

Greek-like Elements in Linear A

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IN THE WORK that has been done on Linear A, it appears that no determination of the values of its signs (i.e., decipherment), no identification of the language of its texts, and no detailed interpretation of its contents has met with general acceptance. There are few ways to confront the problem because there is scant material in A available for analysis: a count of all the A inscriptions does not exceed 300, while the tablets in Linear B at Knossos alone number in the thousands. Yet the corpus of B may prove helpful for an investigation of A: not only is the script of the latter similar to that of B, but also, either the B script is derived from that of A, or both must be derived from a third, non-extant script. Thus some results might be gained by a careful comparison of the *languages* of the two.

The necessary premise for such a comparison is the availability of a phonetic representation of the texts. For B, its decipherment and identification as Greek have made this possible. For A one may, as others have, assume that signs of identical or similar shape in the two scripts will represent similar or identical phonetic values. By a comparison of shapes of signs (often reinforced by comparisons of sign-groups they occur in) one may assume phonetic values for as many as 50 signs in A with varying degrees of certainty; of these the 32 that can definitely be controlled by both shape and context are to be considered basic and the most certain. With all these 50 values, however, one does not have a complete system (even the fuller repertory of deciphered signs in B constitutes a still incomplete syllabary); but there is enough to transcribe large portions of the extant texts and to provide sufficient material for a comparison with the language of the B texts.

In the interpretation of this evidence, the emphasis will be on elements that reflect certain characteristics not only of B, but also, in a wider sense, of Greek as we know it. The arguments here will be presented on the (a) phonetic-graphemic, (b) lexical, and (c) syntactic levels. And finally, the conclusions reached will inevitably lead to

GREEK-LIKE ELEMENTS IN LINEAR A

A	B	C	D	E	F	G
2	⊕	⊕	3	<i>pa</i>	0	a
6	∇ ∇	∇	69	<i>tu</i>	0	b
25	⊥ ⊥	⊥	55	<i>nu</i>	0	a
26	⊥ ⊥	⊥ ⊥	6	<i>na</i>	0	a
29	⊕ ⊕	⊕	77	<i>ka</i>	0	a
30	⊥ ⊥	⊥	1	<i>da</i>	0	a
31	∇	∇	31	<i>sa</i>	0	b
32	⊥ ⊥	⊥ ⊥	57	<i>ja</i>	+	a
51	⊥	⊥	7	<i>di</i>	0	a
52	⊥ ⊥	⊥ ⊥	8	<i>a</i>	+	a
53	⊥ ⊥	⊥	60	<i>ra</i>	0	b
54	∇	∇	27	<i>re</i>	-	a
55	∇ ∇	∇ ∇	26	<i>ru</i>	-	a
56	⊕ ⊕	⊕ ⊕	39	<i>pi</i>	++	c
58	∞ ∞	∞ ∞	76	<i>ra₂</i>	--	a
59	⊥ ⊥	⊥ ⊥	58	<i>su</i>	0	b
60	∇ ∇	∇	30	<i>ni</i>	0	a
62	∇	∇	16	<i>qa</i>	0	a
74	⊥ ⊥	⊥ ⊥	59	<i>ta</i>	0	b
75	⊥	⊥	54	<i>wa</i>	++	a
76	∇	∇ ∇	73	<i>mi</i>	0	a
77	∇ ∇	∇	9	<i>se</i>	0	b
86	∇ ∇ ∇	∇	66	<i>ta₂</i>	0	b
87	⊥ ⊥	⊥ ∇	61	<i>o</i>	++	c
91	⊕ ⊕	⊕ ⊕	78	<i>qe</i>	+	a
92	∇	∇	4	<i>te</i>	+	a
93	∇	∇ ∇	51	<i>du</i>	0	b
95	∇ ∇	∇	80	<i>ma</i>	0	c
97	∇	∇	10	<i>u</i>	+	a
98	∇ ∇	∇ ∇	81	<i>ku</i>	-	a
102	∇ ∇	∇ ∇	45	<i>de</i>	++	b
103	∇	∇	67	<i>ki</i>	0	a

FIG. 1. COMPARISON OF A AND B SIGNS ON THE BASIS OF SHAPE AND USE

A	B	C	D	E	F	G
1	𐀀	𐀀	56	—	—	a
22	+	+	2	ro	0	a
23	𐀁	𐀁	17	za	0	a
24	𐀂	𐀂	44	ke	+	b
27	𐀃	𐀃	23	mu	+	a
34	𐀄	𐀄𐀄	29	pu ₂	0	a
39	𐀅	𐀅	5	to	++	a
45	𐀆	𐀆	70	ko	++	b
64	𐀇	𐀇	50	pu	+	a
84	𐀈	𐀈	13	me	+	b

FIG. 2. COMPARISON OF A AND B SIGNS ON THE BASIS OF SHAPE ALONE

LEGEND

- A. Sign number in Linear A.
 B. Selected A varieties in shape (*cf.* Brice, "Table I").
 C. Selected B varieties in shape (based on Bennett's *Index*, p. xxv).
 D. Sign number in Linear B.
 E. Conventional B phonetic values.
 F. Comparison of relative A and B frequencies: +(+)= (much) more common in B than in A; -(−)= (much) more common in A than in B; 0= relative frequency about the same in A and B.
 G. Rating of degree of similarity in shape: a= certain, b= correspondences of A and B hands for particular sign generally good but occasionally misleading, c= correspondences generally good but only approximate, d= correspondences rarely good and then only approximate, f= no direct correspondence in shape.

speculation about the relationships of the A and B scripts and about consequent historical implications.¹

I. Framework

In order to approximate the phonetic value of as many of the A signs as possible, the investigation should begin with those which seemingly correspond in shape (see Figs. 1 and 2) with particular signs in B. Reliability may be increased by choosing those signs which not

¹The following abbreviations will be used throughout: KN=Knossos, PY=Pylos, HT=Haghia Triadha (more properly, Ayia Triadha), IE=Indo-European, N=personal name, PN=place name.

only are identical or similar in shape, but also occur in sign-groups corresponding to sign-groups of B. The main task in Part I will be to isolate and define as many such A/B sign-group correspondences as possible; these are discussed in nos. 1–24 below.² Then on the basis of both (a) similar or identical A/B distribution in sign-groups and (b) shape (see Fig. 1), the following tentative assignments of B phonetic values³ to A signs will be made: 2= pa 6= tu 25= nu 26= na 29= ka

A	B	C	D	E	F	G
57	⊥	ψ	24	ne	+	d
78	Λ Λ	Λ	37	ti	++	c

FIG. 3. MISCELLANEOUS A AND B SHAPE COMPARISONS

LEGEND

- A. Sign number in Linear A.
 B. Selected A varieties in shape (cf. Brice, "Table I").
 C. Selected B varieties in shape (based on Bennett's *Index*, p. xxv).
 D. Sign number in Linear B.
 E. Conventional B phonetic values.
 F. Comparison of relative A and B frequencies: +(+)=(much) more common in B than in A; -(−)=(much) more common in A than in B; 0=relative frequency about the same in A and B.
 G. Rating of degree of similarity in shape: a=certain, b=correspondences of A and B hands for particular sign generally good but occasionally misleading, c=correspondences generally good but only approximate, d=correspondences rarely good and then only approximate, f=no direct correspondence in shape.

² References to material in A follow the classification system found in W. C. Brice, *Inscriptions in the Minoan Linear Script of Class A* (Oxford 1961). The choice of Brice's book as the A canon is motivated by the fact that it contains, with a few minor exceptions, the whole corpus of A. Cf. review by E. Vermeule in *AJA* 67 (1963) 305–306. The B canon: Emmett L. Bennett, Jr., *A Minoan Linear B Index* (Yale 1953). The standard work on B: M. G. F. Ventris and John Chadwick, *Documents in Mycenaean Greek* (Cambridge 1956)—to be cited as VC. One of the best published general works on A: Emilio Peruzzi, *Le Iscrizioni Minoiche* (Florence 1960); also G. P. Goold and M. Pope, *The Cretan Linear A Script* (U. of Cape Town 1955). Standard work on N and PN in B: O. Landau, *Mykenisch-Griechische Personennamen* (Göteborg 1958). General background on A and B: Sterling Dow, "Minoan Writing," *AJA* 58 (1954) 77–129. Useful reference works: W. Pape, *Wörterbuch der griechischen Eigennamen* (Braunschweig 1875); J. B. Hofmann, *Etymologisches Wörterbuch des Griechischen* (Munich 1950); and H. Frisk, *Griechisches etymologisches Wörterbuch* (Heidelberg 1954–).

³ The B syllabary, it must be noted, is far from being graphemically adequate for the phonemic system of Greek; e.g., the B sign *11, phonetically transcribed as [po], covers the following Greek phonemes: [p]=/p/, /b/, /p^h/; [o]=/o/, /ou/, /ō/, and often /oi/, /ōi/; in

30= da 31= sa 32= ja 51= di 52= a 53= ra 54= re 55= ru 56= pi 58= ra₂
 59= su 60= ni 62= qa 74= ta 75= wa 76= mi 77= se 86= ta₂ 87= o 91= qe
 92= te 93= du 95= ma 97= u 98= ku 102= de 103= ki.⁴

The method to be used for the A/B correspondences nos. 1–24 can be seen in the preliminary comparisons nos. I–IV, which are applied to the problem of two other very important signs: L72 and L100. It has been suggested that the signs from the A corpus classified under the heading “L100” might actually be divided into two separate groups of graphemes (i.e., that L100 is under-differentiated); Peruzzi provides a very useful illustration⁵ of the shape-varieties of L100, and from this it can be seen that there might be at least two different signs with two different shapes involved: (a) with three long prongs on top (+ optional “thumb” on right) and with short stem below, and











A	B	C	D	E	F	G
100a			52	no	+	d
100b			28	i	+	c
72a			75	we	+	c
72b			53	ri	+	c
61			36	jo	+	f

FIG. 4. FURTHER A AND B COMPARISONS

(b) with the same prong/stem proportion but with a reclining U or V (facing right) between them or with short prongs and long stem (see Fig. 4). I believe this proposal for dividing the signs classified under L100 can be corroborated with the tablet HT 43; a three-syllable unit here clearly exhibits (and thus contrasts) the two shapes within the same word: in what is to be read as L114–L100b–L100a, the b-form appears with short prongs, long stem, and the U; while the a-form shows long prongs, short stem, and no U. *Ergo* (a) the proposed distinction in shape is not a matter of variation in handwriting and

addition, if the intended syllable is closed with, e.g., /m/, /n/, or /s/, the latter is generally not written at all. For a thorough treatment of the problem, cf. “The Spelling Rules” in VC pp. 42–48. For similar graphemic overlapping of phonemes, cf. Eng. *th* as in *think* and *this*.

