated with the present author’s attempt to “Understand” and/or interpret the Phaistos Disk as a Minoan Poem. This is the sole responsibility of the present author who is responsible for the views expressed and the inherent mistakes.

2 The present author does not believe in the inevitable “clash of civilizations” as discussed by S.Huntingdon, 1996, and adopted by the USA but rather in the peaceful meeting of civilizations as promoted by the European Union ERASMUS+ Higher Education Programme for Education & Culture. The present author is European Union ERASMUS+ Ambassador for Higher Education 2014-2020.
In 1995 Louis Godart had published the Phaistos Disk and thus it had become “Studiable” along with the related inscriptions, the Arkalochori Axe and the Malia Stone Block³. Unfortunately the Hellenic Ministry of Culture did not give permission for the expert on Minoan and Mycenaean scripts at Heraklion Archaeological Museum to attend the 2008 London meeting as a result of a popular outcry generated by TV journalists who were “shocked” by the claim that the Phaistos Disk might be a fake as claimed by the American art dealer⁴. However the present author, an employee of the Hellenic Ministry of Education, decided to attend for the voice of reason to be heard. So the interested parties gathered in London at the Society of Antiquaries for two days of polite disagreement. Professor Louis Godart disappointingly did not attend, and Professor Tom Palaima disappointingly spoke about Alice Kober and the prelude to the Decipherment of Linear B, not about the Phaistos Disk, while the present author spoke about the Phaistos Disk and the Arkalochori Axes as epigraphic links between the Phaistos Disk, The Enigma of the Minoan script and Minoan Linear A etc. In addition the present author had the pleasure of meeting Professor John Coleman, sine qua non, Professor of Phonetics at the Faculty of Linguistics at the University of Oxford and our subsequent constructive scientific collaboration, i.e., polite disagreement has now lasted a decade³. Professor John Coleman had also realized the importance of the Arkalochori Axes for providing an epigraphic bridge between the Phaistos Disk and the other Minoan inscriptions. In addition, Professor Richard Sproat from Urbana, Illinois, gave a very good paper on how to forge the Phaistos Disk that completely undermined the American art dealer’s groundless accusations of the Phaistos Disk possibly being a forgery.

Professor John Coleman and the present author agreed that it was indeed feasible to “Read” approximately half the Phaistos Disk based on epigraphic similarity and continuity with Mycenaean Linear B as deciphered by Michael Ventris OBE on 1st June 1952. The point was how to proceed from there as most people interested in the subject agreed that it was indeed possible to “Read” approximately half of the Phaistos Disk based on Mycenaean Linear B irrespective of their subsequent “interpretations-decipherments-translations”.


Indeed at London there were 20 very different talks, five of which were constructive, five of which were not based on scientific facts but had some interesting observations to offer, and half were pure fantasy, i.e., all in all on par for a scientific academic conference. Professor John Coleman and the present author both also agreed that the Arkalochori Axes were an epigraphic bridge between the Phaistos Disk and other Scripts of Minoan Crete, i.e., “Cretan Hieroglyphics” and Minoan Linear A as well as ultimately Mycenaean Linear B which had been deciphered by Michael Ventris OBE. We agreed to keep in contact and to exchange work notes.

For the next two years, 2008-2010, the present author spent a great deal of time reading and researching code breaking i.e. Turing and Enigma at Bletchley Park, the Anti-Kythera Device etc. as well as studying the Decipherment of Cuneiform and Egyptian Hieroglyphics etc. and code breaking and decipherment generally.

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6 CF The Phaistos Disk: A One Hundred Year Old Hoax? By Dr Jerome M. Eisenberg, editor in chief of Minerva, The International Review of Ancient Art and Archaeology, the 10th in a series of articles by the editor in chief of Minerva dealing with the problems of forgery and ancient art, July – August 2008, 9-24 PLUS The Phaistos disk: A 100-Year-Old Hoax? Addenda, Corrigenda and Comments 2 pages. At the International Conference on the Phaistos Disk 31-10-2008 and 01-11-2008 At the Society of Antiquaries of London, Burlington House, Royal Academy of Arts, Piccadilly W1, London, UK, sponsored by Minerva. London Talks on PD were good by Profs Louis Godart, Tom Palaima, John Coleman, Richard Sproat and Dr Gareth Owens = 5, reasonable by Eisenburg, Clayton, Reed, Timm and Rumpel =5, while the other ten were fantasy to put it politely. The London Meeting was inconclusive but importantly started a discussion with Professor John Coleman that led to collaborating on the “Signary”, i.e., Syllabary for the Phaistos Disk.

7 Cf. A.Hodges, Alan Turing: The Enigma, 1983, for a fascinating tale of code-breaking and brilliant minds, shaped both by nature and nurture, and the film The Imitation Game where Alan Turing, the broken genius, is brilliantly portrayed by Benedict Cumberbatch. See also S.Singh, The Code Book, The Science of Secrecy from Ancient Egypt to Quantum Cryptography, 1999, and R.Parkinson, Cracking Codes, the Rosetta Stone and Decipherment, BMP, 1999. Can we learn from Turing etc in order to see how to approach the mind of the person who ‘wrote’ the Phaistos Disk (PD) and the person who ‘read’ ‘heard’ ‘understood’ the message with their feelings? Or failing that perhaps put “PD” through Google in reverse and see what comes up, all, images, videos, news, maps, search, tools etc? G© The present author would also like to thank Andrew Hodges and Clare Coleman for their hospitality at Wadham College while lecturing on Decipherment at the Ashmolean Museum.

