

THE WRITING OF CONSONANT GROUPS IN MYCENAEAN

BY

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1. The Mycenaean writing system has been one of the targets of those who doubted the correctness of Ventris' decipherment. However, it must be admitted that Mycenaean writing rules are strictly observed. Of course we have—on more than five thousand tablets—a few exceptions, but they are exceptions indeed, that is we do not find that several variant spellings occur side by side: a given sound group is written in one way only. The other situation may be demonstrated in Hittite, where we find side by side (e.g.)

<i>wa-ar-ap-zi</i>	<i>wa-ar-pa-zi</i>	<i>warpzi</i>
<i>hi-in-ik-zi</i>	<i>hi-in-ga-zi</i>	<i>hinkzi</i>
<i>li-in-ik-ta</i>	<i>li-in-kat-ta</i>	<i>linkta</i>
<i>sa-an-hu-un</i>	<i>sa-an-ah-hu-un</i>	<i>sanhun</i>

One of the central problems is the notation of consonant groups. In all syllabic writing systems (which do not have signs for sound groups comprising consonant groups) these present a problem. There are in principle two ways to meet the problem: either by writing the first consonant with a 'dead' vowel (writing e.g. *ti-ri* for *tri*), or simply by omitting them. Both of these methods are understandable. Mycenaean uses both methods. Now there is a serious problem in that it is not clear when the one or when the other is used. As stated above, the Mycenaean spelling rules are rigid, and we can list the consonant groups for which each method is applied, but the principle underlying the use of the one or the other method is not evident. It is the aim of the present article to show what this principle was.

It may be objected that it is in no way necessary that there was one such principle governing the writing or non-writing of these consonants. However, it seems methodically sound to start from

the assumption that more general rules underly less general ones and then to try to find them. Only when after many attempts this search gives no reliable results, must we allow that there is perhaps no such principle.

Secondly there is the fact—for there is no serious doubt that a fact it is—that the Mycenaean Greeks took over their script from the Minoans, or in any case from a non-Greek speaking people. It is probable, then, that the Greeks also took over its application from this people. How the Minoans solved the problem of consonant groups—provided there were such groups in their language—we do not know. We must admit that we know nothing of their spelling rules. It is therefore impossible for us to estimate to what extent the Greeks adapted these rules and to what extent they took them over unchanged, even if illogical (for Greek).

Since on these theoretical considerations we can say nothing with certainty, it seems legitimate to look for some principle, and to consider afterwards whether it is convincing. To my mind the very rigidity of the Mycenaean rules, mentioned above, makes it probable that there was one very concrete principle according to which a consonant before another was written or not.

2. Essential to the argument is the treatment in Cyprian. I shall therefore first discuss the situation here. In order to provide a scheme in which both Cyprian and later Mycenaean can be fitted, and so as not to allow some cases to escape attention, I divide the consonants in stops (symbolized T), resonants (R) and s; it appears useful to subdivide the resonants in liquids (*r, l*), nasals (*m, n*) and *ǵ, ʁ*. Wherever necessary the following order is observed: TR (liqu. [*r, l*]; nas. [*m, n*]; *ǵ, ʁ*)s. For Cyprian¹) and for Mycenaean each the treatment can be summarized more easily in other ways, but for the sake of comparison the following scheme seems easiest:

I geminates	II A	1	T + T	a ₁	liqu. + liqu.
		2	T + R	a ₂	+ nas.
	B	1	R + T	a ₃	+ <i>ǵ, ʁ</i>
			R + R	b ₁	nas. + liqu.

¹) For the Cyprian facts I rely upon O. Masson, *Les inscriptions chypriotes syllabiques* (Paris 1961), 73-8.

b_2	+ nas.	e_1	$m + n$	III A	1	s	+ T
b_3	+ i, u	e_2	$n + m$		2	s	+ R
c	i, u + R	f_1	$i + u$	B	1	T	+ s
d_1	$r + l$	f_2	$u + i$		2	R	+ s
d_2	$l + r$						

A rule that disturbs the regularity is that nasals are not written before stop or sibilant (s).

atororoi ἄνωρωποι

We have then the following rules.

I Geminates are written single:

apoloni Ἀπόλλωνι

telesato τελέσσατο

II The general rule for Cyprian is: a consonant before another is written with the vowel of the syllable to which the consonant belongs.

In anlaut this vowel is of necessity always the following.

potolise πτόλις

punutilase Πυντίλας

sepeose σπῆος

sotoropiki στρόφιγγι.