⁴ The numberings of A and B syllabic signs are traditionally prefixed with L and * respectively, a convention which will be followed in this work in case of ambiguity. Undetermined values will be transcribed with numberings in this way throughout.

⁵ *Op.cit.*, p. 41.

(b) there seem to be two separate signs L100a and L100b, the shapes of which approximate the *no* and *i* of B respectively (see Fig. 4). Moreover, while no distributional comparison with B lexical units has been found as of now for L100a, the reading of L100b = *i* in the A sign-groups yields the following apparent A/B counterparts:⁶

i. A: *pa-i-to* HT 97a.3, 120.6: both tablets appear to be inventory lists. The items accompanying the recorded amounts in the lists may be either contributors or recipients, and the choice for their identification is narrowed to N or PN.

B: *pa-i-to* KN E 36, Ga416, etc.: PN = definitely Phaistos!

ii. A: *i-ja-te* II 12 from Phaistos: graffito on fragment of a pithos; whole text is *ne-ma i-ja-te*, presumably designating either owner, maker, or provenience of the article. The B parallel suggests N, with title or rank appended.

B: *i-ja-te* PY Eq02.9: *iātēr* = Homeric *ἰητήρ*! A discussion of the significance of the latter is reserved for Part II.

The same possibility of underdifferentiation holds for L72: its forms can be subdivided into: (a) a reverse S, and (b) a reverse S with a loop or notch in the middle; and these shapes approximate the *we* and *ri* of B respectively (see Fig. 4). Here too, however, only the assumed L72b = *ri* yields distributional correspondences—good ones—with B:

iii. A: *su-ki-ri-ta* C.1491 from Phaistos:⁷ on a sealing, with the blurred impression of a seal-stone on one side, and this sign-group on the other. The expected context, on the analogy of B sealings, would be N, PN, or a commodity. The B parallel here suggests the second.

B: *su-ki-ri-ta* KN Dn1092.2, Db1324, etc.: PN *Sugrita* = probably *Σύβριτα*.

iv. A: *su-ki-ri-te-i-ja* II 7 from HT: graffito on a pithos, presumably designating the article's provenience; the B parallel seems to confirm this.

B: *su-ki-ri-ta-jo* KN C 911.3: ethnic = *Sugritaios*.

So much for the apparently *four* signs L72a,b and L100a,b. The method with which *ri* and *i* have been tentatively identified in nos. i–iv will now be applied on a larger scale to the 32 signs already likened to apparent B counterparts on the basis of shape (Fig. 1). What

⁶ The A form throughout Part I will be given first, the B second; all A signs with B shape-counterparts in Figs. 1, 2, 3, and 4 have been tentatively assigned the B phonetic values.

⁷ Cf. G. Pugliese Carratelli, "Nuove Epigrafi minoiche di Festo," *ASAA* 19–20 (1957–8) 375.

follows, then, is a discussion of as many sign-groups in A as might possibly correspond to sign-groups in B:

1. A: *ku-mi-na* Cr IV 5a from HT: on a roundel (for descriptive distinction made between “sealing” and “roundel,” see Brice, p. 11), with this sign-group on one side and the countermark *qe*-L67 on the other. The expected context, on the analogy of the B sealings, would be either N, PN, or a commodity. The B parallel here specifically suggests the third.

B: *ku-mi-na* Ge605 from Mycenae: sing. *ku-mi-no* (= classical *κύμνον*) in Ge602. Semitic borrowing; meaning: “cumin”; see NO. 1 in Part IIb.

2. A: *pi-pi* HT 85a.1 and 97a.1: in both cases *pi-pi* is part of the heading: *a-du pi-pi* L99**ka* and *ka-ru pi-pi* L99**ka*. It is significant that the ligatured sign-combination L99**ka* occurs often in HT headings, and in such a terminal position; furthermore, it resembles a postpositive in HT 85, since it is not immediately followed by numerals. It should also be noted that *pi-pi* in both cases is the second item and is actually optional: e.g., in HT 88, the heading reads *a-du* L99**ka*. On the basis of B headings (which often begin with N) and the interchangeable first items in HT 85 and 97, one might expect *a-du* and *ka-ru* to be Ns⁸ and *pi-pi* to be a title attached to them.

B: *pi-pi* Th VI from Thebes: on a stirrup-jar; definitely in N context—perhaps also a title or rank as apparently in A (for specific suggestion, see NO. 13 below).

3. A: *ka-pa* HT 102.1, e.g., where used as heading for apparently a commodity-inventory—as proved by the three GRA (wheat) ideograms on this tablet; also used as heading for HT 6a, where FIC (figs) ideogram occurs twice. For GRA and FIC see Fig. 5. For expanded discussion of *ka-pa* see NO. 6 of Part IIc.

B: *ka-pa* PY Un02.5, etc.: word applied to OLIV (olives) ideogram. VC find no satisfactory Greek parallel (p. 395). See NO. 6 of Part IIc.

4. A: *ma-di* occurs in inventories which contain recognizable PNs: in HT 85b.5 (also has, e.g., *ki-re-ta*₂, q.v. in Part IIb NOS. 3 and 5 of Landau’s list), in HT 97a.4 (also has, e.g., *pa-i-to*, q.v. in NO. 1 above). Once PNs of two tablets are ascertained, they are mutually helpful in resolving each other’s abbreviations: e.g., *pa*(?-*i-to*?) in HT 85b from

⁸ For a list of several comparisons of A/B Ns, cf. Landau, pp. 269–271; caution: *51 = *du* (not “*da*”) in B has been approved at the Wingspread Convention (ed. 1962c).

pa-i-to of HT 97a, and *ki*(*?-re-ta₂ ?*) in HT 97a from *ki-re-ta₂* of HT 85b. The sign-group *ma-di*, however, also occurs in a list which apparently contains a N (*qa-qa-ru*: see NO. 9), in HT 118.1. Since all three tablets seem to be a list of contributions and of amounts owed—for the latter, cf. the DEFICIT signs *ki(-ro)* in HT 118—it would not be incongruous to suppose that the contributors (or possibly recipients) could be both Ns and PNs. Thus the choice, for the moment, is narrowed down to the latter two. The B parallel suggests N.

B: *ma-di* As603, Dx1168 from KN: N= ? (by abbreviation)
Μαῖδος: from **Madios* to *Maidos*. Cf. **φάνιω* to *φαίνω*.











A:					
	L82	L42	L60	L49	L67
B:					
	131	120	*30	122	121
	VIN (wine)	GRA (wheat)	FIC (figs)	OLIV (olives)	HORD (barley)

FIG. 5. COMPARISON OF SELECTED A AND B IDEOGRAMS

5. A: *o-du* Cr V 2b, e.g., from HT: on a sealing, with this sign-group on one side and the countermark Lc'5*Lc86 on the other. The expected context, on the analogy of B sealings, would be either N, PN, or a commodity. The context of the B parallel specifically suggests the first.

B: *o-du* KN V 479.r3: N.

6. A: *pa-de* HT 9a.2, b.2, 122a.5: the latter tablet and HT 88 both list the item *ku-L1-nu* twice. Such a double occurrence in one list makes the identification of *ku-L1-nu*= N (as against PN) probable. From here on, any word that occurs in HT 122a or 88 can be assumed to be N. In HT 9, the sign-group *pa-de* also occurs twice, but merely on two *sides*, and not in one list. Anyway, the occurrence of *pa-de* in HT 122a, also supported by its B parallel, suggests N.

B: *pa-de* KN Fpl.4, e.g.: found in a list of OLE (oil) offerings; itemized along with Ns Diktaian Zeus, *e-ri-nu*= ? Erinyes, and PNs Daidaleion, Amnisos (see VC p. 306). Alternate *pa-de-i* in KN F 953+

955; the latter form is in an apparent dative context, and is itemized with N *pa-sa-ja*; cf. NO. 15.

The list above can be supplemented with the following examples (NOS. 7–15) of correspondences with only minimal differences (i.e., where the consonantal frame is identical, but the vowels—one or at most two—are different, although no inflectional contrast is assumed):

7. A: *di-de-ru* HT 86a, 95a,b: apparently a list of contributions again; N or PN expected; B parallel suggests N.

B: *di-de-ro* KN X 1504: N.

8. A: *a-tu* HT 87.5: contextual definition of this tablet as N list depends on NOS. 19 and 20 below: all three of these interdependent sign-groups not only are similarly itemized and on the same tablet, but also have definite N parallels in B.

B: *a-to* KN As40.2: N= ? **Avθos*. Cf. VC p. 416.

9. A: *qa-qa-ru* HT 93a.4–5, 111a.2, 118.2–3, 122b.3–4: in 93a.4–5, *qa-qa-ru* is itemized with *da-we-da* (for L72a= *we* see Fig. 4); *da-we-da* in turn is itemized with *ku-L1-nu* in HT 122a. In NO. 6 above, this tablet was defined as a N list. Thus *qa-qa-ru* is probably N; NO. 4 above partially depends on NO. 9, and this in turn depends on NO. 6. As for the B parallel of *qa-qa-ru*, its precise identification may actually be aided by the latter A form.