8 See Constantin Stikas, Antikythera Mechanism, Researchers unlock the secrets of the only surviving ancient mechanical universe. It is with great pleasure that the present author can observe that National Geographic were not able to conduct an Ancient X-File on the Anti-Kythera device as this Enigma had already been solved as a result of international and interdisciplinary research and collaboration. The secret of success is both hard work and team work.


The present author had conducted a “statistical frequency analysis” and had suggested that the “Punk Head” should be assigned the phonetic value “A” both on the Phaistos Disk and on the “Cretan Hieroglyphic” Arkalochori Axe. In 2010 these ideas were discussed and presented on a National Geographic Documentary Ancient X-Files. National Geographic had contacted the present author on Crete after first contacting the British Museum in London who suggested that they contact the present author after attending the Society of Antiquaries meeting in London convened by the American art dealer at Burlington House, Royal Academy of Arts. It was here that Michael Ventris as a 14 year old school boy first saw Linear B and informed Sir Arthur Evans in 1936 very politely indeed at Burlington House that he would decipher Linear B – and he subsequently did!\textsuperscript{11} This is also where the Rosetta Stone was first housed after being seized from the French, who had themselves taken it from the Mameluke Turks, who had taken it in turn from the native Egyptians, and the English inscription was added on the side in honour of the King and thus celebrating “liberating” from the French this otherwise bi-lingual but tri-graphic inscription\textsuperscript{12}.

So the present author made a documentary for National Geographic Ancient X-Files on Crete in 2010. This was first previewed in Oxford in December 2010 and Professor John Coleman and the present author again discussed the Phaistos Disk, the Arkalochori Axes and exchanged work notes. Professor John Coleman demonstrated to the present author that the approach as presented on National Geographic, i.e., “statistical frequency analysis” was the wrong methodology as “epigraphic similarity and continuity” and “partial parallel texts” from the Arkalochori Axes demonstrated that the “Punk Head” on the Arkalochori Axes, both Minoan Linear A and “Cretan Hieroglyphics”, and on the Phaistos Disk should be “I” and not “A” as had been previously suggested. This subsequently demonstrated that the Decipherment of Mycenaean Linear B as brilliantly achieved by Michael Ventris OBE on 1\textsuperscript{st} June 1952 could indeed be applied to ALL Syllabic Scripts of Minoan Crete, i.e., Minoan Linear A, “Cretan Hieroglyphics”, Arkalochori Axe and Phaistos Disk.

The present author had provisionally and tentatively applied the decipherment of Mycenaean Linear B to Minoan Linear A as a working hypothesis in his PhD at the National and Kapodistrian University of Athens “A Provisional Approach to the Minoan Language” which demonstrated based on phonology, morphology, syntax and vocabulary that the Minoan Language of the Second Millennium BC was Indo-European in nature and structure.


\textsuperscript{12} See John Ray, The Rosetta Stone and the rebirth of Ancient Egypt, 2007, p.37 “It now bore two extra inscriptions “captured in Egypt by the British Army 1801” and “Presented by King George III”.
Professor John Coleman demonstrated quite clearly that the present author’s “statistical frequency analysis” was the wrong methodology, opening the way for “epigraphic similarity and continuity” and “partial parallel texts” as the means to literally “Reading” the Arkalochori Axe and the Phaistos Disk. When the present author demonstrated on a trip to Oxford that this meant that the Linear B decipherment could be applied to ALL Minoan Scripts then the way became clearer in order to “Read” the Phaistos Disk using Linear B sound values as demonstrated by Michael Ventris. The methodology of “epigraphic similarity and continuity” and “partial parallel texts” was to be applied to ALL Minoan texts ie Minoan Linear A, “Cretan Hieroglyphics”, Arkalochori Axe and Phaistos Disk.

As a result of the systematic application of half of the c.90 Linear B sound values to the 45 signs of the Phaistos Disk, it was indeed possible to offer the best possible “Reading” of the Phaistos Disk. During 2011 and 2012 the present author and Professor John Coleman worked in order to establish an epigraphic correlation between Linear B and the Phaistos Disk, via Minoan Linear A, “Cretan Hieroglyphics”, and the Arkalochori Axe. Indeed it became apparent that the syllabic sound values of the 45 Phaistos Disk signs were to be found among the c.90 Linear B syllabic sound values. Thus the possibilities were not infinite but it was rather a matter of time and systematic hard work before the best possible “Reading” of the Phaistos Disk could be offered based on the Linear B syllabic sound values. Out of the 45 Phaistos Disk signs, in London Professor John Coleman saw 12 disk signs as a secure epigraphic continuity with Linear A and likely or possible for a further 10, i.e., 22 out of 45 c.50% in agreement with the present author at London. The point was how to progress both in quality and quantity of the ‘Reading’. This was first posted online on 28/11/2012 as “A Table of Similarities between signs of the Phaistos Disk, Cretan Hieroglyphs and Seals, signs on the Arkalochori Axes and Linear A/B”. This was subsequently updated, revised and republished online on 14/12/12, 07/01/13, 17/05/13, 06/09/13, 04/12/13, 26/04/16, 16/09/16, 30/01/17, 13/07/17 and 20/07/17 and subsequently Published as “Signary”, i.e., the Syllabary for the Phaistos Disk.