In inlaut all groups of consonants are treated heterosyllabically, except those of which the first is a stop (A) and $m+n$ (B 2 e_1). The latter group comprises:

A 1 T + T *timowanakotose* Τιμοῦάνα|κτος

tipeteraloipone δι|φθεραλοιφῶν

A 2 T + R *patiri* πα|τρί

kasikenetose κασί|γνητος

aristokeretese Ἀριστο|κρέτης

B 2 e_1 $m + n$ *memanamenoī* με|μναμένοι

In all the other cases the consonant has the preceding vowel. I discuss all the cases and give some examples.

B 1 R + T

aratemiti Ἀρτέμιδι

ewerexa ἔφερξα

kolokiai Γολγία

B 2

a₁ liqu. + liqu. is a geminate (except cases d), see I.

a₂ liqu. + nas.

seperema σπέρμα (Masson, 256)

paramenone Παρμένων

a₃ liqu. + *i*, *u*.

The only instance is *alawo* ἀλῷ-. The interpretation of this word requires some comment, which is given in Appendix I. *Arawasatu* ἀρῷάσατο (Masson, 404) is another instance, but it does not show whether we have hetero- or tautosyllabic treatment, both the preceding and the following syllable having *a*. The Eteocretan *puruwānoti* is of course no reliable basis for conclusions on Cyprian.

b₁ nas. + liqu.

In this group there was an epenthetic consonant, *mr*/*l* > *mbr*/*l*, *nr*/*l* > *ndr*/*l*; then the nasal is not written according to the general rule for nasal before stop:

atiriase ἀνδριάς (from **anr*-, the stem of ἀνήρ).

b₂ nas. + nas. is geminate (except cases e), see I.

b₃ nas. + *i*, *u*. No instance is known to me.

c *i*, *u* + R.

In this case the *i* and *u* are part of a diphthong, which is a separate problem. In Cyprian *i* and *u* are always written.

d *r* + *l* and *l* + *r*. No instance is known to me.

e₁ *m* + *n* see above.

e₂ *n* + *m*. No instance.

f *i* + *u* and *u* + *i*; see under c.

III A 1 s + T

arisitose Ἀριστοῖς

A 2 s + R. No instance.

B 1 T + s. The treatment of the groups *ks* and *ps* is not clear. We find:

eukasameno εὐξάμενος

tapitekisioi τ' Ἀμφιδεξιῶ

but also

ekesosi ἐξουσι

The cases with *ps* are far from certain; here too both treatments are found:

apasuko ἀψύχω

opisike ὀψισ-κε

B 2 R+ s. No instance.

There are only very few exceptions to these rules ¹⁾.

3. The conclusion drawn from the survey of the Cyprian spelling conventions is—as was long known—that the syllable is a decisive factor in this matter, which, though understandable, is not *a priori* evident.

That the syllable is decisive in matters of spelling is known from other syllabaries too. I may refer only to some Hittite facts. Here the situation is different from that in Cyprian and Mycenaean, in that besides signs for CV (and CVC, which are not important to our problem) signs are also found for VC. Essential is here that a syllable *san* is written *sa-an*, not *sa-na*, i.e. that the vowel appears on that

1) To II A 2: *kuporokoratiwose* Κυπροκρατίφος, *pikirewo* Πίγρηφος, *ekerato* ἔχερᾱτο and *ikimamenose* ἱμαμένος, to III A 1 *karasiti* γράσθι (beside *kara-sati* elsewhere) and *epesatase* ἐπέστασε (beside *epesetase*). Masson comments on *pikirewo* that the *i* of the first syllable might have influenced the choice of the dead vowel, which gives no real explanation, since this situation occurs in all consonant groups in inlaut. Throughout he thinks the explanation is that there was in fact a different syllabification (correctly expressed by the notation); in general this is no explanation since it remains to be explained why the syllabification was different: it does not vary at random. As for γράσθι, the supposed syllabification γρα|σθι is refuted by the context: it stands in a hexameter and counts —. Now these verses are not without fault, but that the first word of a hexametric poem should begin with a short syllable is not probable. For ἐπέστασε, on the other hand, the cause may be that the morphological analysis induced the writer to treat the augment and the root as separate units. Anticipating what follows it may be noted with regard to these exceptions that the syllabic trench did in fact fall within the first consonant, e.g. Κυπροκ|κρα-, so that the notation is not incomprehensible (the *k* belonging to both the preceding and the following syllables). But in general I think we must attribute these exceptions to mere mistakes or inaccuracies.

side of the consonant on which the syllabic peak (the vowel) is found of the syllable to which the consonant belongs. We have the same situation in consonant groups, *sanh* being written *sa-an-ah*, not *sa-an-ha*. This enables us to interpret *sa-an-ah-zi* as */ sanhzi /*, since *sanahzi* would have been written *sa-na-ah-zi*; cf. *wa-ar-ap-zi* */ warpzi /*, *li-in-ik-zi* */ linkzi /* cited above; but the rule is not applied strictly, as indicated above, cf. *li-in-ga-zi* */ linkzi /* ¹⁾.