B: *qa-qa-ro* KN As604.3: alternative spelling for *pa-pa-ro*? Ventris: N= *Barbaros*; Chadwick: PN= ? *Parparos* (see VC p. 422). Here despite the attested PN *Πάρπαρος*, the context fits N, which is also suitable for the A parallel. A third alternative is that both the A and B forms refer to an unspecified ethnic group *βάρβαροι* (the spelling convention of B, at least, is that the second as well as the first decl. nom. pl. is written *-o* and *-a* respectively just like the sing.).

10. A: *ma-ru* HT 117a.3: itemized in the same list is *ku-L1-nu* (see again NO. 6). This association would imply that *ma-ru* is N.

B: *ma-ro* PY Cn05.2, Cn14.10,12: the repetition itself of *ma-ro* in the latter occurrence supports the context of N (instead of PN)= ? *Μάρων*.

11. A: *a-ku-tu* IV 9a.7 from Tyliisos: a sub-heading followed by lists of commodities; context would call for N or PN. The B parallel suggests the first.

B: *a-ko-to* KN Sc239: N= ? **Ακτωρ*.

12. A: *i-ta-nu* HT 28b.6: last in a series of sub-headings, each followed by lists of commodities, including *GRA*, *FIC*, *VIN*; context would again call for N or PN. The B parallel suggests the second.

B: *u-ta-no* KN Fp13.3, Dx448, etc.: PN, probably the Cretan city Itanos! Cf. VC p. 141. Once the now-apparent *o/u* contrast in B/A (for full discussion, see third paragraph, Part IIa) has been taken into consideration,⁹ the A form is actually closer to the expected spelling of Itanos than the B, unless a complete *i/u* ambivalence in B (unlikely) is to be assumed.

13. A: *ka-ru* HT 97a.1: probably N; cf. arguments for NO. 2.

B: *ka-ro* KN Fh340: N= ? *Κάλλων* or *Χαίρων* or *Χάρων* (cf. VC p. 419). If the third is to be chosen, it is interesting to compare the A qualifier of *ka-ru* (*pi-pi*; see again NO. 2), with *Φιβί*, name of the Ibis=Hermes Thoth, in *Catalogus Codicum Astrologorum* (i A.D.) 1.167.

14. A: *pa-ra-tu* HT 128a.1: occurs in heading; N?

B: *pa-ra-to* KN Dx1475: N= *Φάλανθος* "bald"; or *Πλάτων*? See VC p. 422.

15. A: *pa-se-ja* Cr IV 15, Cr IV 16 from HT, with no script on reverse of either. In HT 93a.8, *pa-se-ja* is itemized with *qa-qa-ru* and *da-we-da* (see nos. 6 and 9 above), and the identification is thus narrowed down to N.

B: *pa-sa-ja* KN F 953+ 955: itemized with *pa-de* (see nos. 6 and 9 above); thus N, possibly a deity; see VC p. 309.

The list now continues with examples of other A/B correspondences, here with the apparent contrasts of perhaps (a) derivatives and (b) inflections (e.g., case, number, gender?):

16. A: *ra-ri-de*[HT 113.1: the heading; N or PN.

B: *ra-ri-di-jo* KN C 911.8, 10: double occurrence suggests N.

17. A: *ka-da-na* HT 11a.2 (Brice reads *ro* for *da*: seems incorrect from photograph): itemized with list of recipients or contributors; N?

B: *ka-da-no* KN Dk1065, X 5567: N= ? *Χαλδᾶνος*.

18. A: *a-ra-na-re* HT 1a.3: itemized with *ku-L1-nu* (see nos. 6 and 9 above); thus N.

B: *a-ra-na-ro* KN As1516: N.

19. A: *ku-ru-ku* HT 87.4: itemized with *a-tu* (see NO. 8) and *di-ki-se*

⁹ The *o/u* correspondence in B/A has been noticed by Peruzzi throughout his cited work.

(see NO. 20). All are found in a contributor/recipient list, so that N or PN is expected; their B parallels suggest N for all three.

B: *ku-ru-ka* KN Vc5510: N= ? Γλύκη.

20. A: *di-ki-se* HT 87.3, 117b.2 (see NOS. 8 and 19): probably N; abbreviated? All the items on both sides of the latter tablet are followed by the numeral 1; thus it is likely that they all belong to the same category: either N or PN. This is further substantiated and narrowed down to N by the occurrence of *ku-L1-nu* (q.v. in NO. 6) on side A; NOS. 8A and 19A depend on this NO. 20A for identification.

B: *de-ke-se-u* KN Df1119, Dw1426: N, derived from δέχομαι or δέρκομαι: *Dexeus* or *Derxeus*.

21. A: *da-mi-nu* HT 117a.8: listed under a sub-heading *sa-ta*; *ku-L1-nu* occurs in the main list above it and implies that the latter involves N (see NO. 6); perhaps the function of the sub-heading under which *da-mi-nu* occurs is to separate a N list from a PN list. The B parallel of *da-mi-nu* suggests PN.

B: *da-mi-ni-jo* PY An19, KN V 337, etc.: ethnic, cf. Ἐπί-δαμνος.

22. A: *qa-ra₂-wa* HT 86a.3: itemized with *di-de-ru* (see NO. 7), thus apparently N.

B: *qa-ra₂-wo* KN C 50.1, r.1: describes ideogram *ovis*^f (ewe). The A parallel suggests that it might be simply a N, designating the owner (the second decl. gen. sing. and pl. in B is written -o like the nom.).

23. A: *ma-ri-ta₂* HT 90.3: part of the sub-heading *ne-ru ma-ri-ta₂*; the first is probably a N and the second a qualifier, like perhaps an ethnic: the B parallel here is very attractive.

B: *ma-ri-ta* PY Jn832: ethnic *Malitās* = Μελίτης! “Melian.”

24. A: *qe-tu* HT 41.1 (caution: the lines immediately above are broken off, so that it is not certain whether *qe-tu* is not a continuation of some sign-group above it): itemized with HORD (see Fig. 5); therefore it might well be a commodity or article.

B: *qe-to* PY Ta641, Mycenae Ue611: nom. pl. masc.; name of a vessel with handles. Perhaps = *πίθοι*, though the latter’s traditional IE etymology **bhidh-* is then subject to doubt (cf. VC p. 407).

So much for apparent correspondences of sign-groups in A and B. It is hoped that the reliability of assigning B phonetic values to the 32 A signs (which are identical or similar in shape to the respective B signs) has been increased by the apparent A/B sign-group similarities and

identities of nos. 1–24 above. The 32 mentioned signs are thus controlled on the two levels of distribution and shape. One is encouraged, then, to assign B phonetic values to still other apparent A counterparts on the basis of shape alone. Thus the following 10 additional B assignments to A signs can be made on the convincing testimony of the shapes of the latter group: 1= “*pa*₃” (cf. VC p. 23; no definite value assigned post-Wingspread, ed. 1962c) 22= *ro* 23= *za* (= *gia*, *dia*, *kia*, *?tia?* in B—cf. VC p. 44) 24= *ke* (for the apparent A/B contrast in ornamentation, q.v. in Fig. 2, cf. A/B: : L31/★31= *sa* in Fig. 1) 27= *mu* 34= *pu*₂ 39= *to* 45= *ko* 64= *pu* 84= *me*; see Fig. 2. Less certain are: 57= *ne* 78= *ti*; see Fig. 3. Also discussed in nos. I–IV were 72b= *ri* 100b= *i*, and, with less certainty, 72a= *we* 100a= *no*; see Fig. 4. There are more A/B shape-comparisons that can be made (cf., e.g., footnote 13), but it is more important at this point to work with entities which are as certain as possible in Part II. The only additional value that will be added to the assignments made above is one based on distribution alone: the high ultimate and penultimate frequency of ★36= *jo* and of L61 suggests L61= *jo*; see Fig. 4. The rest of the A signs will simply be cited by their numberings.¹⁰ In sum, the 50 phonetic values assigned to the A signs—a partial but non-conflicting set—are still tentative, but their use in the sign-groups listed in nos. 1–24 has only increased one’s confidence that this set of values is worth trying, and indeed they will be tested further in the interpretative part which follows.

II. Interpretation

a. The various correspondences already discussed introduce a crucial point: the main reason for general reluctance to compare the languages of A and B intensively has been the differences in the scripts. However, there are many similarities also, which in fact had actually misled A. J. Evans and J. L. Myres to the settled opinion that A equals B for all practical purposes. This notion was challenged and corrected by E. L. Bennett, A. E. Kober, M. G. F. Ventris, and J. Chadwick (cf. VC pp. 31–6). The established differences, then, between A and B have led to the theory that they are similar scripts of two different

¹⁰ It is encouraging to note that a comparison of these 50 value assignments with Peruzzi’s more extensive list yields only minimal conflicts: L61= ?, L78= *ti* vs. *si*? Cf. also the recent “provisional grid” of C. H. Gordon in “Toward a Grammar of Minoan,” *Orientalia* 32 (1963) 295; out of his 45 suggested equivalents, only the value for L61 differs from the one proposed here.

languages. As for the conclusions to be drawn from the correspondences pointed out in Part I (i.e., that it is worth considering both differences and similarities), they will vary to some extent with the relative datings of A and B. The date of the B tablets has been traditionally assigned to the end of LM II—1405 B.C., while the latest of the A tablets—the ones found at Ayia Triadha—are usually placed within the limits of 1450–1405 (cf. VC p. 32). A serious difficulty is that both these chronologies are still considered tentative. Moreover, it has also been proposed that the B tablets at Knossos might actually be much later—and nearly contemporaneous with the B material of the Mainland, i.e., ca. 1200 B.C.¹¹ If this is the case, the similarities between the tablets of Knossos and the Mainland become much less surprising; furthermore, such a chronology would produce a gap of ca. 200–250 years between extant texts in A and B. What would become more striking, then, is not the existence of differences between A and B (cf. the heavy emphasis on these in VC pp. 39–42), but the great number of common elements in the two scripts. Such a proposed lacuna of 250-odd years instead of 50, however, is not indispensable for the arguments presented in this work. Conclusions can be drawn even if A and B are nearly contemporary.