13 Dr Georgia Flouda of Heraklion Archaeological Museum has most kindly suggested that the “Signary” i.e., Syllabary for the Phaistos Disk could be still further improved both quantitatively and qualitatively by including comparanda from the Cypro-Minoan scripts as on PD 27 WI/WA. C.f. CM0-1(Linear C)-2(Enkomi)-3(Ugarit) and CS influenced by cuneiform and by the writing implement used to execute them. CM0e=#001. #170 o-pe-le-ta-u OPHELTAU is latest Cypro-Minoan, and not earliest, (terminus ante/post quem) Cypriot Syllabic according to J.P.Olivier. For CM 0-1-2-3 see P.M. Steele, Syllabic Writing on Cyprus and its Context, and, A Linguistic History of Ancient Cyprus, both 2013, CUP, as well as S.Ferrara, Cypro-Minoan Inscriptions, Vol.I Analysis, 2012, Vol.II The Corpus, 2013, OUP. These 4 books have made the Cypro-Minoan Scripts ‘studiable’, the first step towards ‘reading’ them and hopefully one day ‘understanding’ them. Rome was not built in a day but London was burnt down in a night. I thank John Coleman, Professor of Phonetics, Faculty of Linguistics, Oxford, for his social and intellectual parea and philoxenia at Wolfson College, Phonetics Laboratory in the Faculty of Linguistics and the Ashmolean Museum at Oxford University on matters concerning script(s) and language(s), and not only, i.e., communication and not just for the gift of these books.
The present author would like to conclude this article on “Reading” the Phaistos Disk with some observations by Garry Kasparov, the former world chess champion who is now also a Senior Visiting Fellow at the Oxford Martin School, working in cooperation with the Future of Humanity Institute. In his book Deep Thinking, 2017, on p.246-7 he discusses what has become known as “Kasparov’s law” while discussing Human and Machine Chess players and collaboration. His observation was that “I represented my conclusion like this: weak human+machine+better process was superior to a strong computer alone and, more remarkably, superior to a strong human+machine+inferior process”.

I would like to describe our invaluable collaboration with Professor John Coleman in the Phonetics Laboratory of the Linguistics Faculty, Oxford University, and to say that the Secret of Success is International and Interdisciplinary Collaboration+ Machines+ Framework+ Hard work and Team work. Professor John Coleman provided the academic-scientific framework for establishing the “Signary”, i.e., Syllabary for the Phaistos Disk, based on “epigraphic similarity and continuity” and “partial parallel texts”, sine qua non, while the present author is a “cretologist”.

By using the “Signary” i.e. Syllabary for the Phaistos disk, it is now indeed feasible to literally “Read” the Phaistos Disk with the sound values of Linear B. If the “Signary” is used from Right to Left, then the “Reader” of the Phaistos Disk can move from the “Received Reading from Mycenaean Greek in Linear B, through the Minoan ‘Administrative’ (on clay) and Glyptic Linear A (on stone, metal etc), Arkalochori axes, Cretan Hieroglyphs and seals”, and thus arrive with “epigraphic similarity and continuity” at the previous unknown, i.e., the Phaistos Disk.

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14 See Garry Kasparov, Deep Thinking, where Machine Intelligence Ends and Human Creativity Begins, 2017, a gift of another fine chess player Trefor Owens, who also told me in 2017 the following sporting quote “the more I practice, the luckier I get”. In a similar thought provoking vein, see the extremely well researched and written thought provoking following works, Yuval Noah Harari, Sapiens, A Brief History of Humankind, 2011, and Homo Deus, a Brief History of Tomorrow, 2015, kind gifts from Dr Simon Bennett while the present author was staying at Cambridge in the Summer of 2017, and I thank him and his family most warmly for their hospitality and friendship. See also Yuval Noah Harari, 21 Questions for the 21st Century, 2018 and Neil MacGregor, Living with the Gods, 2018 for other thought provoking words and see also Christopher Stevens, Written in Stone, A Journey through the Stone Age and the Origins of Modern Language, 2015, for a look at words that go back at least 8000 years b.p..

15 Professor John Coleman is sine qua non for the “Reading” of the PD, his collaboration and teamwork and friendship is of inestimable value to the present author who would like to make it crystal clear that without Professor John Coleman it would not be possible to literally “Read” the Phaistos Disk with Syllabic Sound values of Mycenaean Linear B. Professor John Coleman is not however to be associated with the present author’s attempt to “Understand” and/or interpret the Phaistos Disk as a Minoan Poem. This is the sole responsibility of the present author who is responsible for the views expressed and the inherent mistakes.
On the other hard “Reading” from Left to Right, i.e., from the unknown to the known it is indeed possible to securely establish “epigraphic similarity and continuity” from the Phaistos Disk, through the Minoan “Cretan hieroglyphs and seals, Arkalochori axes, Glyptic (on stone, metal etc) and ‘Administrative’ linear A (on clay)” thus arriving at the established phonetic values and the Received Reading from Mycenaean Greek in Linear B.

By using “partial parallel texts” it is now also possible to see that sound values are supported in this way. Of particular importance is IO Za 2, the best preserved Minoan Religious Inscription, containing eight words of the Minoan Libation Formula on a Stone Libation Table found at the Peak Sanctuary of Mount Iouktas, above Knossos and Archanes, along with Tamata, i.e. votive offerings for health. This custom is still very alive today in Orthodox Crete and shows that the context of the Phaistos Disk is Religious and connected with matters of Health. Of these eight words from IO Za 2, four are to be found in the same word order on the B Side of the Phaistos Disk, e.g., in Linear A ATAIPEWAJA and on the Phaistos Disk IPEWIJE. In addition, the Arkalochori Axes, “Cretan Hieroglyphic” IDAMANANI etc. and Linear A IDAMATE (x2), along with DAMATE in Linear A from Kythera are important “partial parallel texts”, thus also including IDA as yet another Term of the Minoan Libation Formula.