It is certain that the syllable was often a determining factor in matters of spelling in syllabic scripts. We have seen that this was the case in Cyprian and, as we shall see, the Mycenaean conventions are based on exactly the same principles as the Cyprian ones. The general principle is that the writing of consonant groups in Mycenaean was determined by the syllabic structure of the word.

Others have expressed such views ²⁾, but it is mostly not seen that it holds for the whole problem; the implications in the case of stop + resonant have not been considered. The only scholar to do so was our Russian colleague I. M. Tronskij, who, as I saw, proposed almost exactly the same solution; he is therefore granted the honour. His article, however, is not easily accessible ³⁾ and his conclusions have not been accepted e.g. by M. Doria ⁴⁾, to whom I owe the reference to Tronskij's article. It may therefore be useful to present the facts here in detail.

There is a serious difficulty in that our knowledge of Greek syllabification basically rests on two things, the evidence of metrical texts and the evidence of Cyprian spelling conventions. One problem is that in metrical contexts sometimes the syllabic structure of a word is ignored because it would otherwise be impossible to use it in a special type of verse (to give one example out of many, *δακρύοισι* (σ 173) with short first syllable, since *—υ—*] does not enter a hexameter). The dialectal and chronological problems are more serious. It is well-known that Attic syllabification differed from earlier Ionic (as found in Homer). However, I do not think these problems

1) For some facts see J. Friedrich, *Hethitisches Elementarbuch* (21960), 29.

2) E. G. Householder in *Myc. Stud.*, 71-6.

3) *Drevnej mir. Sbornik statej Akad. V. V. Struve* (Moscow 1962), 620-6. The article is written in Russian.

4) *Avviamento allo studio del Miceneo* (Rome 1965), 43-7.

are too great. As for metre, our material is large enough to allow of conclusions; we may be sure that all 'exceptions' are known to us as such. Apart from the Attic development, we do not know many dialectal differences. As regards the relation between Mycenaean, Cyprian and the language of Homer, it is generally agreed that Mycenaean has most affinities with Arcado-Cyprian, and it is also affirmed that this (Arcado-Cyprian) dialect group, if not Mycenaean itself, is a constituent of the language of the epic. Within the epic tradition there are, as far as I know, no indications of metrical deviations in the oldest formulae; on the contrary, it appears that they often fit better in the hexameter than their younger derivatives. This conclusion may of course be based on a circular reasoning, since we have a habit (if not in theory then in practice) of labelling as ancient formulae only those word groups that fit the metre well, but I think we are allowed to say that in general no metrical problems arise in the reconstruction of the prototypes of Homeric formulae, even if there are reasons to consider them Mycenaean ¹⁾. I think, then, that the dialectal affinity between Mycenaean and Cyprian on the one hand, and the fact that the syllabification in the epic language seems to have remained the same since Mycenaean times on the other hand, is enough justification to start from the assumption that these three phases of Greek had the same syllabification. Though it is quite possible that Cyprian later had a special development, I have not found any indication of differences.

We shall now consider the Mycenaean writing of consonant groups in detail, comparing it with the Cyprian treatment and the metrical evidence.

4. I have stated above that I believe that the syllabic structure of the word determines the writing of consonants in groups in Mycenaean, but I have not stated in what way. The rule is this:

1) E.g. α 291 (~ β 222) σῆμα τέ οἱ χεῦται καὶ ἐπὶ κτέρεα κτερετίζαι, on which see Ruijgh, *L'élément achéen dans la langue épique*, 83, Hoekstra, *Homeric Modifications of Formulaic Prototypes*, 143, and my *Development of the Proto-Indo-European Laryngeals in Greek*, 291.

consonants at the beginning of a syllable are written, those at the end are not ¹⁾).

For convenience I recapitulate the Cyprian treatment given above as shortly as possible; I shall discuss the Mycenaean facts in the same order. The Mycenaean treatment can be seen in the forms given in the last column. Essential is that a consonant which is written with the preceding vowel in Cyprian is not written in Mycenaean. It will be seen that the parallelism is complete.

