

Mycenaean

1 Introduction

very much based on *Docs.*³ (quotes, references, etc.)

• "In 1874 Schliemann made a series of trial pits on the Acropolis of Mycenae [T]his was the beginning of Aegean Archaeology and the first landmark in the revelation of the prehistoric civilisation of Greece.

• The second landmark came with the opening of Evans's excavations at Knossos in 1900, when he discovered the clay tablets inscribed in Linear Script B

• In 1956, administrative documents were only known from Knossos, Pylos and Mycenae.

• By the publication of Documents² in 1973, records had been found also at Thebes (1964–).

• Subsequently, further administrative documents have been found on Crete, at Chania (1989–) and possibly Sissi (2011), and on the mainland, in approximate chronological order of discovery, at Tiryns (1966–), Midea (1991–), Volos (2009, but excavated 1956–61), Ayios Vasileios (2008–) and Iklaina (2010), while Pylos, Thebes and Mycenae have each yielded more.

• Inscribed transport stirrup-jars (Haskell et al. 2011), the only other major class of Linear B-inscribed objects, were known from Thebes, Eleusis and Orchomenos sixty years ago, but have now been found on many sites on the mainland (Gla, Kreusis,

History of research

- Focus first on deciphering and reading the texts, i.e., philology was more important, archaeology only ancillary.
- Docs³ p. 9: "Some sense of the relevance of archaeology to the field can be gauged by the relative quantity of archaeological papers in the Mycenaean colloquia: they have never exceeded 20 per cent of all papers and it is probably significant that the highest

- Identification of scribal hands (e.g. Olivier *Scribes Cnossos*, Palaima *Scribes Pylos*) from the 1980s onwards allowed to track individual administrators' work thematically and spatially.
- Both administratively and archaeologically, the documentary record preserved at any site is likely to represent a skewed sample, a 'snapshot' or 'freeze frame' at the moment of burning.

•Tablets are centered around the needs of the palaces, e.g., trade with foreigners is not noted at all, while archaeology shows that it existed.

•Note also reference to *ksenwia* (*ke-se-nu-wi-ja*) cloth, presumably 'cloths for export' in KN Ld(1) documents.

•Maybe trade-related documents more perishable material, or it was not recorded at all.

•p. 11 "Possibly relevant here is the suggestion (e.g. Dulak 2010: 871–72) that mainland Mycenaeans were



PY Ta 641

- This tablet forms a set with twelve others, all rich in vocabulary and morphology, that seem to have challenged the scribe to synthesise the complex information about seventy-four individual objects (see Palaima 2000b, 2011.69–70).
- Michael Ventris (1957) was one of the ‘furnishers’ of the tablet, which he identified as a list of objects (1957: 1057).

predecessors

- Minoan states have a 500-year history, conventionally spanning three major phases:
 - Old, or Proto-Palatial (c. 1900–1700 B.C., ceramic phases MM IB–MM IIIA), when the first palaces were constructed and in operation;
 - New, or Neopalatial (c. 1700–1450 B.C., ceramic phases MM IIIB–LM IB), when major palaces were elaborated and new palace-like structures built;
 - Final Palatial (c. 1450–1350 B.C., ceramic phases LM IIA–LM IIB), when the palaces were further elaborated and new palace-like structures built;

Rule of Knossos?

- Much-debated topic is whether Knossos ever constituted a super-state controlling the entire island of Crete
- Appears unlikely in the Protopalatial period, not least because Knossos used the Cretan Hieroglyphic script, while Phaistos used Linear A at the same time.
- Knossian dominance is possible in MM IIIB–LM IA, when the recently renovated palace there lay at the

Myc. beginnings

- Widespread burnt destructions at many sites on Crete mark the end of the Neopalatial period (LM IB).
- Many regard these destructions on Crete as evidence for a mainland conquest of the island, as Wace suggested in his Preface to *Documents*¹, marked by the first definitive evidence of the use of the Greek language in the Linear B documents found in the Room of the Chariot Tablets (RCT) at Knossos (e.g. Driessen 2000.219–20)

Knossos

- At the time of the Linear B documents uncovered there, Knossos may have overseen a territory of 4500–5000 km² (50–60 per cent of Crete) extending from the Chania region in the far west to the Lasithi region of east-central Crete, including the south-central part of the island around Phaistos.
- Eastern Crete beyond Lasithi seems not to have been part of this polity (Killen 1977.45–46, Bennet 1985.243, 1987)

- This state seems to have collapsed in the mid-fourteenth century B.C.
- reflected in a major destruction of the palace in which most of the Linear B documents were preserved (e.g. Driessen 1997b, 2008),
- perhaps because it overextended its control on an island inherently difficult to manage from a single centre (cf. Bennet 1990).

Pylos, Mycenae, Tiryns

- Pylos at its peak in the 13th c.:
- probably 15ha in extent, population maybe 3000, controlling over 2000 km²
- more or less the modern prefecture of Messenia, total population maybe 50,000.
- Texts mention a Hither and a Further Province separated by the Aigaleon (Strabo 8, 4, 1-2) ridge, nine settlements in the Hither Province, seven or eight in the Further Province.
- In the Argolid, Mycenae and Tiryns are separated by just a few kilometers, so not two different territorial states but Mycenae as main palace controlling Tiryns.

view from outside

.Egypt:

- No Aegean rulers' names appear among the Amarna correspondence, but the inclusion of major place-names such as Knossos and Mycenae in the so-called 'Aegean list' in the mid-fourteenth-century B.C. mortuary temple of Amenhotep III (e.g. Cline and Stannish 2011)

implying a general knowledge of political entities

view from outside

•Anatolia:

- 14th/13th c. B.C. Hittite geographical term
Aḫḫiyāwā may refer to a Mycenaean state – most likely Mycenae or Thebes, conceivably both, but at different times – even in one controversial instance implying that the king of Aḫḫiyāwā had the status of ‘great king’:
- in the "Tawagalawa-letter" (KUB XIV.3/CTH 181), *^mTa-wa-ga-la-wa /Tawagalawa/* = **Etewokleweios*, ca. 1250,

interaction with the gods

- Associations between the ruling elite and the supernatural were displayed in a number of ways.
- The *wanaks* may have been regarded as god-like in some respects, if we take literally offerings of oil to him along with deities, although nothing in the documents compels us to think that Mycenaeans considered him divine.

• There is a royal association with *pa-ki-ja-ne* (probably *Sphagianes*), a sanctuary site (not yet identified) that gave its name to the district of the Hither Province in which Pylos lay: it is the explicit location of a feast in the wanaks's honour (PY Un 2: mu-jo-me-no , e-pi , wa-na-ka-te 'when the w. was introduced into the mystery cult?'), while he may also have assigned land there to those associated with him (members of the elite and also craftspeople defined as 'royal' [*wanaktero-*]).

• Linear B documents at Knossos, Chania, Pylos and Thebes record state-sponsored offerings to deities, often dated by month, suggesting a ritual calendar;

• the commodities included oil (probably perfumed), honey, grain, less frequently gold (and silver?) vessels (details in Bendall 2007, Lupack 2008).

• Although references are not rare, it is likely that the overall amount offered represented a small proportion of the total commodities available to the state, perhaps less than 10 per cent (Bendall 2007).

End of the Mycenaean period

- The century from 1250 to 1150 B.C. saw increasing disruption for Mycenaean centres both on the mainland and on Crete, and it is worth noting that much of our Linear B documentation (especially from Mycenae, Thebes and Pylos) falls in this period, Pylos perhaps the latest in the sequence (cf. Vitale 2006)
- It is unlikely to be coincidental that the eastern Mediterranean experienced conflict and collapse in the same period:

Discovery and decipherment

- Notable that the Greeks of the Classical period had "no clear memory either of a system of writing earlier than the Greek alphabet, or of a time when they and their language were not firmly rooted on the Greek mainland." (Ventrìs *Documents*¹: 3)
- Evans digging in Knossos: The first of six seasons, in which Evans was assisted by Mackenzie with Fyfe as architect, began on 22 March 1900

- Simultaneously with Evans's discoveries at Knossos, tablets in a somewhat different script (Linear A) were found at Agia Triada in the south of Crete by Halbherr (not published till 1945) and also in smaller numbers at other Cretan sites.

- In 1908 Pernier found the unique Phaistos disk, stamped in clay from movable pictographic 'type': its Cretan origin is still disputed.

Years of stagnation

- Evans's *Scripta Minoa* I (1909) contained his collection of inscribed seal-stones, the hieroglyphic and Linear A material from Knossos, and fourteen of the Linear B tablets (five had already appeared in the 1900 dig report).
- No further publication of the Linear B tablets, of which well over 3000 pieces are known to have been excavated, were made until the fourth volume of his

First attempts

- "During the half-century 1901–51 continual attempts were made by reputable scholars, by talented amateurs and by cranks of all kinds from the lunatic fringe of archaeology."
- "The search for possible candidates spread over an absurdly wide area, and included Hittite, Egyptian, Basque, Albanian, Slavonic, Finnish, Hebrew and Sumerian."
- "Notable exceptions are an article by Cowley (1927) in which he showed that Knossos totals are introduced by either $\overline{\tau}$ $\overline{\eta}$ or $\overline{\tau}$ $\overline{\nu}$, and that $\overline{\psi}$ $\overline{\mu}$ and $\overline{\psi}$ $\overline{\lambda}$ mean 'boy' and 'girl', conceivably a phonetic indication 'as if for $\kappa\omicron\tilde{\upsilon}$ - $\rho\omicron\varsigma$ and $\kappa\omicron\acute{\upsilon}$ - $\rho\eta$ ' (which we now know to be correct)." (p. 34)

• "Towards the end of his life the Czech orientalist Hrozný, who in 1915 had brilliantly established cuneiform Hittite as an Indo-European language and had later played a less responsible part in the reading of hieroglyphic Hittite, began to lose his critical faculties and embarked on a wholesale attack on the remaining undeciphered scripts of the world.