The correspondences mentioned in Part I can be supplemented by ideograms: many in B, such as the ones for wine, wheat, figs, and olives, look exactly like their counterparts in A,¹² and coincidence is utterly excluded. Here especially, the evidence for a common scribal tradition linking A and B is incontrovertible. The possibility also emerges that this continuous scribal tradition might have been accompanied by the continuous use of the same language, whether the records in A and B are contemporary or are 250-odd years apart.

The material in A itself would seem to indicate a chronological development of the same script: a particular case in point is the *o/u* contrast in B/A. In the comparative material of Part I, syllables in *o/B* have often been compared to those in *u/A*, and there are enough such examples (cf. especially nos. 8, 11, 13, 14) to suppose that there is a systematic relationship in the scripts and, *a fortiori*, in the languages. The only definite phonetic values with *o* in A are *o*, *ro*, *to*, *ko*, and

¹¹ For background, see L. R. Palmer, *Minoans and Mycenaeans* (London 1961). But cf. J. Raison, "Une controverse sur la chronologie des tablettes Cnossiennes," *Minos* 7:2 (1963) 151–170.

¹² B: 131, 120, *30 (= *ni* also), 122; A: L82, L42, L60 (see also Fig. 1), L49. See Fig. 5 for both A and B.

probably *no* (see above),¹³ and these too, with the exception of *ro*, are rare. The hypothesis may be made that A as we have it is the mid-point in a progression: (1) *proto-A, with a *u*-series but no *o*- (much like the phenomenon in the native Umbrian alphabet), (2) A, with *u*-series and rare *o*-, (3) B, with full repertory of *u*, more rarely used (i.e., almost exclusively for *upsilon*), and with full repertory and increased use of *o*. Thus the few extant examples of A would illustrate a stage where the latter vowel was just being introduced as a sort of spelling reform to suit the actual language better. But this introduction might have come about gradually, with single lexical units like *pa-i-to* paving the way, as it were. By the time of Linear B, the *o*-series is truly developed, but even here—and this is rarely pointed out—there is evidence for possible *o/u* alternation: though identical entity and case cannot be assured, the Ns *a-qi-ro* and *wi-du-ro* in B nevertheless seem to undergo a “relapse” to endings spelled with *u* in the forms *a-qi-ru* and *wi-du-ru* (the latter is from a join: KN X 5975+ 6009). The evolution of *o* from *u* is, in a word, not a phonetic, but a graphemic phenomenon: it is not a matter of language, but of writing. In this respect, then, B as a system seems to be an improvement over A, and such sophistications as the eventual scribal development of an *o*-series would be put into perspective by either (a) the element of considerable time lapse, perhaps to the extent of over 200 years—according to Palmer’s proposed chronology, or (b) a spontaneous spelling reform enacted by the scribal school at Knossos alone, within a much shorter period of 50 years or less—according to the chronology accepted by VC. There may well be other “crude” approximations of spoken language (besides *u*= both *o* and *u* in A) which seem to be subsequently refined in B. For one thing, the *e* and *i* series in A might not be fully developed yet, and examples of confusions (cf. already NO. 20 in Part I) as well as refinements will be encountered later in this work. In sum, although there are differences between A and B, their phonetic and graphemic systems may nevertheless be related in origin and structure, so that they might be called the writing systems either of one language or at least chronologically different stages of one language. This working hypothesis will be tested in sections **b** and **c**.

¹³ In addition to a few other possibilities like L7=*so*, L15=*do* (but cf. L101), L21=*po*. But these signs are all so rare that they are very hard even to identify.

But first, a summation of certain aspects of A spelling should be inserted at this point:

Graphemic repertory of A vowels: $\begin{array}{ccc} a & i & u \\ | & /| & /| \end{array}$

Phonetic repertory of A vowels: $\begin{array}{ccccc} a & e & i & o & u \end{array}$

With the hypothesis that A and B might be writing systems for the same language, one should also assume, for all practical purposes, the same spelling rules for both. Unless otherwise indicated, the spelling rules for B as given in VC pp. 42–48 will be followed in all attempts at assigning Greek-like forms to A sign-groups. Two rules regarding B consonant clusters should be emphasized:

Spelling Rule 1: Greek $-C_1V_xC_2C_3V_z-$ is approximated in B as $-C_1V_x-C_2V_z-C_3V_z-$

Spelling Rule 2: Greek $-C_1V_xk t V_z-$ is sometimes approximated in B as $-C_1V_x-k V_x-t V_z-$

e.g., for Rule 2: Greek *wanakteros* “royal” = B *wa-na-ka-te-ro*, instead of **wa-na-ke-te-ro*, as by Rule 1; a possible extension of Rule 2 is applied to NO. 9 in Part IIb. It is interesting that the A sign-groups already assigned to apparent B counterparts in Part I nos. 1–24 conform to these rules: e.g., A *a-ku-tu*/B *a-ko-to* “*Ἀκτωρ*”, not A **a-ka-tu* or B **a-ka-to*; in this striking example, *both* A and B forms are exempt from the optional Rule 2 and undergo Rule 1 instead. Such conformity can only corroborate the apparent validity of the A/B matchings noted above.

b. Already in Part I, many of the examples in A had parallels in B (most attractive of which are nos. 8, 10, 13, 14, 19) which have been interpreted as suitable for Greek formations. Hence the implication arises that certain A forms may actually be “Greek-like”; a reiteration of the resulting matchings already suggested would be in order here:

8. *a-tu* = ? “*ἄνθος*”. Not only Greek but also probably Indo-European; cf. Old Indic *ándhas-* “plant.” If B parallel is disregarded, *a-tu* = ? “*ἄρως*”.
10. *ma-ru* = ? “*Μάρων*”: cf. *μάρη* “hand”: not only Greek but also probably IE.
13. *ka-ru* = “*Χάρων*”? “*Χαίρων*”? “*Κάλλων*”?

14. *pa-ra-tu*= ? Φάλανθος. Ultimately from φαλός: both Greek and IE.

19. *ku-ru-ku*= Γλύκος? Γλύκων?

At this point, some of the salient items, whether Greek-like or not, of Landau's list of proper nouns in A¹⁴ can be appended conveniently, along with summaries of his glosses for them.

1. *a-su-ja, a-se-ja* PN= ? Ἀσέα.

2. *di-ka-tu*[PN; cf. B *di-ka-ta-de* "to Δίκητη."

3. *ki-re-ta₂* PN= ?? Crete. More probably abbreviation of NO. 5 below.

4. *sa-ma* PN.

Besides the valuable addition of the already-discussed (NO. 1 of Part I) *pa-i-to*= Phaistos to such a list, one example from Peruzzi should also be included here, because it will prove to be a starting point for various arguments below:¹⁵

5. *ki-re-ta-na* PN= ? Κρητανία. This assignment veers slightly from Spelling Rule 1 in Part IIa. The *ki-re-ta-na* for **ke-re-ta-na* might be explained by the possible *e/i* ambivalence in A (cf. again Part I NO. 20). Then too, *ki* in A is very common while *ke* is rare.

The main difficulty with this investigation so far has already been encountered above: the basic material in the A corpus—the HT tablets—has yielded mostly N and PN in the A/B comparisons of NOS. 1–24 in Part I. This should come as no surprise, since the majority of extant B sign-groups consists of N and PN, and the same preponderance should be expected for A—especially in the HT series, which deals with inventories as do the B tablets. The obstacles standing in the way of interpreting such evidence as representing *any* language can be seen in the VC work: a vast number of N and PN in B too is not yet explainable and has to be relegated to the "non-Greek" category. It should also come as little surprise, then, that comparisons of names like A *ku-ku-da-ra* with B *ku-ka-da-ro* yield scant material for interpretation (examples of such contrasts have already been encountered in, e.g., NOS. 2, 4, 7 of Part I). Furthermore, A offers another difficulty, rarely mentioned: abbreviation—polysyllabic as

¹⁴ *Op.cit.*, pp. 269–271.