	Cyprian	Mycenaean
I geminates	<i>apoloni</i>	<i>iqo</i> / (h)ikk ^u os /
II A 1 T + T	<i>timowanakotose</i>	<i>tekotone</i> / <i>tektones</i> /
2 T + R	<i>patiri</i>	<i>erutara</i> / <i>eruthrā</i> /
B 1 R + T	<i>aratemiti</i>	<i>atemite</i> / <i>artemitei</i> /
2 R + R		
a ₁ liqu. + liqu. (geminate)		
a ₂ + nas. <i>seperema</i>		<i>pema</i> / <i>sperma</i> /
a ₃ + <i>i, u</i> <i>alawo</i>		<i>kowa</i> / <i>korwa</i> /
b ₁ nas. + liqu. (> <i>mb-</i> , <i>nd-</i>)		
b ₂ + nas. (geminate)		
b ₃ + <i>i, u</i>		<i>keseniwijo</i> / <i>ksenwios</i> /
c <i>i, u</i> + R (diphthong)		
d ₁ <i>r</i> + <i>l</i>		
d ₂ <i>l</i> + <i>r</i>		
e ₁ <i>m</i> + <i>n</i> <i>memanamenoi</i>		<i>aminiso</i> / <i>amnisos</i> /
e ₂ <i>n</i> + <i>m</i>		
f ₁ <i>i</i> + <i>u</i> (diphthong)		
f ₂ <i>u</i> + <i>i</i> (diphthong)		(<i>mewijo</i> / <i>meiwjōs</i> /)
III A 1 s + T <i>arisitose</i>		<i>watu</i> / <i>wastu</i> /
2 s + R		<i>dasomo</i> / <i>dasmos</i> /
B 1 T + s ?		<i>akosone</i> / <i>aksones</i> /
R + s		? <i>asee</i> / <i>alseei</i> /

It may be useful to summarize and compare the Cyprian and Mycenaean treatments. Leaving out the geminates, and the nasals before a stop in Cyprian, we can establish the following rule:

The first consonant of a group in inlaut is treated as belonging to the preceding syllable (being written with the preceding vowel in Cyprian and being omitted in Mycenaean), except:

1) Householder, *Myc. Stud.*, 71-6, cites Eskimo and Philippine syllabaries as parallels.

		Cyprian	Mycenaeen	alphab. inscr.
II A 1	T + T	×	×	κκτ
2	T + R	×	×	ττρ
B 2 b ₃	n + w	unknown	×	(ννι)
e ₁	m + n	×	×	μμν
III A 2	s + R	unknown	×	σσμ
B 1	T + s	irregular	×	ξξ

(in which cases both Cyprian and Mycenaean write the consonant with the following vowel). (The meaning of the last column is explained below).

As to the metrical evidence, in Homer each syllable followed by a consonant group is long, whatever the structure of the group. It is evident that this asks for comment in cases II A and II B 2 b₃ and e₁. In all other cases the metrical evidence is in agreement with the Cyprian and Mycenaean evidence, but in the cases mentioned it seems to be contradictory. I shall therefore discuss metre only in these special cases.

As to syllabification in general, it must be borne in mind that the syllabic trench need not fall before or after a consonant, but may as well fall within a consonant. In the case of two consonants there are thus five possibilities: |C₁C₂ C₁|C₁C₂ C₁|C₂ C₁C₂|C₂ and C₁C₂|. See e.g. Schwyzer, *Gr. Gr.*, I, 237.

We shall now discuss each of the categories of the scheme.

I It is clear that the first element of a geminate belongs to the first syllable, so that it is not written in Mycenaean. There is hardly any certain case except *iqo*.

II A (1 + 2) Both groups are well represented, the second being very frequent. For the first I cite:

aikupitijo / *aiguptios*

and followed by a third consonant:

arekuturuwo / *alektruōn* /
reukotoro / *leuktron* /

This is the category requiring most extensive comment. Two things are evident: 1. Cyprian and Mycenaean have the same treatment; 2. this treatment suggests that the group as a whole belongs to the

following syllable ($|C_1C_2$), while the metrical evidence suggests that the first consonant belongs to the preceding syllable ($C_1|C_2$). This seeming contradiction can easily be solved by assuming that the syllabic trench fell within the first consonant, $C_1|C_1C_2$, so that C_1 belonged to the first syllable, which explains that this syllable is long as appears from metrical texts, but also to the second, which explains why in Cyprian and Mycenaean it is written with the following vowel. In Mycenaean one might say that the same consonant was omitted and written at the same time (which amounts to its being written, while the fact that at the same time it is also not written is not very striking). In Cyprian in any case this line of reasoning is impossible: it had to be written in combination with the preceding vowel and the following vowel, which is not done, so that a choice had to be made. That the part of the consonant that belonged to the next syllable was chosen is probably caused by the fact that the explosion was 'stronger' than the implosion. This may then also have been the reason for the Mycenaean treatment.