His readings of the then unpublished Linear B tablets

- In 1939 Blegen "discovered the site of a large Mycenaean palace at Ano Englianos, 10 km north of the Classical Pylos (Koryphasion)" >> the Mycenaean Pylos.
- Discovery of 600 pieces of clay tablets (later reduced to 566 by joins).
- They clearly showed that "that the Pylos tablets were

Kober

- Alice Kober (Brooklyn), published important papers between 1943 and her premature death in 1950: "Her chief contribution was to show that the tablets contained, as might reasonably be expected, a language with grammatical inflexions."
- She collected instances of varying descriptions of identical goods, e.g chariots, showing, as we now know, e.g., singular and plural forms.

• "In the end we are left with a well-covered chequerboard of some sixty-five squares, from which all that is lacking is the actual pronunciation of the vowels and consonants themselves (Fig. 2.3).

• This method of attack precludes random attempts to give a premature vocalisation to isolated words (since every assumed syllabic value automatically leads to a (chain-reaction) sequence of signs which are assumed

	VOWEL 1	V2	V3	V4	V?
	-a?	-e?	-i?	-o?	
C1	𐎡		𐎢		
C2	𐎠	𐎠	𐎡		
C3	𐎠 𐎡			𐎢	
C4	𐎢	𐎢			
C5	𐎢	𐎡	𐎡	𐎢	
C6	𐎠	𐎡 𐎢		𐎢	
C7	𐎡	𐎢	𐎢	𐎢	
C8	𐎢	𐎡	𐎡	𐎡	
C9	𐎢	𐎢	𐎢		𐎢
C10		𐎢		𐎢	𐎢
C11	𐎢		𐎢		𐎠
C12	𐎢	𐎢	𐎢	𐎢	𐎢
C13	𐎢	𐎢	𐎢	𐎢	
C14		𐎢	𐎢	𐎢	𐎢
C15	𐎢	𐎢	𐎢	𐎢	𐎢
C?		𐎢	𐎢		

Figure 2.3. The state of the ‘grid’ prior to decipherment (February 1952)

Ventris

- After further publications by Bennett, *The Pylos tablets* (1951) and *Minoan Linear B Index* (1953), Ventris started his *Work Notes* circulated between colleagues and friends between January 1951 and June 1952.
- Among the problems apparently militating against assuming that the tablets were written in Greek was the apparent lack of a sign for /-s/ to note one of the most frequent endings in Greek inflexion.

- Further excavations by Blegen in Pylos (1953-55), among them PY Ta 641
- Blegen sent a letter to Ventris and Chadwick remarking on the fit between their transliteration and the logograms (Docs.³ p. 46).

It's all Greek, but ...

- Form of ancient Greek with some special features.

- Phonology:

- *s > h /#_V, V_V *e-re-e /ere-hen/* 'to row' < *-sen, Skt. -san(i)
- *y > h/z /#_V *ze-u-ko /dzeugos/* 'pair' ~ Lat. iugum etc.; o-/jo- /hō(s)/ 'thus' ~ ὥς
- PIE voices aspirates > voiceless aspirates; differentiated in spelling in alveolar series: <t-> =

•Morphology:

- productivity of nouns in *-eu-*
 - not found elsewhere – or in Phrygian (*Akenanogavos*?)
- 3SG.PRS.IND.ACT *-ei*, <a-ke> /agei/, not *-e-ti

•Lexicon:

- only in Greek, e.g., *qa-si-re-u* /g^wasileus/ (βασιλεύς)

Dialectal position of Mycenaean

- Language of Linear-B tablets quite uniform, little variation → standardized administrative language, used by small group of trained scribes



Classification

- Risch 1955:

- Northern Greek: Doric/North-western Greek; Aeolic; Pamphylian
- Southern Greek: Ionic-Attic, Arcado-Cypriot, **Mycenaean**

- Common innovations of Southern Greek:

- assibilation *-ti-* > *-si-* (δίδωσι vs. Dor. δίδωτι)
- NOM PL M/F article οἱ αἱ vs Dor τοί ταί

Southern features

- Mycenaean shares:

- assibilation: *di-do-si* /didonsi/ 'they give', *e-ko-si* /ek^honsi/ 'they have', *a-pu-do-si* /apudosis/ 'payment', *po-si* /posi/ 'toward' (Dor. ποτί).
- lexicon: *i-je-ro* /hieros/ like Att. ἱερός vs Dor. ἱαρός; *a-te-mi-to* /Artemitos/ 'of Artemis' ~ Att. Ἄρτεμις vs Dor. Ἄρταμις
- But

•Morpurgo Davies (1992): features that unite
Mycenaean and Arcadocypriot:

1)a-stem gen. sing. m. in -āo

2)3 sing. medio-passive ending -(n)toi

3)apu instead of ἀπό

4)posi (Arcado-Cypriot *pos* is apocorated) vs πρός,
προτί

5)hote ‘when’ (vs ὅκα)

Internal variation

- spelling variation/scribal practices:

- PY uses a_2 /ha/ more than KN, e.g. *pa-we-a₂* / *pa-we-a* /p^harweha/ 'cloths'
- KN uses plene spelling with *i*-vowel more often than PY: KN *ko-to-i-na* vs PY *ko-to-na* /ktoina/, KN *a-pi-qo-i-ta* / PY *a-pi-qo-ta* /Amp^hi-k^{w(h)}oita:s/

- morphology: MY prefers DAT.SG in *-i* and has *-e* less often

Internal variation

•Risch 1966: mycénien normal vs spécial:

1) dative singular ending of the athematic declension in *-e* (/ei/) (normal) or in *-i* (/i/);

2) vocalisation of Indo-European syllabic nasals in contact with a labial consonant in *o* (normal) or in *a* (special);

3) alternation between *i* (normal) and *e* (special) in certain words (e.g. normal *a-ti-mi-to* /Artimitos/, gen.

DAT.SG in MY

•recipients of wool: MY Oe 103+105

.0 vac. [

.1 a-pi-e-ra [

.2 di-we-se-ja [

.3 a-qi-ti-ta[

.4 ku-po LANA[

.5 pi-we-ri-di LANA [

- MY Oe 121: *ka-ke-wi* /k^halkewi/ 'for the smith / for Mr. Smith'
- MY Oe 125 *ke-ra-me-wi* /keramewi/ 'for the potter / for Mr. Potter'
- 10 forms with DAT -e, e.g., *ka-na-pe-we* (Oe 129) /knap^hewei/ 'for the fuller'
- Scribe no. 56 writes *ka-ke-wi* and *ka-na-pe-we* → colloquial form in -i vs more archaic form in -e?
- DAT.SG in -i closer to 1st millennium Greek → Greek in Mycene more innovative than in Knossos?

Chadwick

- Chadwick (1976c) went further and, noting that by lacking assibilation special Mycenaean resembled West Greek, suggested that it was proto-Doric.
- It had previously been assumed that the Doric dialects entered the Peloponnese at the end of the Mycenaean period as either a consequence or a cause of the collapse of the palaces.

- Thompson (1999 and 2006b): data do not support such theories.
- (1) is a change in progress anyway, completed in Alph.-Gr. with some scribes being more advanced in using more -i than -ei.
- (2) Spelling varies also with individual hands, e.g. hand 1 writes *pe-mo*, but *a-re-pa*. --> sound change spreading by lexical diffusion, i.e., not (yet) a matter of "dialects".
- (3): words showing this feature are mostly of non-IE origin, so probably the scribes try to render a vowel of a foreign language somewhere between Greek /e/ and /i/.

.(4): words showing lack of assibilation are personal names (*o-ti-na-wo* /Ortina:wos/ 'impelling ships'), which may simply be archaisms, note the famous case of Homeric Ortilochos and his grandson Orsilochos,

//. 5.546 (Alpheios) ὃς τέκετ' **Ὀρτίλοχον** πολέεσσ' ἄνδρεσσιν ἄνακτα·

Ὀρτίλοχος δ' ἄρ' ἔτικτε Διοκλῆα μεγάθυμον,

ἐκ δὲ Διοκλῆος διδυμάονε παῖδε γενέσθην,

Κρήθων **Ὀρσίλοχός** τε μάχης εὖ εἰδότε πάσης.

–the same applies to place names (*Mi-ra-ti-ja* /Milātiai/ 'women of Milet')

.(5): irregular process anyway?

Tablets

•main find spots:

- **KN**ossos, ca. 4200; oldest texts in the Room of the Chariot Tablets ca. 1380, or 1450?
- **PY**los, ca. 1000
- **MY**cenae, 88; only 12 of them found within the citadel, the rest from outside (palace annexes, storage area)
- **TH**ebes, 363

•smaller find spots:

- Khania (KH), western Crete. 5.
- Midea (MID) : 4 noduli and painted vases
- Volos (Thessaly): 2 tablet fragments, one of them uninscribed.
- Iklaina (south of Pylos): 1 tablet found in 2010 (Shelmerdine 2012a)
- Sissi (perhaps) 1 (could be a label in Linear B; found in 2011; Driessen 2012:24).
- Medeon (Phokis; MED): one ivory seal
- Olympia (OL): doubtful, probably a falsification. Pebble with Linear-B text, purported to have been found in Kafkania in 1994 (north-east of Olympia), in a layer dating to 1650 BCE – i.e., much older than earliest Knossos texts.