These inscriptions from Iouktas and Arkalochori, constitute a “partial parallel text” for the Phaistos Disk, and the closest that exists to a Minoan “Rosetta Stone” and/or “Tripod Tablet”16. Indeed, the present author is trying to ‘re-create’ and/or ‘reconstruct’ a Minoan “Rosetta Stone” and/or “Tripod Tablet” to unlock the Enigma of the Phaistos Disk, a Minoan Religious Inscription, by using a data-base of c.100 Minoan Religious Inscriptions. As a result of the established “Reading” as described above, thus the present author continued thinking whether it was indeed possible to start “Understanding” the Phaistos Disk as a Minoan Poem17. This will be tested by quality control on newly discovered Minoan inscriptions as a result of recent excavations on Minoan Crete18.

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16 PD 4 words (IPEWIJE WIPINADWA/AUPINADWA TIRJUTE TINARJUE) of 8 terms of MLF on IO Za 2, PD+AA (IDAMANANI??) 5 words of 10 of MLF A-TA-I-301-WA-JA . JA-DI-KI-TU . JA-SA-SA-RA[-ME . U-NA-KA-NA-]<SI . I-PI-NA-MA . SI-RU-TE . TA-NA-RA-TE-U-TI-NU . I-DA-[I-NAJA (31 extant plus 5/7 reconstructed = 36 JC/38-GO signs, c.40 in 8 words). If the correspondence we have drawn between these PD signs and the corresponding linear A signs is correct, the probability of 9 signs matching by chance (out of the 36 signs in IO Za 2: 31 extant and 5 restored) is over 1 in 14 million, approximately the same chances as winning the National Lottery.

17 The Disk was found at Phaistos in ROOM 101, George Orwell, 1984, may be pleased at our discomfort at our greatest fear that we may not ever understand the Phaistos Disk but perhaps we should remember what the other English intellectual William Blake said that All Religions are (N)One.

18 I thank Tom Palaima, University of Texas at Austin, and colleagues for personal communications. The future of Minoan epigraphic research looks very bright indeed as a result of hard work by our dear archaeological colleagues on Minoan Crete.
A TABLE OF SIMILARITIES
between signs of the Phaistos Disk, Cretan hieroglyphs and seals, signs on the Arkalochori axes, and Linear A/B

<table>
<thead>
<tr>
<th>Phaistos disk signs</th>
<th>Cretan hieroglyphs and seals</th>
<th>Arkalochori axes</th>
<th>Administrative Linear A (on clay)</th>
<th>Received reading from Myc Gk in Lin B</th>
</tr>
</thead>
<tbody>
<tr>
<td>H001, SM No. 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Je supports and is supported by the reading of word B17 as *-i*201-woje

The equation of HM2416 (Arkalochori Axe) sign 1 with AB28 is assured by parallel readings *I-DAMA* on AR Zf 1 and 2:

The identification of this 'uncrested head' with AB10 is assured by the multiple instances of the sign AB10 (U) in the same words of Linear A documents IO Ze 6, AP Ze 1 and Ph7a, as in the scene below.
The reading is supported and is supported by B23 trujite, B24 sidi and B28 idetens, with Linear A parallels listed below.

The identification of PD sign 9 with Linear A *401 depends upon the equation of PD face B word 17 (02-05-27-01, read here as 1-401/WA/E) with Linear A words *1201-WA-E (PK Ze 11) or *1301-WA-JA (other documents). See comments on sign 28 below. Compare PD words B17-26 with IO Ze 1:

PD: 1-*301 with *301 with *301 with *301 with 1-401/WA/E (PK Ze 3) AE 1/2-05-27-01, read here as 1-401/WA/E (PK Ze 11) or 1-301/WA-JA (other documents). See comments on sign 28 below. Compare PD words B17-26 with IO Ze 1:

IO Ze 2: 1-301/WA-E ... 1-301/WA-JA

If the correspondence we have drawn between these PD signs and the corresponding Linear A signs is correct, the probability of 9 signs matching by chance (out of the 36 signs in IO Ze 2: 31 extant and 5 restored) is over 1 in 14 million.

Two lea in s-tea-te, some kind of wheels.

HT 126 b.2. AB87

HT 1.2. AB79 or AB20
<table>
<thead>
<tr>
<th>Sign</th>
<th>Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>H015</td>
<td>CMS II, 2063</td>
<td>MA 9, AB 78</td>
</tr>
<tr>
<td>H027</td>
<td>Bronze pin from Azoria</td>
<td>PE 7 a.1, AD 77</td>
</tr>
<tr>
<td>NEAPOLIS S (8/8) 01 61, H043</td>
<td>axe or wattle</td>
<td>HT 9 b.2, HT We 1278, A 365, A 355</td>
</tr>
<tr>
<td>HO45</td>
<td></td>
<td>HT We 1286, HT We 1311, A 374</td>
</tr>
<tr>
<td>CR 5 (11) S 12 (12/1) detail</td>
<td>head</td>
<td>HT We 2026, A 322</td>
</tr>
<tr>
<td>SM138b</td>
<td></td>
<td>HT 27 a.5, HTHb3, A 310, A 304</td>
</tr>
<tr>
<td>KN H9/04104d</td>
<td></td>
<td>HT 27 a.5, HTHb3, A 310, A 304</td>
</tr>
<tr>
<td>H0277</td>
<td>branch to side</td>
<td>HT 2 a.2, E 937, HTH 17, A 67, AB 78</td>
</tr>
<tr>
<td>H02415 signs 2 and 15</td>
<td></td>
<td>HT Ga.4, A 937, A 417VAS, AB 67</td>
</tr>
</tbody>
</table>

Of the two proposed readings for Linear D24 (Palmer's ruj, and Malara and Chadwick's rd, 'halt'), ruj ('halt') is supported by the equation of PD word D23 (muz) with Linear A muzu. See note under sign 9, above.