This is of course a hypothesis, though an attractive one because it would solve an irregularity. Theoretically it is most likely that there is no contradiction between the evidence of the two scripts on the one hand, and the metrical evidence on the other as we have seen above (§ 3).

There are also other indications that the interpretation that the syllabic trench fell within the first consonant is correct. In Greek inscriptions we often find that the first consonant of a group is written double. For A 1 ($T + T$) we have e.g. *εκκτος, τεθαππται* (in a group of three consonants *εκκπραξαι*). This is generally assumed to indicate that the syllabic trench lay within the first consonant. This spelling is found in other languages too (Lat. *mattrona*, Skt. *pattra*).

It is remarkable that these cases occur exactly where we would expect them on the basis of the above: A 1, A 2 and B 2 e_1 .

A 1 See the words just cited.

A 2 $T + R$: *αλλοττριος, πεττρινον, διππλει*.

B 2 $e_1 m + n$: *μεδιμνον, ιαρομναμονες, γυμνικος*.

I think it permissible to compare the group III B 1 T + s. In Mycenaean the treatment is consistent:

dekisiwo / *deksiwos* /
mogoso / *mok^usos* /
ewepesesomena / *ewepsēsomena* ⁽¹⁾
kupesero / *kupselos* /
rapasako / *lampsakos* /

and with a third consonant following

aikasama / *aiksmans* / (αἰχμή, acc. pl.).

Here too we have a group beginning with a stop. Parallels in the alphabetic inscriptions are forms like Πολυξξενα, where ξξ probably indicates *kks*. In Cyprian the treatment is not clear, both the preceding and the following vowel being used. (Cf. on the exceptions p. 341 n. 1).

Compare below on II 2 b₃ (*nw*) and III A (*s* + T/R).

B 1. The treatment is frequent in both dialects. With Cypr. *kolokiai* Γολγιά cf. Myc. *kako* / *khalkos* /.

B 1 a₂. It is by no means self-evident that the syllabic trench fell between e.g. *r* and *m*. Skt. *dharmma* suggests that it could fall in the nasal; as far as I know there are no Greek writings of this kind.

B 2 a₃. No cases with *ḡ* are known. In Cyprian this group had already disappeared: αἰλος ('ἄλλος', from *aiḡo-*).

B 2 b₁. In these groups the epenthetic consonant was already present in Mycenaean, as appears from *adirijate* / *andriantei* /; cf. on Cypr. *atiriase* in § 2.

B 2 b₃. I know of no Cyprian form with this group. In Mycenaean the writing of *n* is remarkable. Cf. *perusinuwo* / *perusinwos* /. There are no parallels in alphabetic inscriptions, probably because the groups had disappeared. One might compare—as a mere parallel—Thess. προξεννιουν, where *ι* became consonantal. Phone-

1) For this form see my *Development*, 67.

tically the group *nw* resembles *mn*. Further, we know that Attic had ξένος from ξε|ν|φος, while in Homer we have ξείνος indicating a form ξεν|φος in which the *n* was (at least also) part of the first syllable (which is in accordance with the general rule about two consonants). A phase *n|nw* is then quite probable, and we need not doubt that Mycenaean indicates this.

B 2 c. Beside *u* to indicate the second element of an *u*-diphthong we also have some instances of consonantal *w*:

ewiripo / *euripos* /
rawarata / *lauratas* / beside *raurata*

See also under *f*₂.

There is nothing comparable with *i*. This suggests that in a *u*-diphthong part of the *u* belonged to the following syllable, while this was not the case with *i*. This might explain why *u* in a diphthong is always written (*aroura*), *i* generally not (*kotona* / *ktoina* /), as representing *arou|wra* vs. *ktoi|na* (or *ktoin|na*), not *ktoi|jna*.

B 2 d. No examples.

B 2 e₁. Cf. *eruminija* / *elumniai* /. See the discussion above under A.

B 2 e₂. No example.

B 2 f₂. *mewijo* / *meiwjōs* / beside *meujo*
diwijo / *diwjōs* / beside *diujo*.

See above at c.

III A. Here we have a problem. In *s* + R we find that the *s* is written in Mycenaean: *dasomo* / *damos* /, *wisowopana* / *wiswo-* /. As this group makes position, it seems probable that the syllabic trench fell within the *s*, and this is confirmed by inscriptional forms like *χοσμος*, *αναδεσζιμους*.