Many new texts found in Ayios Vassilios south of Sparta – from 2008 onward. 5 tablets

tablets

- Main source of our documentation are clay tablets -- only palatial administration, no private documents or archives apparently.
- Tablets were accidentally baked in fire. Size may vary considerably, e.g. at Knossos, for example, 36 = As(2) 1516 and Fh 346 are 16 x 26 cm and 3 x 1 cm respectively.
- Two basic formats: tablets in the form of a palm leaf

- There are many more leaf- than page-shaped tablets:
- about 95 per cent in Knossos and 85 per cent in Pylos (Olivier 1984.13).
- Due to different uses: leaf-shaped tablets were used for provisional registrations and for monitoring ongoing transactions, the page-shaped tablets contained final lists, tax rolls and closing balance texts.
- Classification of tablets: a-m for leaf-shaped tablets, n-z for page-shaped tablets.

Scribes

- Individual hands can be identified by various characteristics such as (Docs.³ 222):
 - the forms of the signs
 - the number of primary, secondary and accessory elements with which they were formed,
 - the direction and order in which they were drawn,
 - their relative position,
 - the inclination of the stylus while tracing them

Scribes

- Olivier *Scribes of Knossos* identifies 66 scribal hands
- numbered 101-124 for primary, and 201-225 for secondary hands, i.e., those that might represent one of the manifestations of the work of another hand.
- Hand 124 is special: not a scribal hand but the graphic style of the documents of the RCT which is very homogeneous with only little differences: not enough to distinguish different hands, but not too

Scribes

- identification of hands is relevant for epigraphists especially for quasi-joins, i.e.,
 - "to establish whether fragments that do not touch do or do not belong to the same tablet" --
- and for linguists to study linguistic variation, e.g. as mycénien special vs normal in the sense of Risch (1966a).
- identification of hands and their occurrence in various places allows assumptions about how the administration worked, e.g. in Knossos (Olivier, *Scribes Knossos*) (Docs₃ 225f.):

Scribes

- "There were two non-specialised offices (located in the Room of the Chariot Tablets [C] and in the Northern Insula [I1–I5]);
- two possible departments (one that monitored the production of textiles in the northern area of the W. Magazines [F3-F14, F16-F19, F21] and one that dealt with spices, honey and religious offerings in the area of the Corridor of House Tablets and of the Gallery of Jewel Fresco [E5, G1 plus a few F- find-places];
- at least five specialised offices (two that recorded flocks of sheep, located respectively in the area of the E.–W. Corridor [J1] and in the southern area of the W. Magazines [F1, F2, F3, F15], one dealing with olive oil in the Room of Column Bases [E1], one dedicated to the management of personnel in the Hall of Colonnades [J2] and one specialised in monitoring arms and military materials in the Arsenal [L]);

- Most scribes apparently worked in one office only, but a few left traces in various places, e.g.
- scribe 103 (textile department and office of spices, honey and offerings),
- 119 (textiles and office of sheep flocks),
- 120, 207, 217 (sheep flocks and non-specialized office of the Northern Insula) etc.

Only scribes of BCT and of olive oil in the Room of

Pylos

- Situation in Pylos is quite different (*Palaima Scribes Pylos*):
- there were
 - an archive (AC, rooms 7 & 8) containing ca. 75% of the texts,
 - a specialized office (textiles of the *146 type)
 - a non-specialized office (personnel, animals, leather, arms, chariots, textiles...),

Pylos

- Ca. 15 scribes active in Pylos in a single place:

- 1, 3, 6, 11, 22, 23, 24, 25, 42, 43, 45 (AC), 14 (S.W. Area), 31, 32, 33 (N.E. Building).

- About ten carried out their work in more than one place:

- Hand 2 (AC, Rooms 23, 32, 38), Hand 4 (AC, Rooms 38 and 41), Hands 12, 15, 21, 26 (AC, N.E. Building), Hand 13 (?) (Rooms 6 and 105), Hand 34 (Room 32, N.E. Building), Hand 41 (AC, Room 38).

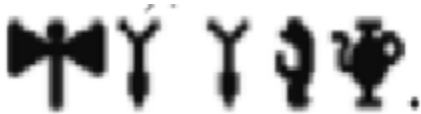
- Many more non-specialized scribes at Pylos than at Knossos → smaller palace and smaller administration.

- Hand 1, who is attested exclusively within the AC and is responsible for drawing up the majority of the texts, uses the work of other scribes (especially Hands 4, 21, 41 and 43), calculates totals, draws up summary documents and makes labels, a set of activities

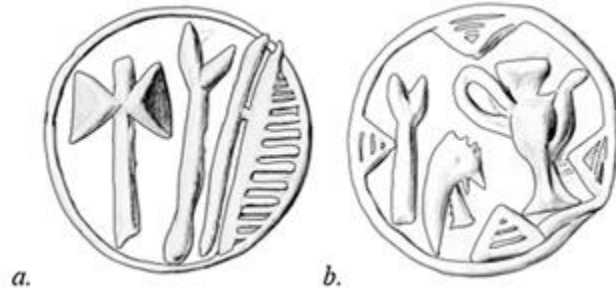
- Why no archive in Knossos?
- Either one of the non-specialized offices was used as archive, or the archival documents were written on perishable materials.
- Apparently no general literacy in Mycenaean times:
 - no evidence that literacy extended beyond the small circle of scribes.
 - Linear-B could have been used for other types of

Writing Systems

- Earliest evidence of writing on Crete are four seals from the end of the third millennium, i.e., before the foundation of the earliest Minoan palaces around 1900 BCE.
- All display the same sequence of five signs (called the "Arkhanes script", 35°14'N 25°10'E):



CMS II.1,394/Y8/C2



•This group, with the last two signs modified, is found later on 10 "hieroglyphic" seals and seal impressions (H 042–019–019–095–052) and on ca. 15 votive inscriptions in Linear-A on stone, metal and clay:

TYYL²T²

- It is unclear, why both hieroglyphic and Linear-A tablets etc. occur side by side both in Knossos and in Malia, apparently at the same time.
- Why was only hieroglyphic used for seals?
- Why did hieroglyphic disappear before the end of the 17th c. while Linear-A was used until the 14th c.?
- About 20 signs have a similar form in hieroglyphic and Linear-A.

Hieroglyphs

- ca. 1900-1500, undeciphered, syllabary?
- ca. 100 different signs
- Knossos, Malia, Petras, Symi : absent from Western Crete and outside Crete only one seal on Cythera and in eight impressions at Samothrace.
- ca. 350 documents with ca. 3000 signs -- few compared to Linear-A with 8000 signs and 6000 documents in Linear-B with ca. 70.000 signs.



A green jasper seal with Cretan hieroglyphs. 1800 BC



Cretan hieroglyphs (1900-1600 BC) on a clay bar from Malia or Knossos, Crete. As exhibited at Heraklion Archaeological Museum, Crete, Greece. Dots represent numerals.

Edition: J.-P. Olivier, L. Godard, in collaboration with J.-C. Poursat, *Corpus Hieroglyphicarum Inscriptionum Cretae* (CHIC), Études Crétoises 31, De Boccard, Paris 1996, ISBN 2-86958-082-7.
















	WHEAT	OIL	OLIVES	FIGS	WINE
H					
A					
B					

Figure 3.2. Logograms for common staples in ‘hieroglyphic’ [H],
Linear A [A] and Linear B [B]