AR 18 a would yield IDUNOTE for D12, with parallels in DUMUNOTE (HT 92 b.3) and KUMUNOTE (ZA 70 b.4).
The identification of PD 21 with H033 and/or B64 rests on the observation that its shape is wholly included within PYR S 14 01 6, which like PD 21 has "combs" at top and bottom, a vertical central bar with a horizontal projection to the left, PYR S 14 01 6 has, in addition, a horizontal projection to the right and two diagonals. The "combs" (e.g., rows of pegs) at top and bottom resemble a warping board, either with (PYR S 14 01 6) or without (PD 21) a warp threaded across it. An alternative identification is this similar object—a kind of shield borne by a warrior with a crested helmet, or a bracer from Xestos (right).

Possibly

KN Hh 04 05 d, uncertain sign
CHIC #250 a (janiss)
Pea. CHIC #202a sign 2

HT 45 a.3, A318

zo to-e, (aS, for boiling)

(Younger suggests "Paleo-Doric", but the evidence is rather slim.) Olivier (2013) sees A318 continuing into Cypro-Minoan and Classical Cyprus R0; the Cypriot r-vowel series generally correspond to Linear A/B r-vowel.

M/A H 01, KN Hh 01 03.d H034

PK Za 11a, A020

TY 3e 1 Za 18a Za 13e 2 A321

A235 perhaps a nimmer rather than a "house". A228 is perhaps therefore a more plausible correspondence.

M/A H (01) 02 a, H040

HT 34 i 5, A886

KN Hh (01) 01d, H088

HT 20 i 2, A8 76

Our proposed reading H040 depends on identifying AB130 with A846. A207 could also be a variant of this sign, and is often duplicated, as in HT 35a 3. The horizontal and vertical bars of the central "T" in HT 113 a.1 are also evident in the Cretan hieroglyphic version of this sign. This reading gives several "words" (similarities to other words) in Linear A (see below), and fits with the first syllable of the Mycenaean Greek word for hide or skin. An alternative possible reading B110 depends on identifying B110 with the corresponding Cypriot sign, on the basis of their visual similarity; this also yields a reading T301 WAwa REF or T355 for PH 10, resembling 1301 WAd A of PK Za 11.
<table>
<thead>
<tr>
<th>Sign</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEAPOLIS S 8/8 01 3.2</td>
<td>Sign 836</td>
</tr>
<tr>
<td>H017</td>
<td>P.H (7) 31 a.3, AB 85</td>
</tr>
<tr>
<td>H016</td>
<td>This relationship is not well substantiated.</td>
</tr>
<tr>
<td>MAP Hts (8) 01b</td>
<td>M.T 9 a.6, AB 81</td>
</tr>
<tr>
<td>H015</td>
<td>P.7 1.7, AB 60</td>
</tr>
<tr>
<td>NEAPOLIS S 8/8 01 3.3</td>
<td>SMT 9 30 80</td>
</tr>
<tr>
<td>KN 5 (2/0) 01 H013</td>
<td>H018</td>
</tr>
<tr>
<td>ARGU (2/0) 01</td>
<td>IO Ze 6 a. AB 81</td>
</tr>
<tr>
<td>STIA (1) 5 34/0 01 a</td>
<td>HT 3 a. AB 81</td>
</tr>
<tr>
<td>PH 13c</td>
<td>PH 15 a, AB 81</td>
</tr>
<tr>
<td>HT65</td>
<td>Fish + AD 21</td>
</tr>
</tbody>
</table>

*Compare PH 15a JMA-TIE-RESA with PB 816 de-te-re-ese and B7 pe-je-ese. These parallel -ese endings support the identification of sign 33 with 3a.*

<table>
<thead>
<tr>
<th>Sign</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malle quartier mu</td>
<td>Sealing no. 34, H021</td>
</tr>
<tr>
<td>&quot;Mason's mark&quot;</td>
<td>Palace of Pheasos</td>
</tr>
<tr>
<td>PH 19.3, AB 833</td>
<td>pl (as in piepa, plait, boiling pot)</td>
</tr>
<tr>
<td>Symbol</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>MAY</td>
<td>Ye OL, HO25</td>
</tr>
<tr>
<td>H22</td>
<td>Kn HH (04)</td>
</tr>
<tr>
<td>H023</td>
<td>KN (04) 01</td>
</tr>
<tr>
<td>H024</td>
<td>OY 01 Y1</td>
</tr>
<tr>
<td>H027</td>
<td>CMS II, 1, 2, 1301</td>
</tr>
<tr>
<td>H028</td>
<td>CMS II, 2, 072, CMS II, 1, 098, (Knossos)</td>
</tr>
<tr>
<td>H029</td>
<td>CMS II, 1, 14</td>
</tr>
<tr>
<td>H031</td>
<td>H032 pos.</td>
</tr>
<tr>
<td>H037</td>
<td>CF TO 07</td>
</tr>
<tr>
<td>H039</td>
<td>CF TO 07</td>
</tr>
<tr>
<td>H042</td>
<td>KO Zen 1d, A284</td>
</tr>
</tbody>
</table>

*Note: The table includes various symbols and their associated descriptions, along with references to vocabularies.*
<table>
<thead>
<tr>
<th>46</th>
<th>47</th>
<th>48</th>
<th>49</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
</tbody>
</table>

Further signs from the Arkalochori Axe, not attested on the Disk:

The equation of HM2416 (Arkalochori Axe) sign 3 with AB80 is assured by parallel readings I:OA-MA- on AR Zf 1 and 2. See photographs under sign 02, above.