This is quite in line with what we saw above. The problem, however, is that both Cyprian and Mycenaean treat *s* before a stop (A 1) as not belonging to the second syllable. For Mycenaean compare also

ekara / *eskhara* /
pakana / *phasgana* /.

First there is the difference in treatment between $s + T$ and $s + R$, which could simply be accepted, but there is also the fact that inscriptions have Fασστυοχω , Ασσκλαπιος , indicating that the syllabic trench fell within the s , not after it. The interpretation is not easy. I think it must be connected with the fact that s before a stop was also not written at the beginning of the word. See there (§ 6).

B 1 $T + s$. See above under II A.

B 2 $R + s$. *Asee* is supposed to be ἄσος (in the dat.); a different treatment could hardly be expected.

As far as our evidence goes the agreement between Mycenaean and Cyprian is complete, if we assume that the determining factor is the syllabic structure of the word.

5. The situation in an- and auslaut deserves special consideration.

In anlaut, of course, all consonants belong to one syllable. Forms as *wirino* / *wrinos* / are then unproblematical.

A problem, however, is formed by s , which is not written when initial; cf.

pema / *sperma* /
tatomo / *stathmos* /

This is quite unexpected. Doria (in *Studia Mycenaea*, 59-64) suggests that sT was monophonemic (as it would be in Old Germanic) and therefore was written with one consonant only. But I see nothing that backs this assumption; the fact that a short vowel produces a short syllable before a word like Σκαμάνδριον in Homer (B 465) is much easier explained as a metrical licence because otherwise the word could not be used in a hexameter. To my mind—an idea also expressed by Tronskij—it is more probable that the reason must be found in the nature of the group $s + \text{stop}$: the aperture of s is greater than that of the stop, so that a syllabification $s|per-$ could be expected. This fact is of course the cause of the rise of prothetic vowels before such groups, as are known from various languages, cf. Spanish *escuela*, French *école*; Turkish

istasyon. Then *s* probably stands at the end of a syllable. We could in our case—without such a prothetic vowel—also think of a syllabification *sp|per-* in which *s* has vocalic function¹). It seems to me that the same fact caused the omission of *s* before a stop in inlaut: the syllabic trench might have been *s|sT*, but of the syllable *sT-* only *T* was written as in anlaut.

In auslaut all consonants stand of necessity at the end of the syllable, so that they are not written. Only forms like *wanaka* / *wanaks* / could provide a problem. If this is not simply a sign (*ka*) added to make the form more transparent, one could think—in connection with the above—of a syllabification *wa|nak|ks*, which finds some support in writings as $\kappa\omega\lambda\iota\zeta\varsigma$.

APPENDIX I. Cyprian *alawo*

As to *alawo* there has never been any doubt of the reading *alw-*, but as there is some hesitation about the interpretation of the form, it may be discussed at some length; I think we can arrive at a clear understanding.

The word occurs thrice in the great Idalion inscription, lines 9, 18 and 21, so that there is no problem as to the correctness of the form. For the meaning of the word as it appears from the context I cite Buck, *Gr. Dial.*, 212: “the meaning is partly the broad ‘tract of cultivated land, plantation’, and partly more specific ‘garden’, ‘vineyard’ or ‘orchard’. Here, as shown by ll. 20, 21, the $\alpha\lambda\omega\nu$ is more specific (‘vineyard’) than the $\alpha\tilde{\alpha}\pi\omicron\varsigma$, which here has the broader sense”. Masson (p. 240) has the same interpretation. There is, then, no problem as regards the meaning of the word.

On the basis of its meaning and the general resemblance of the form *alawo* is considered to belong to the group of $\alpha\lambda\omega\varsigma$, $\alpha\lambda\omega\acute{\eta}$. Schwyzer (*Gr. Gr.*, I, 479) rejects this connection (following Schulze) because of the difference in meaning between ‘threshing floor’

1) One could compare Lycian *sttala*, *sttrat*], which forms might indicate that the syllabic trench falls after *s* in the following stop. However, of a group of consonants the last is often written double in Lycian: *Pttara*, *Terssikleh*, *χssadrapa* (see G. Neumann, *Lykisch*, 372, in *Altkleinasiat. Sprachen, Handb. d. Orient.*). It may be that the syllabic trench fell within the last consonant of the group (*Terssikleh*, *χistte*, *Arttumbara*). It is striking that in Ionic we find forms like $\omicron\kappa\tau\tau\omega$, which seem to point to the same syllabification.