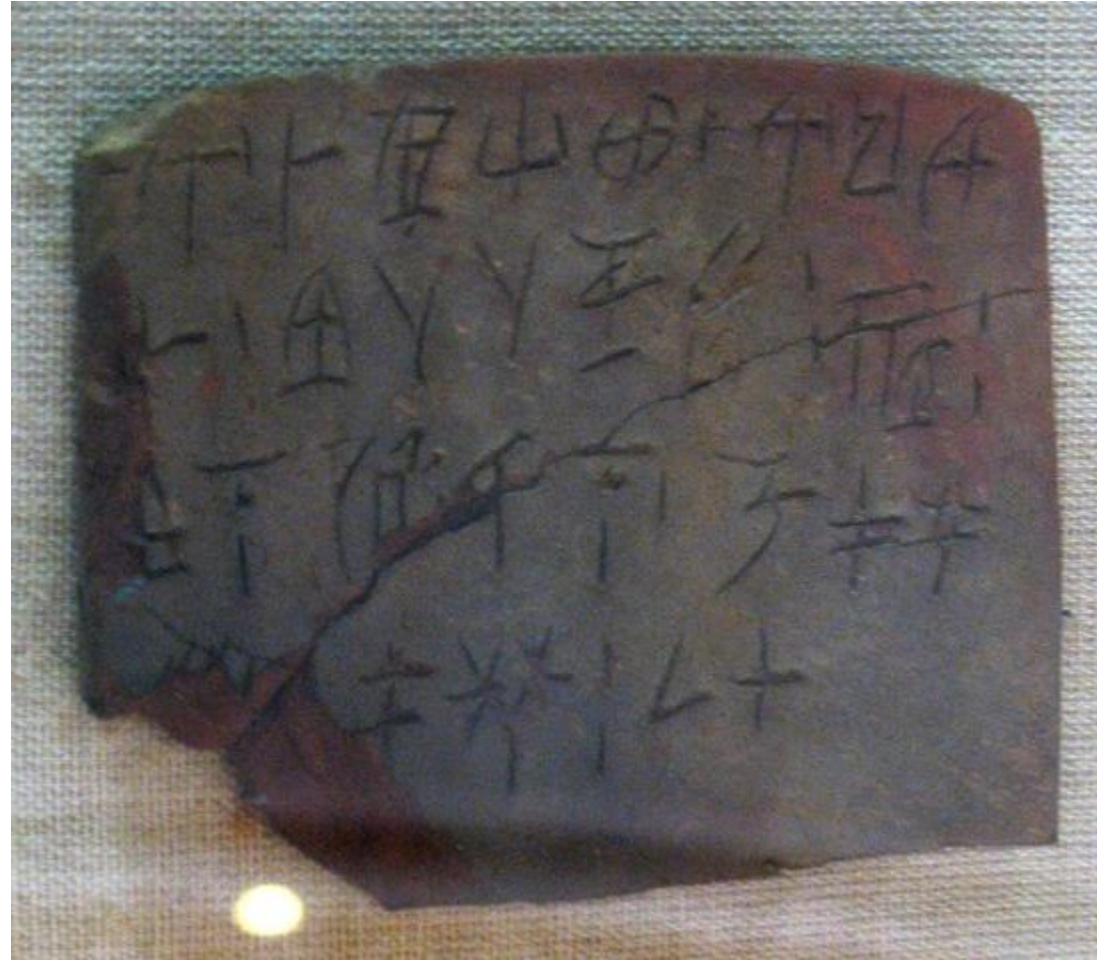
- The logogram for figs takes the same form as the phonogram H 024 in ‘hieroglyphic’ and the phonogram AB 30 in the two other systems of writing, the phonetic value of that phonogram is *ni* in Linear B.
- Neumann (1962): gloss of Hesychius, ‘νικύλεον· σῦκαι. Κρήτες’, case of example of acrophony (extremely rare in Aegean writing)?
- Would imply that the logogram was more ancient than the syllabary (although for this to be the case the phonetic value of H 024 and/or A 30 would have to have been *ni*, and of that we cannot be sure).

Numerals

- Tens are initially expressed by a dot in hieroglyphic and Linear-A of the 18th and 17th c.,
- in the 15th c. this became a horizontal stroke in Linear-A and this is also the form used in Linear-B,
- hence the latter was not invented before 1600.

Linear A

- ca. 1950-1450, Crete, ca. 80 signs, syllabary, used for one or more non-Greek language(s)
- 1427 specimens totalling 7362–7396 signs
- Main find spots:
 - Haghia Triadha : 147 tablets;
 - Zakro/Zakros, port town in the far east of the island with 31 tablets;
 - Khania, port town in the northwest of the island



- 20 signs similar to those of hieroglyphic -- but is this sufficient to claim that one derives from the other? Cf. Linear-B taking 64 signs from Linear-A, with a similar overall size.
- Apart from the Arkhanes-formula no similar sequence of repetition of similar signs in hieroglyphic and Linear-A have been found.
- Earliest specimen KN 49, ca. 1950-1900, latest: 8 signs painted on a clay statuette with the Arkhanes formula, found in Poros/Irakliou (one of the ports of Knossos): ca. 1500-1450.
- Uncertain whether Linear-A was used for one language only.
- Possible to apply Linear-B phonemic values to similar signs in Linear-A -- as a hypothesis, but even so this does not result in a clarification of the language.

Linear B

- ca. 1450/1380-1100.
- Probably created to write Greek, syllabary not well suited for this
- strongly standardized sign forms
- place of creation unclear

Linear B

- ca. 88 signs, 20 new, rest has predecessors in Linear A
- Newly created signs include *pe* and *do, jo, mo, no, qo, so, wo* and *zo*: --> apparently /o/-vowel was marginal in Minoan.
- Further innovations: *a₂, a₃, ra₃* /ha, ai, r~lai/ and *dwe, dwo, pte, ro₂ (rjo), twe, two*.

Format

- Linear-A-tablets are mostly higher than wide, whereas for Linear-B-tablets the "palm leaf" format (tablets that are wider than they are high) became the standard format.

- Olivier stresses the differences: "Consequently, the models for Linear B, both its writing and the format of its documents, should not be sought in the clay archives in Linear A. But there were 'other' archives and other written documents, the prevalence and role

When and where?

- Date of invention: Notation of numbers gives a "terminus post quem, since that borrowing can only have taken place after 1600: in Linear A, tens are noted by a horizontal line (as they were to be in Linear B) only from that date (beginning of Late Minoan) onwards."
- Where? mainland Greece ca. 1500? Crete after 1425 (Olivier takes this as the date of Mycenaean invasion of Crete), tablets of the RCT ca. 1390?
- Latest texts just before the destruction of Pylos ca. 1200. --> ca. 200 years of attestation with remarkable conservatism, little change in spelling, forms of writing, language.

AB 08 <i>a</i>		B 36 <i>jo</i>		AB 55 <i>mu</i>		AB 76 <i>ra₂</i>		AB 37 <i>ti</i>		AB 22	
B 25 <i>a₂</i>		AB 77 <i>ka</i>		AB 48 <i>mwa</i>		B 33 <i>ra₃</i>		AB 05 <i>to</i>		AB 34	
B 43 <i>a₃</i>		AB 44 <i>ke</i>		AB 61 <i>o</i>		AB 27 <i>re</i>		AB 69 <i>tu</i>		AB 47	
AB 85 <i>au</i>		AB 67 <i>ki</i>		AB 03 <i>pa</i>		AB 53 <i>ri</i>		B 87 <i>nve</i>		AB 49	
AB 01 <i>da</i>		AB 70 <i>ko</i>		B 72 <i>pe</i>		AB 02 <i>ro</i>		B 91 <i>two</i>		AB 56	
AB 45 <i>de</i>		AB 81 <i>ku</i>		AB 39 <i>pi</i>		B 68 <i>ro₂</i>		AB 10 <i>u</i>		B 63	
AB 07 <i>di</i>		AB 80 <i>ma</i>		AB 11 <i>po</i>		AB 26 <i>ru</i>		AB 54 <i>wa</i>		B 64	
B 14 <i>do</i>		AB 13 <i>me</i>		B 62 <i>pte</i>		AB 31 <i>sa</i>		AB 75 <i>we</i>		AB 65	
AB 51 <i>du</i>		AB 73 <i>mi</i>		AB 50 <i>pu</i>		AB 09 <i>se</i>		AB 40 <i>wi</i>		AB 79	
B 71 <i>dwe</i>		B 15 <i>mo</i>		AB 29 <i>pu₂</i>		AB 41 <i>si</i>		B 42 <i>wo</i>		AB 82	
B 90 <i>dwo</i>		AB 23 <i>mu</i>		AB 16 <i>qa</i>		B 12 <i>so</i>		AB 17 <i>za</i>		B 83	
AB 38 <i>e</i>		AB 06 <i>na</i>		AB 78 <i>qe</i>		AB 58 <i>su</i>		AB 74 <i>ze</i>		AB 86	
AB 28 <i>i</i>		AB 24 <i>ne</i>		AB 21 <i>qi</i>		AB 59 <i>ta</i>		AB 20 <i>zo</i>			
AB 57 <i>ja</i>		AB 30 <i>ni</i>		B 32 <i>qo</i>		AB 66 <i>ta₂</i>		AB 18			
AB 46 <i>je</i>		B 52 <i>no</i>		AB 60 <i>ra</i>		AB 04 <i>te</i>		B 19			

AB 01	da 𐀢	AB 16	qa 𐀓	AB 31	sa 𐀈	AB 47	*47 𐀓	()B 62	pte 𐀓	AB 77	ka 𐀓
AB 02	ro 𐀢	AB 17	za 𐀓	()B 32	qo 𐀓	AB 48	nwa 𐀓	()B 63	*63 𐀓	AB 78	qe 𐀓
AB 03	pa 𐀢	AB 18	*18 𐀓	()B 33	ra ₃ 𐀓	AB 49	*49 𐀓	()B 64	*64 𐀓	AB 79	*79 𐀓
AB 04	te 𐀢	()B 19	*19 𐀓	AB 34	*34 𐀓	AB 50	pu 𐀓	AB 65	*65 𐀓	AB 80	ma 𐀓
AB 05	to 𐀢	AB 20	zo 𐀓	()B 36	jo 𐀓	AB 51	du 𐀓	AB 66	ta ₂ 𐀓	AB 81	ku 𐀓
AB 06	na 𐀢	AB 21	qi 𐀓	AB 37	ti 𐀓	()B 52	no 𐀓	AB 67	ki 𐀓	AB 82	*82 𐀓
AB 07	di 𐀢	AB 22	*22 𐀓	AB 38	e 𐀓	AB 53	ri 𐀓	()B 68	ro ₂ 𐀓	()B 83	*83 𐀓
AB 08	a 𐀢	AB 23	mu 𐀓	AB 39	pi 𐀓	AB 54	wa 𐀓	AB 69	tu 𐀓	AB 85	au 𐀓
AB 09	se 𐀢	AB 24	ne 𐀓	AB 40	wi 𐀓	AB 55	nu 𐀓	AB 70	ko 𐀓	AB 86	*86 𐀓
AB 10	u 𐀢	()B 25	a ₂ 𐀓	AB 41	si 𐀓	AB 56	*56 𐀓	()B 71	dwe 𐀓	AB 87	twe 𐀓
AB 11	po 𐀢	AB 26	ru 𐀓	()B 42	wo 𐀓	AB 57	ja 𐀓	()B 72	pe 𐀓	()B 90	dwo 𐀓
()B 12	so 𐀢	AB 27	re 𐀓	AB 43	a ₃ 𐀓	AB 58	su 𐀓	AB 73	mi 𐀓	()B 91	two 𐀓
AB 13	me 𐀢	AB 28	i 𐀓	AB 44	ke 𐀓	AB 59	ta 𐀓	AB 74	ze 𐀓	Numeri deleti: 35, 84, 88, 89	
()B 14	do 𐀢	AB 29	pu ₂ 𐀓	AB 45	de 𐀓	AB 60	ra 𐀓	AB 75	we 𐀓		
()B 15	mo 𐀢	AB 30	ni 𐀓	AB 46	je 𐀓	AB 61	o 𐀓	AB 76	ra ₂ 𐀓		

AB: sign borrowed from Linear A

()B: sign created by Linear B

01 etc.: numeration of the 'conventional order'

da: sign in transliteration

𐀢: syllabogram in Linear B Script

(original font by JEAN-PIERRE OLIVIER)

Melena, José L. „Mycenaean Writing“. In A Companion to Linear B, ed. Yves Duhoux & Anna Morpurgo Davies, 3:1–186. Louvain-La-Neuve: Peeters, 2014, p. 12.