Is this an inverted version of sign 3C mfoilive?

John Coleman and Gareth Owens, 2008–2017
Phaistos disk signs tabulated against Linear A/B signs, with sound values from Linear B

<table>
<thead>
<tr>
<th>Sign</th>
<th>Linear A/B Sign</th>
<th>Linear B Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>pa 9</td>
<td>pe 10</td>
</tr>
<tr>
<td>d</td>
<td>da 1</td>
<td>de 15</td>
</tr>
<tr>
<td>l</td>
<td>ta 14</td>
<td>te 15</td>
</tr>
<tr>
<td>k</td>
<td>ke 7</td>
<td>ku 7</td>
</tr>
<tr>
<td>m</td>
<td>wa 14</td>
<td>kw 4</td>
</tr>
<tr>
<td>n</td>
<td>na 24</td>
<td>ne? 20</td>
</tr>
<tr>
<td>r</td>
<td>ra 12</td>
<td>re 21</td>
</tr>
<tr>
<td>s</td>
<td>sa 5</td>
<td>sw 5</td>
</tr>
</tbody>
</table>

Notes:
- Linear A/B signs are given alongside Linear B signs.
- Phaistos disk signs are compared against Linear A/B signs for sound values.
Some similarities between PD words and Linear A words:

<table>
<thead>
<tr>
<th>A2</th>
<th>etukwe</th>
<th>PH2</th>
<th>ASETUDIO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PH Wg 45</td>
<td>ETAAQE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MT Zsa 3</td>
<td>TUGENU</td>
</tr>
<tr>
<td>B2</td>
<td>widte</td>
<td>KN Zr 31</td>
<td>TIDITE</td>
</tr>
<tr>
<td>A6</td>
<td>widtikwe</td>
<td>KN Zr 31</td>
<td>TIDTEQATI</td>
</tr>
<tr>
<td>B24</td>
<td>tiditi</td>
<td>KN Zr 31</td>
<td>TIDTE</td>
</tr>
<tr>
<td>B28-29 icenet</td>
<td>PK Za 11 UNARUKANATI</td>
<td>IPINAMIN</td>
<td></td>
</tr>
<tr>
<td>A9</td>
<td>kuraute</td>
<td>ZA 20.4</td>
<td>KURA</td>
</tr>
<tr>
<td>A10</td>
<td>ikwesidate</td>
<td>ARKH 2.1</td>
<td>SIDATE</td>
</tr>
</tbody>
</table>

(*) T/S variation also seen in PK Za 11 UNARUKANATI ~ KO Za 1 etc UNAKANASI

Note that these similarities provide further evidence that the direction of text is from the rim towards the centre.

Transliterations

In the following transliteration of the text of the Disk, “ji” could equally well be “hai”; “au” could be “sja” - various uncertainties remain; we have attempted to enumerate all reasonable possibilities in the tables above. We might have liberally sprinkled (?) throughout the transliteration, as in the table above, but have not done so as (a) all of it is open to doubt and debate, and (b) it would only clutter and disrupt the text still further.

<table>
<thead>
<tr>
<th>A</th>
<th>ikwepaerji</th>
<th>etukwe</th>
<th>auditi</th>
<th>aauapi</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>ikwenwatusa</td>
<td>widtikwe</td>
<td>wimino</td>
<td>kujate</td>
</tr>
<tr>
<td>A</td>
<td>ikwerenjekte</td>
<td>estuti</td>
<td>ikwerensokte</td>
<td>retwe</td>
</tr>
<tr>
<td>A</td>
<td>ikwekurja</td>
<td>ikwekurja</td>
<td>lwiti</td>
<td>iwidwazunajru</td>
</tr>
<tr>
<td>A</td>
<td>iwidiwiterjswi</td>
<td>sana</td>
<td>ikwekurja</td>
<td>iwidwazunajru</td>
</tr>
</tbody>
</table>
A transliteration of the Arkalochoi Axe inscription

1. I-DA-MA-NA-<47>-<48>
2. I-<49>-NA-MA-NI(or TE?I)
3. <50>-TE-(or TE?) DA

Bibliographic notes

The idea that the signs of the Disk and the Axe are related to Cretan Hieroglyphics, Linear A and Linear B, and they might thus be read with sound values obtained from Linear B, is far from new and not in the least original. It is a hypothesis that has engaged and divided scholars for decades.