(ἀλωή) as against 'orchard, vineyard, garden'. I think Chantraine is right in dismissing this argument (*Dict. étym. de la langue grecque*, s.v. ἀλωή). First it is clear that in Homer ἀλωή has both these meanings. Then, the explanation of this fact, urged by Frisk and Chantraine, is given by A. D. Ure, *Class. Quart.* 49 (1955), 255-30. He demonstrates, specially from η 122-5, that ἀλωή was (and is) an enclosure containing a vineyard, a wine-press and a drying-floor, which certainly is the same as the threshing-floor; this is indicated by its Italian counterpart and present-day practice in Greece. After all, this is a fairly general disposition: on the land immediately around the farm (i.e. the building) there are some fruit-trees, vegetables (η 127) and the threshing-floor. (I have the same arrangement on my small farm in the North-East of the Netherlands, the threshing-floor here being inside the building). When we find 'the threshing-floor', 'the vineyard' and 'the whole of them' as the meanings of ἀλωή etc., it is probable that the meaning spread from a part to the whole. The threshing-floor may have been this starting point, but I cannot demonstrate this. The point might be confirmed if Old Swedish *lō* (see below) 'threshing-floor' were cognate.

So much on the semantic side. On the formal aspect we can be more definite than e.g. Frisk. Cyprian *alawo* can be read either as *alaw-* or as *alw-*; there are no other possibilities. For *alw-* we have the support of Doric forms, e.g. *αλος* in Sicily (ποτὶ τὰν αλον καὶ ὑπὲρ τᾶς αλου, Schwyzer, *Del.*³, 313.28 ff). This form may continue *αλF-o-, an interpretation which is also possible for *alawo*. For *alaw-*, on the other hand, there is no indication.

That *alawo* is indeed an *o*-stem derived from *alw-*, αλF- is also evident when we consider the formation of ἄλωος, ἀλωή. These words must contain the *μ* that appears in *alawo*. Since αλω- cannot represent αλFω-, because the *a-* of ἀλωή is short, the F must have been lost after the ω. It is then probable that αλω- contains a suffix *δμ*. Ἀλωή is then a derivative from the stem *alōμ-*. For the suffix *δμ* in words of this type see Schwyzer, *Gr. Gr.*, I, 479 f. and Kuiper, *Notes on Vedic Noun-inflexion*, 36-8, 40-53, 56 f. The form *δμ* of this suffix was originally confined to the nominative, the oblique cases having *μ* (and the accusative *εμ* or *ομ*). The form αλF-, then, is the

stem of the oblique cases, and *alawo* can hardly be anything but a thematization of this stem. (The situation is the same as e.g. λειμών vs. λίμν-η, from an original paradigm **lei-mōn* **li-mn-ós*). It may be added that a stem αλῶ- (for *alawo*), as preferred by Masson, 240, is historically incomprehensible (it was rightly rejected by Boisacq). The study of the forms ἄλωζ ἄλωή, then, confirms that αλῶ- is the correct reading of *alawo* (and not *αλαῶ-) ¹⁾.

Linguistically this word is not without importance, because it is, as far as I know, the only word in which we have traces of both *ōu* and *u* in Greek.

The original form of the word may have been **h₂el-ōu-s* (or **h₂el-ōu-s*), gen. **h₂el-ū-ós* (*h₂el-*, *h₂el-* and *h₂el-* all giving Gr. αλ-). For the Greek forms, *sel-* *sl-* is also possible, but this form cannot be connected with Old Swedish *lō* 'threshing-floor'. Finnish has *luuva* 'id.' borrowed from Germanic. This points to a basic form **lōua*. This form can be derived from the inflexion reconstructed above, when we assume that in Germanic the ablaut was levelled down so that the zero grade of the root was combined with the lengthened grade of the suffix, **h₂el-ōu-*. (For this type cf. e.g. Lat. *dātōr-*, which combines zero grade **dh₃-* with lengthened grade *-tōr-*, though this combination was probably not given in the PIE inflexion which had **deh₃-tōr* (δῶτωρ), gen. **dh₃-tr-ós*). If this etymology is right, it confirms that the word began with a laryngeal and not with *s* (though a vocalic beginning is not impossible, **elōus* **lūós*, the *el-* form being everywhere lost).