	100 VIR		108 ^m SUS ^m		118 L		125+PA CYP+PA		142		159+KU TELA+KU
	102 MULier		108+KA SUS+KA		120 GRAnum		127 KAPO		144 CROCus		159+PA TELA+PA
	104 CERVus		108+SI SUS+SI		120+PE GRA+PE		128 KAYAKO		145 LANA		159+PU TELA+PU
	105 EQUus		23-109 MU-BOS		121 HORDeum		129 FAR		146		159+TE TELA+TE
	105 ^f EQU ^f		109 ^f BOS ^f		122 OLIVa		130 OLEum		146+PE		159+ZO TELA+ZO
	105 ^m EQU ^m		109 ^m BOS ^m		122+A OLIV+A		130+A OLE+A		150		160
	21-106 QI-OVIS		109+SI BOS+SI		122+TI OLIV+TI		130+PA OLE+PA		151 CORNu		161
	106 ^f OVIS ^f		110 Z		123 AROMa		130+WE OLE+WE		152		162 TUNica
	106 ^m OVIS ^m		111 V		123+KO AROM+KO		131 VINum		153		162+KI TUN+KI
	106+TA OVIS+TA		112 T		124 PYC		132		154		162+QE TUN+QE
	22-107 CAPer		113 S		124+QA PYC+QA		133 AREPA		155 155 ^{VAS}		162+RI TUN+RI
	107 ^f CAP ^f		114 Q		124+O PYC+O		134		156 TURO ₂		163 ARMa
	107 ^m CAP ^m		115 P		125 CYPeros		135 MERI		157		164
	85+108 SUS		116 N		125+KU CYP+KU		140 AES		158		165
	108 ^f SUS ^f		117 M		125+O CYP+O		141 AURum		159 TELA		166

Fig. 17.6. The Linear B logograms
(transliteration of the Salamanca Convention) — to be continued

	166 + WE		179		205		218		242	Numeri vacantes (vel *deleti) *101, *103, *119, *124+123, *126, *130+PO, 135-139, *143, 147-149, *175, *186, *187, *188, *192- 193, 194-199, *141+213, 221-224, *235, 236-239, *244, *251-252, 259-298, *299.
	167		180		206 ^{VAS}		219 ^{VAS}		243	
	167 + PE		181		207 ^{VAS}		220		243 + TE	
	168		182		208 ^{VAS}		225		244 + TE	
	168 + SE		183		209 ^{VAS}		226 ^{VAS}		245	
	169		184		209 + A		227 ^{VAS}		246	
	170		185		210 ^{VAS}		228 ^{VAS}		247	
	171		189		211 ^{VAS}		229 ^{VAS}		248	
	172		190		212 ^{VAS}		230		249	
	172 + KERO		191		212 + U		231		250 ^{VAS}	
	173		191 GALca		212 ^{VAS} + U		232		251	
	174		200 ^{VAS}		213 ^{VAS}		233		252	
	176		201 ^{VAS}		214 ^{VAS}		234		253	
	177		202 ^{VAS}		215 ^{VAS}		240		254	
	178		203 ^{VAS}		216 ^{VAS}		241		255	
			204 ^{VAS}		217 ^{VAS}		242		256	
							243		257	
							244		258	
							245			
							246			
							247			
							248			
							249			
							250			
							251			
							252			
							253			
							254			
							255			
							256			
							257			
							258			

Fig. 17.7. The Linear B logograms
(transliteration of the Salamanca Convention) — continuation

Cypro-Minoan

- ca. 1550-1050
- Cypriot version of Linear A?
- Ca. 250 objects—such as clay balls, cylinders, and tablets and votive stands.

Cypro-Minoan signs with most certain values

Based on their comparison with signs of the Cypriot and Linear B scripts.

F1 – Faucounau1, F2 – Faucounau2, FN – Facchetti/Nagri, C – Colless, O – Opheltau.

	A	E	I	O	U
·	102 	38 	104 	64 	12/197 
B/P	6 	11 			
D/T	4 	7 	23 		
K/G	25 		70 	217 	
L	87 	24 	9 	5 	
M	55/53 		91 	73/75 	
N	8 	2 			
R		33 		97 	
S	82 	44 	27 		467 
W		1 			
Y	69 				
Z					

•Steele, P. M. (2013). A linguistic history of ancient Cyprus. Cambridge: Cambridge University Press.

•Steele, Philippa M. (Ed.) (2013). Syllabic Writing on Cyprus and its Context. Cambridge

- Émilia Masson distinguishes three syllabaries:
- Cypro-Minoan 1 (CM 1), from the fifteenth century to the eleventh, used throughout the island, on all kinds of objects; 206 documents with c. 1,300 signs;
- Cypro-Minoan 2 (CM 2), from the twelfth century, at Enkomi, on 3 large fragmentary clay tablets bearing c. 2,000 signs;
- Cypro-Minoan 3 (CM 3), from the thirteenth century,

Cypriot syllabary

•from 12th c. onward, 55 signs to write Cypriot Greek dialect

•Oldest text (GEN.SG of 'O (KN).



ἑλται,
p^heltā^ho/

Is this already the Cypriot syllabary or still CM1 used

- Next inscriptions from the 8th c.:
- Mende (Chalcidice), Attic amphora, clay, cf Vokotopoulou & Christidis 1995
 - Vokotopoulou, I. and Christidis, A.-P. 1995. 'A Cypriot graffito on a SOS amphora from Mende, Chalcidice', *Kadmos* 34, 5–12.
<https://www.degruyter.com/document/doi/10.1515/kadm.1995.34.1.5/html>

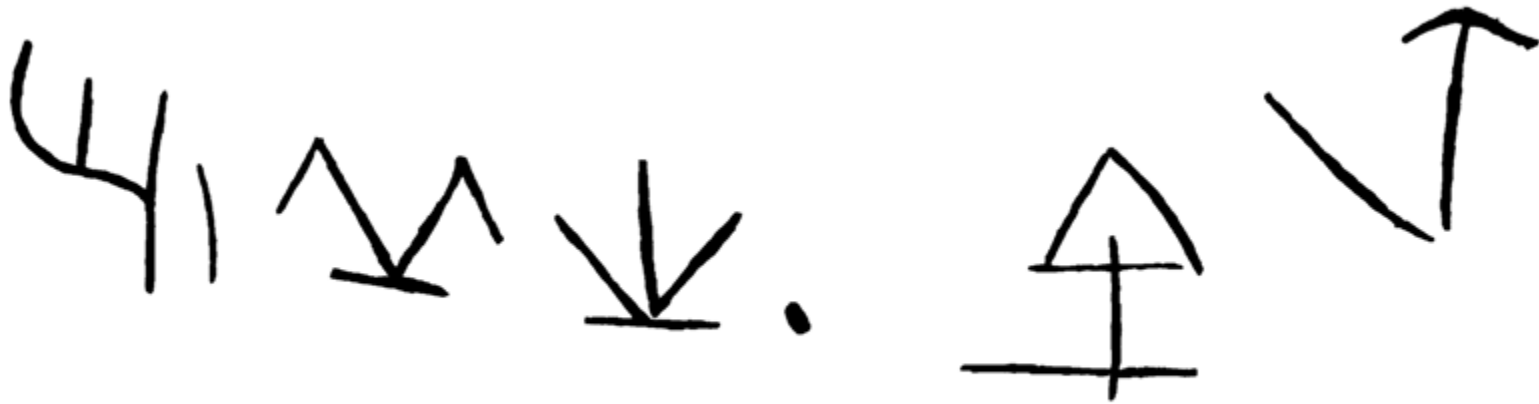


Fig. 1.]*la-si*//. *te-mi* | *se*

Two names, one in -lasi(s), then a short form in Themi(s) + beginning of an ethnic, e.g., Selaminios?

•Adana (Cilicia), seal, cf. Egetmeyer in Poncy et al 2001: 18-20 and in Borgia et al. 2002:177-81.

•Poncy, H., Casabonne, O., De Vos, J., et al. 2001.
'Sceaux du musée d'Adana', *Anatolia Antiqua* 9, 9–37.