¹⁵ *Op.cit.*; cf. generally his indices. Unfortunately, some of the attractive interpretations in both Landau and Peruzzi are based on dubious readings: e.g., the *mi-se-ra*= Egypt of the former and the *da-ra-ku*= Δράκων of the latter.

well as monosyllabic—is frequent. The latter occurs often in B and examples can even be found of the former; thus the B corpus offers: *a-ja-me(-na)*, *ki-ti-me(-na)*, *to-(so)-pe-mo*, *e-pi-(de)-da-to*. See VC p. 47. What follows is a list of *apparent* polysyllabic abbreviations in A (full form listed first, apparent abbreviation second):

1. L1-*ni-na* HT 6b.6, 93a.1, 8
L1-*ni* ,, 85a.2
2. *pa-se-ja* Cr IV 15, Cr IV 16; see Part I NO. 15.
pa-se HT 18.1, 27b.4
3. L83-*tu-ja* ,, 115b.3
L83-*tu* ,, 9a.2, 9b.3, 119.4, 122a.6
4. *ku-pa-ja* ,, 116a.1
ku-pa ,, 110a.2; Cr V 5a
5. *a-se-ja* ,, 115a.4; q.v. above.
a-se ,, 93a.3, 132.1
6. *i-ta-nu* ,, 28b.6; see Part I NO. 12.
i-ta ,, 25b.1–2

It can already be seen from these examples that the *ja* ending—so consequential in proving the B is Greek—cannot be expected to occur regularly in A. Thus Furumark,¹⁶ if we accept his equation 101 = *do*, may be quite right in assuming that the A PN *ku-L101-ni* might = *ku-do-ni(-ja)*, the important Cretan city Kydonia. Further examples of possible abbreviations are not hard to find: A *te-tu* and *te-ki* seem to correspond with the B ethnics *te-tu-ru-we* and *te-ki-ri-ne-to* respectively. Then too, the PN list of HT 25a gives *di*, *ki*, and *pa*, while other tablets have *di-na-u*, *ki-re-ta-na*, and *pa-i-to* in the same context and with the same names surrounding them (the latter two of the three examples have already been encountered; cf. also the Ns and PNs in Part I). The obvious conclusion, then, is that caution should be exercised in trying to assign cases to the items in the HT tablets, since the endings might often not be written out at all. This scribal idiosyncrasy in A has produced a corpus which offers scant inflectional material to be used in a grid, while the habitual writing out of word endings in B (the exceptions cited above are very rare and might even be considered scribal errors; cf. VC p. 47) proved to be the key to its decipherment. Yet despite all these odds, as well as the fact that B itself has only a small percentage of names which are definitely Greek, the A sign-groups

¹⁶ Cf. again Peruzzi's indices.

given in, e.g., nos. 8, 10, 13, 14, 19 of Part I nevertheless seem to be very much like Greek formations.

To find lexical units where the context rests on a somewhat firmer basis, such as common nouns, it would be well to turn for a moment from the HT tablets (which, as has been stated, deal predominantly with names) to a group of A texts that have seldom received due consideration: the sealings and roundels. From the parallel material in B, one can deduce that the text of such documents is supposed to deal with—besides N and PN—only commodities, which is truly an ideally restricted context. And indeed, the following interpretations, some of them quite surprising, can be furnished:

1. Even *ku-mi-na* “cumin” of Cr IV 5a displays the characteristic vowel arrangement of the attested Greek form *κύμνον* (though admittedly of non-IE origin)—not even to mention the identical B form of no. 1 in Part I (contrasted with Hebrew *kammōn*, Akkadian *kamūnu*, Sumerian *gamun*, where the vowels are quite different; it is conceded that the easy way out for anyone who would support the alternative possibility of a direct Greek borrowing from a Semitic source, is to assume that the unknown vowels of Ugaritic *kmn* are the link to the Greek vocalization). The *ku-mi-na* of A even seems to exhibit the neut. pl. form that one would expect for Greek, and is actually attested in B (cf. again no. 1 of Part I). The latter point should actually be reserved for section c.

Cr IV 2a:



Cr IV 3a:



FIG. 6. FACSIMILES OF TWO SEALINGS FROM AYIA TRIADHA

2. Both Cr IV 2a and Cr IV 3a have traditionally been read as *su-ni-ka*, which is also Brice's reading. I propose the following interpretation instead: since the position of the *ni* (it also serves as the ideogram for *FIG*= figs in both A and B; see Fig. 5) in both cases is a little higher than the other two figures, it would be better to read *su-ka* with the ideogram *FIG*= figs superimposed, admirably fitting Greek

σῦκον, pl. *σῦκα* (see Fig. 6). Attested already in B, in a seemingly derivative form of the latter, is *su-za* (= *sukia*; cf. Greek *συκ-ίον*, *-ία*). Though the etymology of this word is regrettably obscure and probably non-IE, the Greek-like formation here—even to the extent of seemingly a neut. pl.—is quite striking. Furthermore, *su-ka* is also found on Cr IV 10a and Cr IV 13, with a yet unexplained L101-*di*- prefixed to it in the former case, and with a separate word L101-*di-na* occurring before *su-ka* in the latter, though Brice's reading fuses them. That they are separate here seems to be proved by the fact that L101-*di-na* and *su-ka* are written at right angles to each other. (Doubtless the L101-*di* and the L101-*di-na* are related, and should also be compared with forms like L101-*di-ra* in Cr IV 11a and Cr IV 12.)

3. Though Brice may be justified for fusing the reading *ka-ku-pa* on the basis of Cr IV 9a, it nevertheless appears from the photograph of Cr IV 6a that a division exists between *ka-ku* and *pa*. On the basis of the discussion of the *o/u* contrast in B/A above, this would then be the expected A equivalent of B *ka-ko* = *χαλκός*, accompanied here by something like the common B adjunct *pa* (= *palaios* in A also?). Though the root of the Greek word for bronze is possibly non-IE, it seems to be definitely a Greek formation that B and A here approximate. Furthermore, VC evidently consider their entry *ka-ko* (in the "Mycenaean Vocabulary" section of their work) as conclusive for proving that B is Greek, because they grace it with an asterisk, meaning that it is "a valuable addition to Greek lexicography, and represent[s], together with Hittite vocabulary, the earliest detailed evidence of Indo-European speech" (VC p. 385).

4. Cr V 2b has the N *o-du*, which is matched also in B (cf. no. 5 in Part I). Though it seems non-IE, this sign-group invites the possibility of an abbreviation like maybe *o-du* = *o-du(-se-u)*!

5. Cr V 4b seemingly has the definitely IE N *ne-tu*, which would correspond to B **ne-to* = *Νέστωρ*: the latter is unfortunately not attested, but a compound form is: *ne-ti-ja-no* = *Nestiānōr*; also dat. *ne-ti-ja-no-re* = *Nestiānorei*.

So much for the sealings and roundels.¹⁷ Now come other texts which are very pertinent to this discussion:

¹⁷ For background on these texts, cf. M. Pope, "The *Cretulae* and the Linear A Accounting System," *BSA* 55 (1960) 200–210.

6. Most significant is the occurrence of *i-da-ma-te* on two double-axes from Arkalokhori (V 17 iii and iv).¹⁸ When one divides this text as *i-da ma-te*, the striking reading of **Idā māter* seems to emerge. (Though Cretan *Ida* has an initial *digamma* by classical times, the inclusion of the latter is still optional in the B spelling of the root: e.g., *i-da-i-jo*, *wi-da-jo*, *i-do-me-ne-ja*. See pp. 418, 427 in VC.) As for *mātēr* the root is not only unmistakably Greek but also of course IE. It is of special significance because it also can serve as an isogloss: if the reading here is truly to be interpreted as *mātēr*, the word then excludes the possibility of identifying the language of this text with any Anatolian variety of IE. This particular root for “mother” does not exist in the latter group of languages, Luwian included (“mother” = Luwian *anni-*, Palaic *anna-*, Hittite *anna-*). Furthermore, the mountain worship involved in the “Minoan” mother-goddess religion would seem only to corroborate this reading. (**Idē* = “the wooded hill”; cf. *Iliad* 2.821, etc.)

7. The *pièce de résistance*, as it were, among lexical units illustrating the possibility of Greek elements in A is the graffito II 12 from Phaistos (cf. NO. II of Part I). It reads *ne-ma i-ja-te*, and while the first part is most likely a name (**Nemas*? Cf. also the epithet of Zeus: *Nemeas*), the second matches the B word *i-ja-te* (= *iātēr* “physician,” e.g., *ιητήρ* *Iliad* 2.732). The latter not only gets the aforementioned asterisk in VC (p. 394), but actually happens to be a Greek word with a clearly IE origin. It is even attested in the Cypriot syllabary in the accusative form: *to-ni-ja-te-ra-ne* (*to-n . . .* = *τόν*; see VC p. 394). The reading *i-ja-te* here in A is so attractive that it hardly needs further comment.

After these two pieces of rather convincing evidence for Greek-like words with IE origin in A, it might be foolhardy to attempt less certain interpretations and thus risk discrediting the more reliable material (i.e., *a-tu*, *ma-ru*, *ka-ru*, *pa-ra-tu*, *ku-ru-ku*, *ku-mi-na*, *su-ka*, *ka-ku*, *o-du*, *ne-tu*, *i-da*, *ma-te*, *i-ja-te*). In order to avoid this, the following items (NOS. 8–16) will be treated only briefly and should be considered tentative:

8. In HT 35.1, for *i-ku-su* read (possibly) *i-ku-ta*, which might = Homeric *ἰππότα*. Cf. B *i-ḡo* “horse” (KN ca 895, etc.). For a parallel in declension, cf. B *e-ḡe-ta* = *ἑπέτας* (KN As821, etc.: IE **sekʷ-*, as also in

¹⁸ For background, cf. E. Vermeule, “A Gold Minoan Double Axe,” *Bulletin of Museum of Fine Arts, Boston* 57 (1959) 4–16.

socius). The B decipherment does not extend the *q*-series to *u*. Thus for A one could expect $\star qu = ku$, as if A *i-ku-ta* = A $\star i-qu(/qo)-ta$ = B $\star i-qo-ta$ *ἰππότα*.

9. In HT 2.1, *a-ka-ru* seems to be in a parallel context with PN *ki-re-ta-na* = *Krētania* (cf. NO. 5 above in the discussion of Landau's list). Thus *a-ka-ru* might (if the *kt* exception of Spelling Rule 2 of Part IIa, q.v., might be extended to *kr* also) = PN *ἄγρός* "field": definitely Greek and IE.

10. *a-re* in HT 29.5, since the context seems to indicate a list of Ns, is probably not "Ares" nor its dat. (*Ἄρει*) as in B (Fp14.3), but an abbreviation for $\star a-re-jo$ (cf. A *a-re-jo-ne* in Part IIc NO. 5, as well as B *a-re-i-jo* and *a-re-jo*). Likewise, though in B the ending *-i* (i.e., the non-consonantal *i*-syllable) is the dat. pl.-marker, the *da-i* coming after *a-re* is probably not dat. either, but possibly an abbreviation for the A equivalent of B *da-i-qo-ta* or the like.