Evans (1900) pp. 278-9, though concluding that the Disk and its script is of non-Cretan origin, compares many disk signs with Minoan hieroglyphics:

PD 18 “This occurs in the regular Minoan series (No. 42)”
PF 30 “The facing head of a similar animal occurs in the Minoan hieroglyphic series (No. 67).”
31 “The linearized representation of a flying eagle ... occurs in both classes of the Cretan linear script.”
32 “Compare the dove preening its wings, No. 79 of the Cretan hieroglyphic series, and also the bird No. 82”
36 “The forked spray here shown closely resembles certain varieties of what has been described as the ‘olive branch’, No. 101, of the Minoan hieroglyphic series.”
39 “Dr. Pernier is probably right in identifying this sign with the saffron flower, No. 88 of the Cretan hieroglyphic series.”
43 “The simple triangle occurs among the Minoan hieroglyphs (No. 130)”

In one of the first contemporary reports of the Arkalochoi axes, Payne (1935) comments “Many of the axes are cast, and have elaborate incised and chased patterns. One has an inscription, indeed in three columns, the script of which resembles that of the Phaistos disk.” In view of the equation that can be made between the first three signs, I-DA-MA-NI of the Arkalochoi Axe and parallel inscriptions in Linear A on AR ZF 1 and 2, it can no longer be maintained that (as Godart 1995 claims) “apart from sign 4, we cannot possibly maintain with confidence that the cases of signs common to the axe and the Cretan scripts are especially important, allowing us to link securely the inscription of the axe with one of the scripts of ancient Crete.” Indeed, in view of the very many similarities and correspondences set out in the table above, we assert that it can hardly be denied that the texts and their scripts are closely related, and we firmly reject Godart’s claim that “there are no definite comparisons between the signs of the Phaistos disc and the syllabograms of the three known Cretan scripts”, though of course we must admit that there are still many points of uncertainty.

The hypothesis followed here, that the Phaistos Disk signs are related to the Cretan linear scripts, was advanced by Schwartz (1959), Schleier (1973), Naum (1979), Duhoux (1983) and Timm (2004), albeit always with doubts about specific sign relationships. Raison and Pope (1971: xiv-xv), considering Linear A and Cretan Hieroglyphics, note “des points communs avec des caractères des autres écritures précédemment évocées, notamment l’‘hieroglyphique’ (citing here 20 correspondences, with reference to Scripta Minoa II, ainsi qu’avec le répertoire graphique du célèbre disque de Phaistos ... Les numéros 12, 19/22, 25, 27, 31, 35, 39, 43, 45 de cette liste sont
assez analogues (quelque beaucoup plus ‘pictographiques’) Lin. A. L 91, 30/31, 35, 567, 92?, 98, 49/54, 867, 58.

Though some have been extremely reluctant to draw parallels between the Disk or Axe signs and Cretan hieroglyphics, the links between hieroglyphics and Linear A/B are relatively uncontroversial, even though not clear in every case. Ventris and Chadwick (1956) p. 33, fig. 6 sets a basis for subsequent work, such as the table of possible correspondences between hieroglyphics and Linear A/B in Olivier et al. (1996). Owens (1996) details some correspondences between signs in the Cretan hieroglyphic inscription of the Malia stone tablet and signs of the Phaistos Disk and Linear A.

The final step in the chain of correspondences – that Linear A symbols can be read with sound values inferred from Mycenaean Greek written in Linear B – was confirmed by Packard (1974): it is now accepted practice to associate Linear A symbols with Linear B values, as in e.g. Godart and Olivier (1985), and the transcriptions at http://people.ku.edu/~jyounger/LinearA/


Younger, J. (online) Linear A texts in phonetic transcription, and commentary. http://people.ku.edu/~jyounger/LinearA/
A1 =
PD = 02-12-13-01-18_  AB = 28-78-03-46-34_ = I-QE-PA-JE-RJU_
A2 =
PD = 24-40-12  AB = 38-69-78 = E-TU-QE
A3 =
PD = 29-45-07_  AB = 85-07-37_ = AU-DI-TI_
A4 =
PD = 29-29-34  AB = 85-85-39 = AU-AU-PI
A5 =
PD = 02-12-04-40-33  AB = 28-78-48-69-31 = I-QE-NWA-TU-SA
A6 =
PD = 27-45-07-12  AB = 40-07-37-78 = WI-DI-TI-QE
A7 =
PD = 27-44-08  AB = 40-73-52 = WI-MI-NO
A8 =
PD = 02-12-06-18[-20?]  AB = 28-78-45-34[-24_] = I-QE-DE-RJU[-NE_]
A9 =
PD = 31-26-35  AB = 81-33-04 = KU-RJA-TE
A10 =
PD = 02-12-41-19-35  AB = 28-78-41-01-04 = I-QE-SI-DA-TE
A11 =
PD = 01-41-40-07  AB = 46-41-69-37 = JE-SI-TU-TI
A12 =
PD = 02-12-32-23-38_  AB = 28-78-60-06-77 = I-QE-RA-NA-KA_
A13 =
PD = 39-11  AB = 27-87 = RE-TWE
A14 =