•Borgia, E., Casabonne, O. and Egetmeyer, M. 2002.
'Notes ciliciennes', *Anatolia Antiqua* 10, 177–95.

•line 1: **ma-to-te...**

line 2: **ti-wa i-ni-le-to** 2 /Divinephilē /; gen. of

- ca. 30 inscriptions from the 7th c.
- Special syllabary used in Paphos.
- Finds with these syllabaries from Italy to Egypt and Syria --> merchants.
- Idalion inscription (bronze tablet, 5th c., ICS1 no. 217; 31 lines, 1262 signs).
- Altogether more than 1300 inscriptions, 65% in the common syllabary, 35% in the Paphian variety.



	-a	-e	-i	-o	-u
	✱	✱	✱	≧	Υ
w-	✱	I	✱	♯	
z-	✱				
j-	0			≈	
k-, g-, kh-	⊥	✱	Υ	∧	✱
l-	≈	8	≤	+	⊙
m-	✱	✱	≈	⊙	✱
n-	⊥	✱	≤	ℓ	✱
ks-)((≈	
p-, b-, ph-	✱	ℓ	≈	ℓ	≈
r-	⊙	♯	ℓ	ℓ)(
s-	V	ℓ	≤	≈)(
t-, d-, th-	⊥	⊥	↑	⊥	⊥

- signs for V, CV
- no notation of vowel length, accent, spiritus (psilotic dialect?)
- regular plene spellings, e.g. *po-to-li-ne* = πτόλιν 'city', different from Linear B
- differentiation between /r/ and /l/ -- different from Linear B

Linear B : Signs and spelling rules

- ca. 88 signs

- "It is difficult to be certain of the exact number of syllabic signs. Some which were previously thought to be independent signs are now known to be variants of others. It is now accepted that the sign formerly identified as *84 is a variant of *83, that *35 (now suppressed) is a variant of *34, and that *88, previously seen only on MY 96 = Fo 101.2, is in fact *82 written over another, erased sign — hence the

Signs and spelling rules

- V, CV (d j k m n p q r s t w z + V)
- doublets: a_2 , a_3 , pu_2 , ra_3 etc. alternate with simple a, pu, ra etc.
- more specialized: <a> can always replace < a_2 >, but not vice versa
- a_2 /ha/, cf.
 - pa-we- a_2 /p^harweha/ ‘cloths’ (φᾶρος),

•a₃ /ai/:

- NOM.PL ā-st. often -a₃ /ai/ ~ -αι,
- a₃-ka-sa-ma /aiksmāns/ : αἰχμή /ksm/ > /k^hm/

•a₄ /au/: rare, mostly <a-u>.

- a-u-de-pi /audes-p^{hi}/ ‘with waves’ (decoration) ~ a₄-de-pi

- pu_2 /p^hu/: *pu₂-te-re* /p^hūtēres/ ‘who plant’ (φυτῆρες)
- but also *da-**pu**₂-ri-to-jo* /Dap^hurinthoio/ beside *da-**pu**-...* - Alph.-Gr. λαβύρινθος.
- ra_3 /lai, rai/: *e-ra₃-wo* /elaiwo-/ and *e-ra-wo* ‘oil’.

- Complex signs *pte*, *nwa*, *dwo*, *dwe* etc. alternate with combinations of simple signs *pe-te*, *nu-wa*, *du-wo*, *du-we* etc.
- ra*₂, *ro*₂ alternate with *ri-ja* and *ri-jo*
- probably this also applies to <pte>: originally sign for /pje/ before sound change *py > pt?

• **dwo**: *wi-dwo-i-jo* /widwohijos/ ‘witness; overseer’,
also *-du-wo*, *-do-wo*.

– derivative of perf. ptc. *widwos-, Alph.-Gr. εἰδώς,
**widwos-io*-.

• "As seen by Risch 1957, *dwo* (𐌆𐌆) resembles two *wo*
signs written adjacent to one another (𐌆𐌆), the second
reversed (presumably to distinguish *dwo* from *wo-wo*,

nwa, pte

- **nwa:** *pe-ru-si-nwa* /perusinwā-/ ‘last year’s’ beside *pe-ru-si-nu-wa*.
- cf. Skt. *párut(i)* ‘last year’, Gr. πέρυσι, Arm. *herow*, MHG *vert*, ON *í fjǫrð*.
- **per-ut-(i)*, **wet-* (ἔτος, *vetus*)
- **pte:** Unique in representing a syllable with two initial stops.
- Original /pye/ > /pte/ (cf. **klepyō* > κλέπτω).
- *pte-re-wa* vs *pe-te-re-wa* /ptelewās/ ‘made of elm-wood’ (gen. sg. cf. πτελέη)
- *ra-pte* /r^haptēr/ ‘man who sews, saddler’ (agent noun in –tēr; cf. fem. *ra-pi-ti-ra*₂ /raptryai/ ‘sempstresses’).

•**two**: only found in o-two-we-o /ort^hwōwehos/ 'with upright ears' (cf. de Lamberterie 2009), beside o-tu-wo-we (NOM.SG).

•*82 could be /swa/: PIN pi-*82 /Piswa/ = Classical Πῖσα near Olympia, cf. the ethnic pi-sa-wa-ta /Piswātās/.

•*64 could be /swi/: a-*64-ja, adj. describing women, maybe /Aswiai/ 'women of Asia', cf. a-si-wi-ja /Aswiāi/, epithet of Ptonia (dat).

Vowels

- Extra signs like $a_{2/3}$ are optional, but there are some tendencies, e.g. a_2 is common on the mainland in s-stem neuter nom. and acc. plur. -eha, but is used in only one such word at Knossos, where it is rare generally:
- The only s-stem to show this spelling at Knossos is pa-we- a_2 : in other words the spelling is uniformly with a.
- apart from pa-we- a_2 , a_2 is used in Knossos only in a_2 -ke-te-re, and the gen. sg. e-ma- a_2 -o = Hermahāo 'of Hermes', and in the incomplete words] a_2 -ta and ru- a_2 [

•medial: for inherited /s/ > /h/:

- a₃-ki-a₂-ri-ja-de = Aigihaliān-de (place-name in acc. sg. with allative -de suffix);
- o-pi-a₂-ra = opihala ‘coastal regions’ (cf. ἔφαλος);
- pi-a₂-ra = phihalā ‘boiling pan’ (cf. φιαλή);
- si-a₂-ro = sihalons ‘hogs’ (cf. σιάλους).

•variation with the same scribe: we-a-re-ja = wehaleya ‘decorated with glass’ (cf. ὑάλλος) on PV 261 = Ta

•a₃ /ai/ regular spelling of the diphthong in word-initial position: a₃-ka-sa-ma /aiksmans/ 'spearpoints', medially found only in au-to-a₃-ta (MN) and de-we-ro-a₃-ko-ra-i-ja /Dewerō-aigolaia/ (name of the Hither Province of Pylos).

•<au> regularly word-initially, e.g., au-ke-wa /Augewās/ (MN), au-to-jo /autoyo/ 'of himself'. <au> not found medially.

Diphthongs

- second element of -i-diphthongs often not spelled out: wo-ko /woikos/, but cf. above on ko-to-na / ko-to-i-na /ktoina:/
- sec. el. of u-diphthongs always spelled: e-u-me-ne /Eumene:s/

Stops

- voicing and aspiration unmarked, except for the d-series:
- Thus ka can represent ka, kha or ga (or, of course, kā etc.):
 - ka-ko = khalkos ‘bronze’ (cf. χαλκός); ka-ra-we = grāwes ‘old women’ (cf. γρᾱ(F)ες).
- ta can represent both ta and tha:
 - te-ko-to = tektōn ‘carpenter’ (cf. τέκτων); te-o =

Stops

- <q->: qa, qe, qi, qo, no*qu!
- continues PIE labio-velars (*k^w etc.), e.g. qa-si-re-u /g^wasileus/ ~ βασιλεύς. qo-u-ko-ro /g^wou-kolos/ ~ βου-κόλος, πέλομαι, πόλος, *k^wel-; also used to spell *kw, e.g. i-qo 'horse' < *h₁eḱwo-.
- NB παντ- : no relation with Skt. śvā- 'strong', PIE *ḱwā-; *to-so-pa* /tosson pan(t)/; Toch. *pont-*
- Lack of <qu> implies lack of context *k^wu → probably

$pu_2 / p^h u /$

- pu_2 -ke-qi-ri = $P^h uge-g^w rins$ (man's name);
- pu_2 -ra₂-a-ke-re-u / $P^h ullāhagreus$ /, pu_2 -ra₂-a-ki-ri-jo / $Phullāhagrion$ / (place-names; cf. φυλία, ἀγρός);
- pe -] pu_2 -te-me-no / $p^h ep^h ut(ē)menon$ / 'planted [with trees]';
- pu_2 -te-re / $p^h utēres$ / 'planters'
- ze- pu_2 -ro = *Zephuros* (man's name; cf. Ζέφυρος).

Semivowels: j

- <ja, je, jo>, maybe *65 = <ju>? (Heubeck:) i-*65 = i-ju /ijus/ 'son', cf. υἱός, pl. υἱεῖς.
- PIE **suHyu-* (: Toch. B soy, A se, Arm. ow-str).
- Als i-jo /ijos/ ~ υἱός. /uju-, ujo-/ > /iju-, ijo-/ with assimilation (or dissimilation in u...u > i...u).
- Variant ijo- in PN Ἰο-κάστη : κέκασμαι 'to excel, be prominent': 'who is prominent on account of her son (Oedipus)'?