11. Though the context is not certain in the fragmentary tablet HT 62.2, *ka-ku* is probably the A equivalent of B *ka-ko* = *χαλκός*. Cf. NO. 3 above.

12. Admittedly of greater importance than the others in this list: for HT 88.2, reading *FIG* [= "figs"] *ki-ki-na*, see G. Neumann, "Minoisch *ki-ki-na* 'die Sykomorenfeige'," *Glotta* 38 (1960) 181–6. This sign-group *ki-ki-na* can be applied to the attested classical form *κίκινος*, *-η*, *-ον* "from the *κίκι*-tree."

13. In HT 96a, *a-pa-ra-jo* = ? *Apharaios*. Cf. *Ἀφαρήιος*, *Ἀφαρήιος*, etc., as in Pape, p. 180.

14. Cf. heading *ma-ka-ri-te*, as in HT 117a.1, with *Μακαρίτης* (the "blessed") or with *Μαργαρίτης* from *μάργαρον* (non-IE). The difficulty here is that the classical ending *-ης* should appear as *-a* = *-ās* in A as in B. Perhaps one could look for an ending other than *-as*, such as *-eus*: in B, *-e-u*, as in *do-ro-me-u* = *Dromeus* from *δρόμος*; there are over 100 such *-e-u* Ns in B (VC p. 100); perhaps the *-eus* in A is approximated as *-e(-u)*. Cf. A *di-ki-se*/B *de-ke-se-u* in Part I NO. 20. Caution: the *ri* in *ma-ka-ri-te* has also been read as *we*: cf. C. H. Gordon, *Orientalia* 32 (1963) 297.

15. In II 1, a clay cup with an ink-written inscription (from KN), the 11th syllable seems to be *a*, not *i*, making the word consisting of the 11th, 12th, and 13th syllables emerge as *a-ja-nu*, possibly corresponding with *αἰανῶς* "forever"; likewise in II 8, a graffito from HT, the

occurrence of the same form *a-ja-nu* might suggest some religious context. Here the text reads: *a-ja-nu-ma-ja-wa*. Perhaps *ma-ja-wa*= an adjectival form of *μαῖα/Μαῖα*.

16. II 18, a graffito on the shoulder of a pithos from Tyliossos, reads *a-ti-ki-ta-a*. It is tempting to suggest ἄθικτα “untouchables, holy things,” in the sense that one finds the word in, e.g., Aischylos *Ag.* 371 and Sophokles *OT* 891. With this equivalent, the vocalization of *a-ti-ki-ta-a* would even suit Spelling Rule 2 in Part IIa, making ἄθικτα all the more plausible.

17. III 8, a roundel from Kato Zakro, reads *a-ti-ka-a*, suggesting possibly Ἀττικά.

So much for the tentative interpretations. Reserved till now have been the three lexical units in the HT corpus with the clearest context. These are the signs for (1) TRANSACTION *te*, (2) TOTAL *ku-ro*, and (3) DEFICIT *ki-ro*, corresponding with B *jo-*, *to-sa*, and *o-pe-ro* respectively. The obvious Greek elements in the latter triad need not be discussed here, but if something resembling Greek could be found for the former three, then all the arguments presented heretofore would seem much more plausible:

18. The transaction-sign *te* occurs usually after the heading of a tablet; e.g., in HT 13, the first entry *ka-u-de-ta* is possibly a verb (cf. third-person mid. *-e-tai?*), but probably N; then follows the VIN (wine) ideogram, then the *te*. Then comes a listing of Ns—who may be either recipients or contributors. The introductory nature of the *te* reminds one of the beginning formula in B: i.e., the prefix *jo-* (corresponding, but not equivalent, to classical ὧς “thus”). Perhaps the most satisfactory interpretation of *te*, then, should properly convey somewhat the same semantic implication as “thus”; the best IE approximation would seem to be Homeric τῆ, in the sense of Fr. *voici*. (Though in Homer it is constantly used with an imperative, this is probably just a formulaic specialization *metri gratia* in Epic; cf. “exceptions” in Kall. *Epig.* 33.38 and Simm. 26.3.) The *eta* (without *iota* subscript) in τῆ is Common Greek (thus never *τᾶ; cf. Lithuanian *tè*) and would thus satisfy the *e* in *te*. Besides, there is the additional corroboration of the Doric and Ionic adverb τῆδε “here”; the latter is clearly derived from τῆ.

19. There are at least two Greek possibilities that can be offered for the TOTAL sign *ku-ro*. (1) The fact that *ku-ro* undergoes no variation in

form throughout the extant A corpus suggests that it may be an abbreviation; with the $u = o/u$ ambivalence of A taken into consideration, one approximation might be from the root of *κολώνη* and *κολωνός* “peak”; the latter is IE: cf. Lat. *columna*, *collis*, *culmen*, *celsus*. Furthermore, the semantic value of “peak” furnishes an ideal extension of meaning into “total”; and this phenomenon is actually evidenced in, e.g., the Latin *summus-a-um*, which produces the semantic extension *summa* = Eng. “sum.” (2) Again with the $u = o/u$ ambivalence in A taken into consideration, *ku-ro* might = *κόρος* “enough, surfeit” (IE, cf. *κορέννυμι* “sate” with Lith. *šerti* “feed”). To counter the expected objection that it seems incongruous to have first u and then o to approximate *omicron* in the same word, the following points can be raised: (a) *ko* in A is very rare; (b) *ro* is the only syllable in the o -series of A which is frequent, as it is also in B: cf. Fig. 2; (c) *ro* has the shape of an upright cross—the simplest figure in the A repertory, executed with only two strokes. Now if one assumes the gradual introduction of the o -series into A (see above p. 194), the simplicity of *ro* in shape and its high frequency in extant A would suggest that it was perhaps first to be introduced, especially in such often used words as *ku-ro* and *ki-ro*. Presumably the sign *ko* had been developed later, and frequent sign-groups like *ku-ro* had not yet been pervaded by it at the state that A is extant. As for the idea of “total” in *koros*, one might note that a tally in an inventory is made upon coming to the end—i.e., “having enough,” “completion”—of the items and accompanying numerals to be listed. Such a summary statement of completion before the actual addition is semantically matched in the B TOTAL form *to-sa* “so much”; the latter way too of expressing a sum is unparalleled in later Greek, so that the testimony of B itself counters the expected objection to the assignment *ku-ro* = *koros*: that it is not the ordinary way to express a total in Greek. Of the two submitted alternatives (1) and (2), the former assignment is less preferable, since its tentative Greek identification depends entirely on root etymology: *kolōnē* and *kolōnos* are not attested with an abstract meaning. On the other hand, *koros* (a) is abstract, (b) has the attested meaning “enough,” and (c) is actually often used in extended expressions approximating the TOTAL context in A: e.g., *κόρον δ' ἔχει καὶ μελι* in Pindar N. 7.52, or *ἐς κόρον* in Lucian, *de Mercede Conductis* 26. Also *ποθή*, the antonym of *κόρος*, has a similar quantitative force in Homer: e.g., in *Odyssey* 15.514, *ξενίων ποθή* (“lack,” not “desire”).

20. The DEFICIT sign *ki-ro*, if one keeps in mind Spelling Rule 1 given in Part IIa and the proposed modification in *ki-re-ta-na*=*Krētania* of Part IIb, might answer quite admirably to the Homeric *χρέος* “debt,” the root of which (*χρή*, etc.) is sound IE. That *ki-ro* is not an abbreviation in A seems to be proved by a “plural” occurrence *ki-ra* in HT 103.5. The *a*-ending of the latter form even corroborates that the word is “neuter,” and a perfect parallel is found in the pl. form in Hesiod, *Op.* 647: *χρέα*. There should be no concern here for a missing *digamma*, since the latter is an optional suffix in this word (cf. Hofmann, p. 423). Yet the proposed A approximation of **re-o* and **re-a* here as *-ro* and *-ra* in *ki-ro* and *ki-ra* is still to be justified: one does not have to look far for a parallel, since B actually exhibits the same sort of contraction; e.g., *ke-ra-a* in KN K 872 (see VC p. 396) “horns,”= Homeric *κέρα* (as in *Od.* 19.211); both these forms are to be contrasted with *κέρεα*, as in Herodot. 2.38. Cf. also the Doric orthography of *θεός* as *σιός*; also Homeric “synizesis” *-εο-*, *-εα-*, *-εω-*, etc. Lastly, for a parallel of similar syllabic resolution of a consonant cluster as in *ki-ra*, cf. B *to-qa* (KN Fh339) instead of *to-ro-qa* (KN Fh358)=*τροφή*—with *ki-ra* instead of **ki-re-(w)a*=*χρέα*. Furthermore, *ki-ro* in turn undergoes abbreviation in HT 24a.1, where *ki* occupies exactly the same position as that in which one usually finds the TRANSACTION sign *te* (see, e.g., HT 17): it is as if this particular inventory in HT 24 were a list of missing, in contrast with acquired, items.

c. Because of the attempted syntactical interpretations that follow, some of the most attractive lexical evidence had to be reserved until now. The first group to be treated thus will be verb-like formations. Suitable context for the latter would be expected in the headings of tablets, as also in B:

1. The word at the head (i.e., the word is not merely a sub-heading, since it is the *first* item on the reverse, b.1) of IV 9 from Tyllissos reads *ki-ri-ne*. This might possibly be the equivalent of *κρίνει*, in the sense of “he approves.”¹⁹

2. When one takes into consideration the common *e/i* spelling ambivalence in A (cf. also the *o/u* alternation discussed above), the heading of HT 27a might be furnished with the following equivalent (the term “identity” is repeatedly avoided): *ti-ni-ta pi*=*τίνεταί σφι*, in

¹⁹ Cf. *κριθέντων ἐν τοῖς ἱερείοις* “approved etc.” (Delph.) in *Sammlung der griechischen Dialekt-Inschriften*, ed. H. Collitz (Göttingen 1884–1915) 2049.15.

the sense of “payment is made to them” or “the debt is paid to them.” This *pi* in A has an excellent parallel in the *pe-i* of B: e.g., An 43.15 *me-ta-qe pe-i* “and with them” and Na55 *e-re-u-te-ro-se . . . to-sa-de pe-i* “he made so much free for them.” Although VC admit that *pe-i* must be from *σφεῖς* and must be dat., they are uncertain whether it should be interpreted as *spheis* “to them” or **sphe'i*, a conjectured form meaning the same (p. 299). But it must be remembered that final *-i* (the non-consonantal syllable) is the dat. pl. sign in B for the first and second declensions; therefore, if one also keeps in mind the scribal aversion in B to writing single syllables, it may well be claimed that *pe-i* too is just an orthographic circumvention for *pi*= *σφι* with the syllable *-i* in *pe-i* serving as “dative-sign.”