A15 =
PD = 28-01_  AB = 36-46_  = JO-JE_

A16 =
PD = 02-12-31-26_  AB = 28-78-81-76_  = I-QE-KU-RJA_

A17 =

A18 =
PD = 33-23  AB = 31-06  = SA-NA

A19 =
PD = 02-12-31-26_  AB = 28-78-81-76_  = I-QE-KU-RJA_

A20 =

A21 =
PD = 28-01_  AB = 36-46_  = JO-JE_

A22 =
PD = 02-12-31-26_  AB = 28-78-81-33_  = I-QE-KU-RJA_

A23 =

A24 =
PD = 06-18-17-19  AB = 45-34-PD17-01  = DE-RJU-PD17-DA

A25 =
PD = 31-26-12  AB = 81-33-78  = KU-RJA-QE

A26 =
PD = 02-12-13-01  AB = 28-78-03-46  = I-QE-PA-JE
A27 =
PD = 23-19-35_ AB = 06-01-04_ = NA-DA-TE_
A28 =
PD = 10-03-38 AB = 79-10-77 = ZU-U-KA
A29 =
A30 =
PD 13-01 AB = 03-46 = PA-JE
A31 =
PD = 10-03-38 AB = 79-10-77 = ZU-U-KA
B1 =
PD = 02-12-22-40-07 AB = 28-78-20-69-37 = I-QE-ZO-TU-TI
B2 =
B3 =
PD = 02-37-23-05_ AB = 28-76-06-50_ = I-RAI-NA-PU_
B4 =
PD = 22-25-27 AB = 20-86-40 = ZO-DWA-WI
B5 =
PD = 33-24-20-12 AB = 31-38-24-78 = SA-E-NE-QE
B6 =
PD = 16-23-18-43_ AB = 74-06-34-66_ = ZE-NA-RJU-TJA_
B7 =
B8 =
B9 =

B10 =

B11 =
PD = 02-26-36-40  AB = 28-76-30-69  = I-RJA-NI-TU

B12 =
PD = 27-25-38-01  AB = 40-86-77-46  = WI-DWA-KA-JE

B13 =

B14 =
PD = 16-14-18  AB = 74-59-34  = ZE-TA-RJU

B15 =
PD = 29-33-01  AB = 85-31-46  = AU-SA-JE

B16 =

B17 =
PD = 02-09-27-01  AB = 28-72-40-46  = I-PE-WI-JE

B18 =
PD = 29-36-07-08_  AB = 85-30-37-52_  = AU-NI-TI-NO_

B19 =
PD = 29-08-13  AB = 85-52-03  = AU-NO-PA

B20 =
PD = 29-45-07_  AB = 85-07-37_  = AU-DI-TI_

B21 =
PD = 22-29-36-07-08_  AB = 20-85-30-37-52_  = ZO-AU-NI-TI-NO_
B22 =
B23 =
PD = 07-18-35  AB = 37-34-04  = TI-RJU-TE
B24 =
PD = 07-45-07_  AB = 37-07-37_  = TI-DI-TI_
B25 =
PD = 07-23-18-24  AB = 37-06-34-38  = TI-NA-RJU-E
B26 =
PD = 22-29-36-07-08_  AB = 20-85-30-37-52_  = ZO-AU-NI-TI-NO_
B27 =
B28 =
B29 =
B30 =
PD = 45-07_  AB = 07-37_  = DI-TI_

AA 1 =

AA2 =

AA3 =
PD+AA = 50-22-19  AB = ??-20-01  = 50?-ZO?-DA

GO – PD+AA – AB – TRANSLITERATION – EPAE – 06/09/2018
1st MILLENNIUM – CYPRUS

CYPRIOT SYLLABIC – CS – 1st MILLENNIUM
STUDI-ABLE OK READ-ABLE OK UNDERSTAND-ABLE OK

2nd MILLENNIUM – AEGEAN BRONZE AGE - HELLAS – CRETE - CYPRUS

LINEAR B – LB - 1200-1400
STUDI-ABLE OK READ-ABLE OK UNDERSTAND-ABLE OK

LINEAR A – LA - 1400-1600
STUDI-ABLE OK READ-ABLE OK UNDERSTAND-ABLE OK?

“CRETAN HIEROGLYPHIC” – “CH” – 1600-2000
STUDI-ABLE OK READ-ABLE OK? UNDERSTAND-ABLE OK??

PHAISTOS DISK & ARKALOCHORI AXE – PD+AA – 1600-1700
STUDI-ABLE OK READ-ABLE OK? UNDERSTAND-ABLE OK??

CYPRO-MINOAN – CM - 1000-1500
STUDI-ABLE OK READ-ABLE OK? UNDERSTAND-ABLE OK??

3rd MILLENNIUM – AEGEAN BRONZE AGE - HELLAS – CRETE - CYPRUS

“NEOLITHIC SCRIPT(S)” – “NS” 4th – 6th MILLENNIA
STUDI-ABLE ? READ-ABLE ?? UNDERSTAND-ABLE ???

6th MILLENNIUM – NEOLITHIC BALKANS

“DISPILIO INSCRIPTION” – “DI” 5300
STUDI-ABLE ? READ-ABLE ?? UNDERSTAND-ABLE ???

“TARTARIA TABLETS” – “TT” 5300
STUDI-ABLE ? READ-ABLE ?? UNDERSTAND-ABLE ???

GO – CRETE – 06-09-2018
SIDE A

WI-DI-TI-QE WI-MI-NO I-QE-DE-RJU-NE KU-RJA-TE I-QE-SI-DI-TE
DE-RJU-....-DA KU-RJA-QE I-QE-PA-JE NA-DA-TE ZU-U-KA
I-QE-WI-WI-TE-RAI-SWI PA-JE ZU-U-KA

SIDE B

I-QE-ZO-TU-TI WI-DI-TI-TE I-RAI-NA-PU ZO-DWA-WI SA-E-NE-QE
ZE NA-RJU-TJA PA-JE-RE-SA SO-TI-PA-JE-RJU ZO-RAI-....-DWA
AU-SA-JE DE-TE-RA-RE-SA I-PE-WI-JE AU-NI-TI-NO AU-NO-PA
AU-DI-TI ZO-AU-NI-TI-NO WI-PI-NA-DWA TI-RJU-TE TI-DI-TI
AU-PI-NA-DWA DI-TI