Semivowels: w

- <wa, we, wi, wo> (no *wu!)
- <w-> for etymological *w and for secondary glide, e.g., e-u-wa-ko-ro /Euwag(o)ros/
- similarly <j->: po-ti-ni-ja /Potnija/ 'lady', i-je-re-u /(h)ijereus/ 'priest'.

•Word-initially: wa-na-ka = wanaks ‘king’ (cf. ἄναξ; the words a-na-ka and ʾa-na-ka-te cannot be related); we-to = wetos ‘year’ (cf. ἔτος).

•In word-initial clusters: wi-ri-ni-jo = wrīniois ‘leather’ (instr. plur. adj.).

•Intervocally: ka-ra-wi-po-ro = klāwiphoros ‘key-bearer’; ka-ke-we = khalkēwes ‘bronzesmiths’.

•In consonant clusters: wi-do-wo-i-jo = Widwoios

- This consistent spelling of w has caused a number of etymologies to be revised:
- Homeric εἴνεκα used to be thought an Ionic treatment of original *henweka, but Mycenaean e-ne-ka = heneka shows that the Homeric lengthening is artificial.

liquids, nasals, sibilant

•ra, re, ri, ro, ru

•ma, me, mi, mo, mu

•na, ne, ni, no , nu

•sa, se, si, so, su

•<r>- for both /rV/ and /lV/, cf. do-e-ro /dohelos/,
δοῦλος.

•ti-ri-po 'tripod' Hom. τρίπος

• ra_2 , ro_2 /r/lyā, r/lyo/(?), e.g. a-ke- ra_2 -te /agerrantes/ or /angellantes/, cf. ἀρείρω, ἀγγέλλω.

• *ra-pi-ti-ri-ja* 'tailor (fem.) / *ra-pi-ti-ra_2*, i.e. /rya~rra/?

• *a-ke-ti-ra_2* vs *a-ke-ti-ri-ja* 'female decorators [of cloth]'

• Since there are no other disyllabic signs, probably better to interpret ra_2 as /rja/, probably a synizesis of -rija- as in su-za < *sukija-. Or geminate /rra/ < /rja/. Cf.

•ro₂ /ryo/ > /rro/, /lɣo/ > /llo/.

•po-pu-ro₂ = porphuryō, or better, porphurrō ‘purple’ (fem. nom. dual), adj. in -ios with reduction of [i] > [y] (cf. po-pu-re-ja = porphure(y)ai);

•a-ro₂-a = arroha ‘better’ < *ar-γos- (cf. ἀρείων, ἄριστος);

•pi-ti-ro₂-we-sa = ptillowessa ‘decorated with a feather pattern’ < *ptilyo- (cf. πτίλον ‘down’);

z-series

•za, ze, zo, no *zu

•/ts, dz/, /tj, dj/, /kj, gj/?

•different origins:

– *y : ze-u-ko /dzeugos/ 'pair'

– *dy, gy: a₃-za /aidza/ 'goat skin' < *aigya (: αἴξ), to-pe-za /tṛpedza/ or /torpedza/
< *(k^w)tṛ-pedya

•NB not used for writing /sd/, hence not identical to the use of alphabetic ζ for both /zd/ and /dz/:

– te-qa-de /T^hēg^wansde/ 'to Thebes' (cf. Ἀθήναζε), with the normal spelling rule that /s/ is not written before a stop.

•Also used for voiceless stops: ka-zo-e < *kakyoses 'worse', i.e. /katsohes/; also in cases where vocalic i has become a glide /_V: su-za 'fig trees' (cf. Dor./Aeol. συρία) /sūtsei/. Synizesis here similar to Lesbian

• Various explanations: Lejeune:

- metathesis of sk(h) > k(h)s, with z- used both for velar and dental affricate. Cf. cases like OE ascian and axian. But why never metathesis in wa-na-ka (no *wa-na-za), also ksenwia is always written ke-se-, never *ze-.

• Palmer (1980:33): ske- with palatalized -k'-, hence spelt with <z->.

word division

- simple space between words
- change in script size, indicated by / in the transcription for a transition from bigger to smaller characters and // for the significantly rarer transition from smaller to bigger ones: di-ka-ta-jo / di-we 317 = KN Fp(1) 1.2;
- different alignment of signs on the tablet, e.g. a superscript word, indicated in the transcription by single quotation marks around the word: de-u-ki-jo-jo 'me-no' 317 = KN Fp(1) 1.1
- line end, since words, as a rule, do not continue from one line to the next. Exceptionally, a long word may span two lines, probably in this case the scribe did not calculate the space needed for the word correctly: e-te-wo-ke-re-we-i-jo /etewoklewehios/ is written over two lines at 56 = PY An 654 8.9.
- very occasionally, we find a small 'X' as a checkmark following an entry (transcribed as

- More important is the word divider, a small vertical bar, transliterated as a comma. → The only orthographic punctuation mark found in Linear-B-tablets, already found in Linear-A and later in the Cypriot syllabary.
- May be used in combination with other indicators like size, e.g. a-mi-ni-so , / pa-si-te-o-i 317 = KN Fp(1).
- Use of word-divider is more regular in Pylos (according to Duhoux 1999 in 90% of all possible cases) than in Knossos (less than 50%) → major difference between writing tradition in Pylos and Knossos.

- single words may be written with a word-divider: *e-ne-wo, pe-za* 'nine-footed' (table) PY Ta 642 vs *e-ne-wo-pe-za* PY Ta 713+.

- so what is a "word" in Mycenaean spelling?

- As Meissner in Docs.³ points out, Mycenaean scribes do not write based on syllables, e.g. /dāmos apedōke/ could be written <da-mo-sa-pe-do-ke> with the advantage of also indicating the word-final consonant

• But this is probably the **prosodic** word: accentual unit, enclitics not separated by word divider etc.

- *da-mo-de-mi* /dāmos-de-min/ 'but the damos (says that) she'
- Likewise *-qe* 'and' is never written with a preceding word-divider: *e-ke*, *e-u-ke-to-qe* ... *e-ke-e* /holds and claims to hold' (Ep 704.5), nor is *-de* 'towards': *ku-do-ni-ja-de* 'to Chania' (KN L 588).

• But other words behave differently, e.g. preposition **pa-ro** found 237x, without word-divider only 15x → so probably not a clitic.

• But what about *a-pu, ke-ka-u-me-no* 'burnt' in PY Ta 641?

• Surely a compound with one accent only, so why word-divider?

• Individual feature of hand / scribe 2?

- Problem of verbs: usually spelled as a separate word, so probably orthotone --
- but also the forms that in Alph.-Gr. are enclitics, i.e., forms of εἰμί and φημί, which are usually regarded as remnants of the PIE situation where, if we follow the Vedic distribution, the verb was unaccented in main clauses.
- Cf. Docs³ 110:

• "Intriguing is 142 = PY Ep 704.5: *da-mo-de-mi*, *pa-si* = /da:mos-de-min pha:si/ 'but the community says that she [holds the lease of a communal plot]'.

• On the one hand, *pa-si* is exactly parallel in its position to μήτηρ γάρ τέ μέ φησι θεὰ Θέτις ἀργυρόπεζα (Il. ix, 410) where φησι occurs last in a string of enclitics and just before the caesura.

• On the other hand, *pa-si* is clearly marked off from

monosyllabic words

- Apparently, stricture against the spelling of monosyllabic full words with just one sign,
- cf. *qo-o* acc.pl PY Cn 3 /g^wons/ (rather than /g^wōns/ -- NB vowel length is not noted in Linear-B anywhere else).
- The only exception is *dwo* '2', but the sign itself is a kind of geminate (v. supra), and the instr. pl. is always spelt *du-wo-u-pi*.

•Another instance of this tendency:

•*to-so-pa* /tos(s)on pān/ 'so much in total'.

•NB /pan/ is never spelt as a single word, but always attached to the preceding word.

•The disyllabic forms of /pant-/ can be spelt separately: *to-so, pa-te* /tossoi pantes/ KN B 1055 (the only example, however); but PY Sh 740 *wi-so-wo-pa-to* /wiswōn pantōn/.

semantic units?

- *to-so-pe-ma* /tosson sperma/ 'so much seed' (PY Ep 301.6), beside *to-so*, *pe-mo* (PY Ep 301.8); *pa-si-te-o-i* /pa(n)si theoihi/ 'to all the gods/ to the all-gods'.
- *a-ta-na-po-ti-ni-ja* /Athānā potnia/ 'Lady Athena' or (less likely) /Athānās potnia/ 'the lady of Athens';
- *a-ne-mo*, / *i-je-re-ja* (KN Fp 1.10) beside *a-ne-mo-i-je-re-ja* (KN Fp 13.3) 'the priestess of the winds', both written by hand 138.

unexpected division within a word

- unexpected divisions of clear or likely compounds
 - *a-pi* , *to-ni-jo*; *a-pu* , *ke-ka-u-me-no*; *e-ne-wo* , *pe-za*; *ke-re-si-jo* , *we-ke*; *pu-ko-so* , *e-ke-e*
 - not just limited to the PY Ta series
 - but, as Duhoux (1999.230) notes, to the same scribe (Hand 2) and can thus be seen as an individual peculiarity.