3. The B equivalent of classical *ἐπί* is *o-pi*, but it must be remembered that there are several other IE forms involving the same root; these are: **epi*, **epe-i*, **opi*, **ope-i*, and **pi*. The last one proves to be very significant here, and is actually attested in Greek forms like *πιέζω* (from IE **pi-s(e)d-* “sit on”). The form **pi*, then, might be applied to the heading of HT 21a.1: *pi-ta-ka-se te*. The *pi-* here might well be a variant for *o-pi*, and the whole phrase would then be interpreted as **o-pi-ta-ka-se te* (and would answer—without augment, perhaps—to the classical *ἐπέταξε* “he assessed”; + *τῆ* “here” or “thus”). Cf. the meaning of *ἐπίταξις* in Herodot. 3.89, “assessment”; cf. also *ἐπιτάξαντος τᾶπόλει Γαλλίου σῆτον καὶ Ἀνχαρίου* [sic] *ἰμάτια* (i B.C.).²⁰

4. A huge inscription (both syllables of the short text are nearly a foot long—thus clearly meant to be noticed) found in a tholos tomb at Kephala (V 15) reads *a-pi*. One might propose **ᾶπι* or **ᾶπει* “go away” (instead of **ᾶπιθι*, normal imperative of **ᾶπειμι*; the latter suggestion would be on the analogy of *ἔξει* instead of *ἔξιθι* in Aristoph. *Nu.* 633). Not only would this reading fit the expected context of such a tomb inscription admirably, but the form itself would be strikingly IE: cf. also Lat. *abi*. A more remote possibility for *a-pi* is the N **Aπις* (e.g., the mythical King of Argos in Aisch. *Supp.* 260).

5. So much for verb-like forms. Still to be discussed are possible dative functions in A. Already mentioned was **28=i* in the terminal position as the dat. pl. marker for, e.g., the second declension in B; q.v. in NO. 2 above. There is a possibility that L100b=*i* might have the same function in A; attention is called to the second among the four

²⁰ *Sylloge Inscriptionum Graecarum*, ed.³ W. Dittenberger (Leipzig 1915–24) 748.25.

headings of HT 120: (1) *da-qe-ra da-me*, (2) *da-u-L120-i* (L120 = *no*₂ ?), (3) *ki-re-ta-na*, (4) *pa-i-to*. These might then be interpreted as destinations expressed by the dative: “to *da-qe-ra da-me*, to the ?Daunoi?, to Kretania, and to Phaistos.” Furthermore, *da-qe-ra da-me* might be “to the **da-mu* (B *da-mo*, as in Ea03, = δῆμος “village”; this word too gets an asterisk in VC p. 390) of **Daquera*.” If an occasional *-u/-e* :: nom./dat. variation in A can be assumed, it may be paralleled by *-o/-o-e* :: nom./dat.—a *hapax* variation in B, as attested in *to-e* (Eb842) = τῶ. Here the *-e* in *to-e* is clearly not phonetic, but orthographic to indicate dative case. The lack of variation in the ending of *pa-i-to* might be explained in this way: the proposed *-u/-e* :: nom./dat. ‘second declension’ contrast might not have been extended to the forms ending in *-o*. The fact that the latter are rare and restricted to isolated lexical units as *pa-i-to* would indicate, as previously pointed out, that the *o*-ending was an orthographic innovation and was adapted only gradually throughout the second declension; furthermore, the second declension sing. dat. in B is written with an *-o* just like the nom., suggesting that the *-u/-e* contrast was never extended to *-o/-e*, with the one extant exception of *to-e*, and even here the *o* of the declension is written out. The whole proposal for *da-me*, however, is to be considered tentative.

Another dat. context seems to occur in the spiral text of a gold signet-ring from Mavro Spelio (V 14). Though the middle of the text is practically illegible, the beginning and the end seem clear: *a-re-jo-ne . . . a-ja-ku*. One might suggest: *Areioni* [or *Areionei*?] . . . *Aiakos*. It would be tempting also to guess that the middle portion of the text might be something like the contents of the famous Praenestine fibula: “X made me for Y.” But the syllables involved are simply too worn to make out on the photograph.

6. The one sign-group for which possible inflectional or derivative forms can be isolated within the A corpus itself is *da-ta-ro*, *da-ta-ra*, *da-ta-re*. The first, *da-ta-ro* in HT 116a.1, serves as the heading with *te* (q.v. in NO. 18 of Part IIb); then follows a list of contributors (or recipients?), with commodities and amounts given after the Ns. Among these commodities are GRA, HORD, and OLIV (wheat, barley, olives). As for the second apparent derivative form, the heading of HT 6a reads *ka-pa da-ta-ra te*. In the list that then follows, the commodity $\pi\iota\kappa$ occurs twice. Now it is worth noting that the endings of *ka-pa* and *da-ta-ra* agree. One might suspect a second declension neut. pl. if the text were Greek. It will be remembered that *ka-pa* (q.v. in NO. 3 of Part I) also

occurs in B, where it is applied to the OLIV ideogram. In A too (HT 102.1) it serves as a heading for a list in which the GRA ideogram occurs three times. Besides, *ka-po*= *καρποί* is actually attested in B (KN F 841). Thus if there were a neuter form of the root *karp-* (IE, with asterisk in VC p. 395; cf. Eng. “harvest”) with the same general meaning as *karpos*, this would certainly fit into the context of the neut. pl.-looking *ka-pa* in both the A and the B. I believe the Hesychian gloss *κάρπη: τὰ σπέρματα* suits not only the apparent neut. pl. (*κάρπη*= **κάρπεα*; significantly, cf. also *ki-ra*= ? *χρέα* above) but also the context of A and B *ka-pa*, as the commodities discussed directly above (and linked with the ideal meaning of *ta spermata*) would indicate. As for the *da-ta-ra*, one might suggest an adjectival form of *δαιταλ-όμοι* “feast” (Lykophron 654), *δαιταλ-εύς* (Aisch. *Pr.* 1024). An even better comparison might be *δαιτρόν* (from *δαίω*; again IE) “one’s portion,” as in *δαιτρόν πίνειν* *Iliad* 4.262. In that case, the heading *ka-pa da-ta-ra* would mean “commodity allotments.” Likewise, *da-ta-ro te* would mean “the allotment is thus.” Since HT 6 and 116 deal with commodities like wheat, barley, olives, and figs, the context for these interpretations is ideal. The one difficulty is that according to Spelling Rule 1 (q.v. in Part IIa) *da-ta-ro* should then appear as **da-to-ro*. But there is the analogy of *da-ta-ra*, which is normal, while *to* is very rare in the A corpus and is restricted to isolated lexemes as *pa-i-to* (see Part IIa). As for *da-ta-re*, since it occurs in the same list (HT 88) with *ku-L1-nu* (q.v. in Part I NO. 6), it might be a derivative N from either the base *daitr-* or *daital-*.

7. The use of *-qe* in A as a connective (just like B *-qe*= *τε*) is often mentioned but its significance is seldom emphasized. One example of it is in HT 6a: here the *-qe* in *ka-pa-qe* of line 4 serves as a resumptive from the heading *ka-pa* in line 1. The motivation for a resumptive might be (a) a time lapse between the scribe’s writing the first and the second *ka-pa*, since the commodity *FIG* is itemized after *both* headings; or (b) an intentional distinction made between *ka-pa da-ta-ra* (q.v. above) and simple *ka-pa* with no specification intended. This one example already provides a syntactical as well as lexical identification with the attested Greek form of *-qe* in B. Now once one abandons the notion that the A syllables identical in shape with those of B might differ radically from the latter in phonetic value (and Part I was intended to counter just that), then even this one connective *-qe* in A

can prove to be crucial and decisive: not only is it another isogloss excluding all Anatolian languages, but it is also identical in form and position (postpositive) with the known connective used in the earliest attested form of Greek—with the *-qe* of Linear B. In a word, the importance of the *-qe* in A cannot be emphasized enough.

It will also be noted that the other common Greek connective meaning “and” (i.e. *καί*) has not as yet been found in the corpus of B: this is probably due to the aforementioned aversion of the B system to monosyllables other than abbreviations (*cf.* NO. 2 above). The classical form *καί* is used from here on only for the sake of convenience and clarity. Attested is Cypro-Arcadian *κάς* = *καί*, and the former would be more likely a form to conjecture for the dialect of B. In any case, *kas* or *kai* would be expected to appear as **ka* in the syllabary. A clay bar in A from Mallia, as it happens, reads: [*obverse*] *ṛo-i-du-wi ka qe-de-mi-nu*; [*reverse*] *a-de ka qe-de-mi-nu* (for the *mi-nu* portion of the latter compound-looking name, *cf.* *Μίνως*). Since there are no inventory signs or numerals on this bar, the text may well deal with religion, but aside from the question of the names (though it would be dazzling to find the underworld figures “Hades” and “Minos” in the same text on this reverse, it is unlikely, since Hades—reconstructed as **Αΐδης* “unseen”—should appear as **a-wi-d . . .*, not **a-d . . .*), the two monosyllables *ka* connecting them clearly suggest *kai*.