•The only case of variation with the same word is *e-ne-wo-pe-za*:

•"The inspector, when faced with the probably unusual object of a nine-footed table, may well have counted the number of legs, written down the number, added the word divider and then the second part of the compound. In other words, we may take this as evidence for a spontaneous word formation, and it is interesting to note that later on in the series

Spelling rules

- Vowel length is not indicated, on qo-o cf. above.
- Diphthongs: discrepancies here:
 - second element of i-diphthongs is normally neglected, e.g., wo-no /woino-/ 'wine', ko-wa /korwai/ 'girls', while u-diphthongs are spelt in full: <o> can stand for /o, oi, o:, o:i/, but a-ro-u-ra /aroura/ 'arable land'.
- Before vowels, sometimes only the glide is written, cf.

• a_3 /ai/ is the norm word-initially (and used only word-initially), e.g.

- a_3 -*ka-sa-ma* /aiksma(:)ns/ (acc. plur.) ‘tips of spears’ 207 = PY Jn 829,
- a_3 -*ku-pi-ti-jo* /aiguptios/ KN Db 1105 (MN),
- a_3 -*ki-a_2-ri-ja* TH Of 25 but *a-ki-a_2-ri-ja-de* TH Of 35 (place-name, prob. = /aigihalia:/)

- ra_3 is, so far, only attested at Pylos; at Knossos, the sign serves as the ideogram for saffron.
- Its use as a syllabogram on the mainland may be an innovation here, though it cannot be ruled out that its absence at Knossos is due to chance.
- It occurs only medially and finally, alternating with ra :
 - e- ra_3 -wo PY Fr 1184+ and e- ra -wo PY Fr 1223 = /elaiwon/ ‘oil’,

- full spelling of i-diphthongs occasionally found in Knossos which has consistently ko-to-i-na (found only in the Uf series), against Pylos which always has ko-to-na 'piece of land'.
- Also wo-i-ko-de Kn As 1519 vs wo-ko-de TH Of 36 /woikonde/ 'to the house'.

•Spelling of u-element is so rarely omitted that if it happens it may be a spelling mistake, or represent a different form,

•cf. *qo-qo-ta-o* on the PY Ea series 'cow-feeder', i.e. **g^wou-g^wotā-*, beside *su-qo-ta-o* 'swine-herd' in the same series and *qo-u-qo-ta* KN L(4) 480.

•Either *qo-* is dissimilated here because of the following labiovelar or it represents the *u*-less stem

- Unclear why *i*-diphthongs and *u*-diphthongs are treated differently.

- Meissner Docs.³ 116:

- "It may be that the second element of *u*-diphthongs had a significantly stronger consonantal tier in Greek than the *i*-diphthongs, for which one can point to the monophthongisation of short *i*-diphthongs in post-Classical Greek, while the second element of *u*-

glides

- glides between i/u + vowel are very often written - remarkable.
- ku-wa-no /kuwano:(i)/ 'with blue glass' (PY Ta 642+); i-je-re-ja, ti-ri-jo-we 'with three handles' etc.
- Variation may occur on the same tablet, ti-ri-o-we-e beside ti-ri-jo-we (PY Ta 641).
- Notation of glides also found in Cypriot writing (a-no-si-ya /anosia:/) and Alph.-Gr., e.g. Pamphylian

status of /j/

•already changed to /h/ in word-initial position,
spellings with j- historical spellings? Problem of
variation:

(a) clause initial particle is spelled o- or jo-;

(b) noun ja-ke-te-re PY Mn 11 vs a₂-ke-te-re KN V(1)
118;

(c) personal name ja-sa-ro KN V(6) 832 vs a-sa-ro KN
As 40.

- word-internally /j/ seems to be rather stable:
 - a-ja-me-no /ajaimenos/ ‘inlaid’ KN Sd 4401+, to-ro-qe-jo-me-no /trok^wejomenos/ ? ‘touring’ PY Eq 213.
- Alternation is found with the adj. in e-jo-: e-re-pa-te-jo (KN Sd 4403+) vs e-re-pa-te-o KN Se 1007+ ‘made of ivory’. 21x vs 2x.
- qe-te-jo (PY, TH) but qe-te-o (KN, TH), qe-te-a₂ (PY,

•ra₂, ro₂ /rja, lja, rjo, ljo/, alternate with ra, ro and ri-ja, ri-jo.

•ta₂ = /tja/ vel sim.,

- cf. the alternation ra-wa-ra-ta₂ (PY An 298) vs ra-wa-ra-ti-jo (PY Cn 45), ra-wa-ra-ti-ja (PY An 830), ra-u-ra-ti-ja (PY On 300), ra-u-ra-ti-jo (PY Ad 664).

- /w/ stable except possibly before /j/, cf. *i-je-re-ja* if from **iherewja*.
- <u> is used to write /w/:
 - before _Cu: /wruntoi/ 'they guard' <u-ru-to> (-→ so probably there was no syllabogram <wu>);
 - in the sequence /wj/: di-u-jo /diwjon/ 'belonging to Zeus, shrine of Zeus', me-u-jo /mewjo:s/ 'smaller', alternatively di-wi-jo, me-wi-jo.

gemminates?

- gemminates: may have arisen in loanwords, at morpheme boundaries, by assimilation etc.
- Never written. So we do not know if outcome of first palatalization /totjo-/ was /tossso-/ or /toso-/ 'so much', <to-so>;
- morpheme boundary: *e-so-to* /es(s)ontoi/ 'they will be' < **h₁es-s-ontoy*.

stops

- Problematic with clusters, since Linear-B only provides CV syllables with a few exceptions.
- So either plene-spelling with a dead vowel or "underspelling" with the suppression of a C can be adopted.
- Consonants in final position: n, r, s are not written -- NB these are the only consonants permitted in word-final position in Greek: *pa-te* /pate:r/, *o-pe-ro*

•Cs#: C spelled, s suppressed:

– to-ra-ka /thoraks/ 'suit of armour',

– a₃-ti-jo-qo /Aithiok^ws/ MN;

•but also C may be left out:

– to-ra (KN Sk 8100) is probably an alternative spelling for to-ra-ka.

dead vowel

- Often the vowel of the syllable to which the stop belongs, as in to-ra-ka.
- But there are other spellings such as o-nu-ka (KN Od 485+) beside o-nu (KN Od 681) /onukhs/ 'nail' and ke-ni-qa /khernigws/ 'wash hand basin' (χέρνιψ 'water for washing hands').
- Hypothesis (Meissner): tendency to develop a standard dead-vowel, as in Cypriot, where it is <e>;

plene C-spelling

- Spelling of final consonant maybe in *wo-no-qo-so* /woinok^ws/, name of an ox (KN Ch 897), 'wine-colour-faced' = 'dark-faced', cf. Homeric βόε οἴνοπε 'a pair of dark-faced oxen' Il. 13.703+
- *e-ke-ra₂-wo-ne*, the name of a very important official in Pylos, is found on An 724.
- For syntactic reasons, this is very likely to be nom. written *e-ke-ra₂-wo* on PY Un 718

CC

- If the first consonant is a stop, the cluster is spelled in full: *qi-si-pe-e* /k^wsiphehe/ 'two swords, daggers' (PY Ta 716), *a-re-ku-tu-ru-wo* /alektruo:n/ MN (PY An 654)
- clusters sm, sw, mn, nw are spelled fully:
 - *do-so-mo* /dosmos/ 'contribution' 173 = PY Es 644+; *wi-so-wo-pa-to* /wiswo:n panto:n/ 'of all alike' 303 = PY Sh 740; *ma-na-si-we-ko* /mna:siwergos/, man's name at PY Jn 431; *pe-ru-si-nu-wo* /perusinwon/ 'last year's' PY Ma 216+

•otherwise, sC and RC: only second element is written:

•*pe-ma* /sperma/ 'seed' KN E 1569+;

•*ka-ke-u* /khalkeus/ 'smith' KN V(6) 958+;

•*ko-wa* /korwa:/ 'girl' KN Ag 87+.

•Few exceptions, and these are usually overspelling than underspelling: *ko-wa* /korwa:/, but *a-ra-ru-wo-a* /ararwoha/ 'put together' (KN Ra 1541), and *a-ra-ro-me-to-me-ra* /ararometme-ra/ with /r/ spelled

choice of dead vowel

- usually progressive spelling: dead vowel is the next following vowel: *a-re-ku-tu-ru-wo*.
- Exceptions / oscillations: ke-se-ni-wi-jo / ke-se-ne-wi-jo which could show different syllabifications: /kse.nwi.os/ and /ksen.wios/.
- If the last consonant of the cluster is /w/, the vowel can be /u/: ke-se-nu-wi-jo.

Summary


- Probably not a single feature like syllabification or orthographic convention is enough to explain the spellings in Linear-B.
- Analogy may play a role and also in some cases the desire to mark the root clearly, cf. for analogy *a-ra-ro-mo-te-me-na* /ararmotmena:/ 'fitted out' in contrast to *a-na-mo-to* /anarmostos/ 'not fitted', with /r/ written by analogy to *a-ra-ru-wo-a*?


Rise of "states" and palaces

- development linked to the appearance of sail-powered craft that collapsed the distance between Crete and the eastern Mediterranean,
- facilitated the movement of materials and people, signalled by the increase in imported exotic objects and materials around 2000 B.C.

- Linear-A signs used as models were probably written with a paintbrush on some flexible material, e.g. palm-leaf, bark or skin
- Linear-B signs are in general more slender than those seen in Linear-A-tablets.

- Cf. e.g. Linear-B *sa* (B31) with the simpler Linear A A31.
- The embellishment seen in Linear-B is not continued in the Cypriot sign for *sa* which is V.

sa ( = B 31)

 = A 31