Another possible identification of *ka* in A with *kai* is found in HT 11b. Here *ka* occurs five times as a monosyllable connecting numerals (40, 30, 50, 30, 30 respectively), which are totaled up in the end (= 180) with the *ku-ro* sign:

1.]*dē*-L1 1 *sa-ra*₂
2. -L35 *ka* 40 *ka* 30
3. *ka* 50 *ru*-L101-*na*
4. *ka* 30 *sa-qe-ri*
5. *ka* 30 *ku-ro*
6. 180

Since these five instances of *ka* occur with absolutely no ligatures appended, they are consequently identical and there is no direct evidence that could point to their being ideograms. One can explain them as plus-signs in a tally—the most ideal context possible for *kai*. The broken-off sign-group with numeral,]*dē*-L1 1, is a continuation of the text of side A. For side B, *sa-ra*₂-L35, *ru*-L101-*na*, and *sa-qe-ri* serve

as the headings, and the precise motivation for placing a *ka* before each number might be to indicate just what is supposed to be added up. Consequently, the numeral 1 in line 1 is excluded from the tally and thus does not have a *ka*. The latter is repeated five times here in this horizontally-running tally for the same reason, one would suppose, that plus-signs are repeated in horizontal additions today: the one difference is that in this tablet the first *ka*, unlike a plus-sign, occurs before the first number to be tallied; but *cf.* Greek *kai X kai Y kai Z* = “both X and Y and Z.”

Another very striking possibility for *kai* is the occurrence of *ka* in the ideal environment of *-qe* = classical $\tau\epsilon$ (q.v. in discussion above); here *ka* combines with *-qe* in the apparently $\tau\epsilon\ \kappa\alpha\iota$ construction *qe-ka*, which connects two numerals (the second an afterthought?) of an inventory list in HT 85b.2. Such a double occurrence, besides its intrinsic value syntactically, also corroborates the assignments made for both *-qe* and *ka*.

III. Historical Speculation

So much for preliminary evidence—admittedly of varying worth—for Greek-like elements in A. Another IE language that can be applied to A is of the Anatolian group—Luwian (also spelled ‘Luvian’). However, as of now there has been only one word in the corpus of A that has been pointed out as a convincingly “Luvoid” type: *a-sa-sa-ra* (also written *ja-sa-sa-ra*), with or without the “my” suffix *me*.²¹ Moreover, I have found the seemingly same root in a masc. N in B with apparently the same variation in the initial syllable: *a-sa-ro* (As40.4)/*ja-sa-ro* (V 832.4). Then too, the evidence from folklore that the “Lykian” (*ergo* of Luwian descent) Apollo at Delphi is connected with “Parnassos folk” of Luwian stock²² is counterbalanced by the Homeric Hymn to Apollo at Delphi, where the latter brings a shipload of Cretans to be priests at his shrine. All the same, no attempt

²¹ For background, *cf.* L. R. Palmer, “Luvian and Linear A,” *TransPhilSoc* (1958) 75–100. The interpretation of *a-sa-sa-ra* / *ja-sa-sa-ra* (e.g., in I 8 from KN) as Luwian $\ast a\check{s}ha\check{s}\check{s}ara$ has been based on a proposed Hittite form $\ast i\check{s}ha\check{s}\check{s}ara$ (on the analogy of attested $i\check{s}ha\check{s}$ = “dominus”), interpreted as the phonetic equivalent of the logogram GAŠAN = “domina” in Hittite texts. But even this identification of GAŠAN as = $\ast i\check{s}ha\check{s}\check{s}ara$ has been endangered in the recent discovery of a dative/locative GAŠAN-li; q.v. in J. Friedrich, *Hethitisches Wörterbuch: Ergänzungsheft II* (Heidelberg 1961) 29. Thus the occurrence of an *-li-* in the stem of the Hittite word for GAŠAN casts some doubt on the identification GAŠAN = $\ast i\check{s}ha\check{s}\check{s}ara$, and consequently on $\ast i\check{s}ha\check{s}\check{s}ara$ = Luwian $\ast a\check{s}ha\check{s}\check{s}ara$, and further on $\ast a\check{s}ha\check{s}\check{s}ara$ = *a-sa-sa-ra*.

²² *Ibid.*

should be made to refute any specific example of Luwian—or, for that matter, Semitic—elements in A unless a suitable item from another language can be substituted.²³

As for the possible Greek elements in A,²⁴ how can they be justified historically? Quite helpful for this problem has been James Mellaart's article.²⁵ In it, besides theories of early Greek and Luwian migrations, one finds a very important axiom, summarized in his statement that "a change in ruling class does not necessarily produce a cultural break, but a migration of peasants does."²⁶ The Greek invasion of Greece proper *ca.* 1900 B.C., of course, would be the latter case; the former, however, would suit Crete well at the beginning of Middle Minoan IIIb.

It is at this time (*ca.* 1660) that there seem to be signs of considerable innovation: the palaces are rebuilt, on a more uniform basis, the transition is made to wheel-manufactured pottery, and more advanced metal types are introduced.²⁷ Furthermore, 1660 is the *terminus post quem* of A, except for III 13–16 and IV 16 from Phaistos, the last of which is dated tentatively to as early a date as *ca.* 2000–1900; this time also marks the starting point of the "hieroglyphs."²⁸ Significantly, none of the material on these five pieces can be interpreted as of now as Greek. Only in 1660 did A spread throughout the island; in one case—at Mallia in Middle Minoan IIIb—it can actually be shown that the old hieroglyphic script competed for a while with the A system (VC p. 31). This fact would suggest that A, while its writing system was based on the native hieroglyphic script and the "proto-A" at Phaistos, was actually a vehicle for a newly-introduced language, and replaced the old systems as well as, perhaps to some

²³ As for possible Semitic elements in A, *cf.*, e.g., C. H. Gordon, "Minoica," *JNES* 21 (1962) 207–210. It is interesting that some of his most convincing assignments of Semitic forms to A sign-groups can also be interpreted as Greek borrowings from Semitic; e.g., *su-pu* over JAR-ideogram in HT 31: besides Hebr. $\eta\text{ט}$, *cf.* also Greek *σμπή* "meal-tub," etc.; see, e.g., *LSJ*.

²⁴ A proponent of Greek in A has been V. Georgiev: *cf.* *Le déchiffrement des inscriptions crétoises en linéaire A* (Sofia 1957). His latest work, "Les deux langues des inscriptions crétoises en linéaire A," *Linguistique Balkanique* 7:1 (1963) 1–104, suggests Greek for the HT tablets and "Hittite-Luwian" for the rest of the A corpus. While there is much to be disagreed with, it is encouraging that his work and this one (no direct confrontation is proposed at this point) have both independently arrived at identical suggestions for the following A words: *a-tu*, *da-ta-ra*, *ka-ku*, *ku-mi-na*, *ku-ru-ku*, *ma-ru*, *pa-ra-tu*, *pi-ta-ka-se* (very significant!), and *-qe*.

²⁵ "The End of the Early Bronze Age in Anatolia and the Aegean," *AJA* 62 (1958) 9–32.

²⁶ *Op.cit.*, p. 21.

²⁷ J. D. S. Pendlebury, *The Archaeology of Crete* (London 1939) 158–159, 164.

²⁸ *Cf.* Brice, p. 22.

extent at least, the old languages too. And this process can then actually be seen from the above-mentioned evidence at Mallia. The question is, could not the introducers of such a new language be an aristocratic ruling class of Greeks? The same sort of Greek invasion pattern that S. Dow (*op.cit.*) had already formulated to explain the Knossian B before actual publication of its decipherment could then be postulated for an earlier period starting with 1660—the coming to Crete of the ruling class under whom A was developed.²⁹

This work, at any rate, has attempted to show evidence for some Greek-like elements in A. As we know, the latest extant samples of it are tentatively dated to *ca.* 1450 B.C., or possibly later. Then too, the earliest extant material in B at Knossos occurs even later, though how much later is not yet definite, as has been shown above. Now several examples have already been introduced to show increased sophistication in writing (such as the completion of the *o*, *u* and the *i*, *e* series and the introduction of new characters) in B as compared with A. This has been suggested to counter the often cited theory of “degeneration by adaptation” of B from A (comparable in magnitude with an attempt at transcribing Russian with a Polynesian phonemic system—as if Greek and “Minoan” were so dissimilar). One may well postulate an unbroken scribal tradition spanning the proposed lacuna between extant material in A and B—however great this gap might be—and assert confidently that B, however improved, is descended from A. Could one, then, look for Greek elements in Linear A?³⁰

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²⁹ It also seems relevant that N elements like *Mίνως* and *Ῥαδάμανθους* might be from IE roots. Especially ingenious is the explanation of the latter as “IE” **rǝdho-mant-(e)us* “Rat-Sinner,” admirably fitting later mythological attributes as judge in the lower world. Equally suitable for the same sort of context is the former, which has long been tentatively associated with the same root as found in *μémνημαι*. Thus Minos might = “the remembering one.” These and many other suggestions can be found in W. Merlingen, *Das Vorgriechische und die sprachwissenschaftlich-vorhistorischen Grundlagen* (Vienna 1955), and A. J. van Windekens, *Le Pélasgique* (Louvain 1952).

³⁰ I would like to thank Professors Sterling Dow, Zeph Stewart, and Calvert Watkins for their advice. They are not, of course, to be held responsible for the views expressed. I thank Mr Richard Collin also for his collaboration.