1) The interpretation of ἄλoux· κῆποι Hsch. remains uncertain. It is of course neuter plural, and if it represents αλῶ-α or αλωῶ-α, there is no problem. But it might indicate αλοῦ-α. This form can be explained as follows. The type nom. -*ōi*, (acc. -*ei-m* or -*oi-m*), gen. -*i-ós* (Skt. *sakhā*, dat. *sakhye*) was reduced in Greek to nom. -*ōi*, elsewhere -*oi-* (type *Λητώ*, acc. *Λητώ* < -*oy-α*, *Λητοῦς* < -*oy-ος*). In the same way *ōu(s)*, *eu-(m)*, *u-(os)* might have been levelled down, not to *ōu* only, but to *ōu* (nom.), *ou*; these two degrees of simplification are also found elsewhere: -ων -ωνος vs. -ων -ονος, -ωρ -ωρος vs. -ωρ -ορος. This means that there might have been a Greek inflexion αλωζ αλοῦς. Then αλοῦ-ον (n. pl. -α) could be a thematization of this stem αλοῦ-*α*. This is, to my mind, perfectly possible; there are, however, no other instances of *ōu/ou*, and hardly any of *ēu/eu* (for *πηχεῖ*- see Kuiper, *Notes*, 45). But it should be stressed again that it is not certain that ἄλoux represents αλοῦ-α.

APPENDIX II. ἀνδροτῆτα

The epenthesis in Mycenaean (p. 347 above) is of importance for the question of Homeric ἀνδροτῆτα. If the word that stood where we find ἀνδροτῆτα was indeed derived from the stem of ἀνήρ, we can be sure of two things: 1. the form did not have a vocalic sonant, since these had disappeared already in Mycenaean and are represented there by vowel + consonant or *vice versa*; 2. in the group *anro* the *d* had already developed in Mycenaean. There are some formulae of which we have reasons to believe that they date back to Mycenaean times, but that we should have formulae that would be still a great deal older is most improbable. So also Ruijgh, *L'élément achéen dans la langue épique*, 74. For our formula it can be demonstrated that it cannot be so old, if ῥβη is indeed cognate with Lithuanian *jegà*. For in that case the word had initial *ǵ-*. This *ǵ-* is in the time of our Mycenaean documents apparently in a transitional phase, as it is sometimes written and sometimes not; in any case the 'verbal prefix' *jō-*, probably **ǵō-*, shows *ǵ-* still present. For a period before our documents (the period in which the vocalic sonants were still present as such), then, we may be sure that *ǵ-* was a consonantic phoneme. But in ἀ(ν)δροτῆτα καὶ ῥβην | the καὶ preceding ῥβη is short, which shows that the *ǵ-* was lost when the formula was made. (It is not allowed to assume a metrical licence here, since both καὶ and ῥβη can be easily fitted into a hexameter, and since then the formula would present *two* deviations). Moreover, in a formula of Mycenaean date we would rather expect τε than καὶ. Our formula can therefore hardly be of Mycenaean date ¹).

The word occurs in ἀνδροτῆτα καὶ ῥβην (Π 857, X 363) in identical passages (Π 855-8 = X 361-4) and ἀνδροτῆτά τε καὶ μένος ῥύ (Ω 6).

It is useful to cite the ancient comments on the word. Aristarchos says: οὐδέποτε ἀνδροτῆτα εἶρηκε τὴν ἀνδρείαν, ἀλλ' ἡγορέην. This means that the normal word for courage was ἡγορέη in Homer, so that another word (from the same stem) would be strange, and is therefore suspect. Scholion B has: ἀνδροτῆτα οὐ τὴν ἀνδρείαν, ἀλλὰ τὴν

1) The argumentation of Hoenigswald, *Pratidānam* (Festschrift Kuiper), 20-3, escapes me completely. Whether we accept his (ə)bnr̥b or (ə)bnro, both are *VnrV*, of which the first syllable could only be long. In any case the Mycenaean -*d*- refutes the whole idea.

άνθρωπότητα, τὴν ἀνδρὸς φύσιν. ἀνδρείαν γὰρ οὐ καταλείπει, ἀρετὴν οὖσαν ἰδίαν. To my mind the meaning ἀνθρωπότητα has only been constructed on the basis of the reasoning given, so that we can neglect it.

The reading ἀδροτῆτα is rejected by Leaf, without argumentation and I do not see what argument there could be. 'Ἀδρός means according to LSJ 'full-grown, ripe, well-grown, fine' used of plants, animals and men. Thus ἀδρότης agrees remarkably well with ἥβη; one could say that it indicates the physical side of ἥβη. Two arguments could be brought against it. First ἀδρότης occurs elsewhere only relatively late, the first instance being in Theophrastus. Such arguments are of course important, but they need not be decisive. Either the word is not known to us from the intervening time by pure accident, or it could have been lost from the language, and at a later date have been formed again, for the derivation of ἀδρότης from ἀδρός was possible at any moment in classical Greek (cf. Chantraine, *Formation des noms*, 293 ff.). The other point is that one should explain why our texts also present ἀνδροτῆτα. The reason is the same as why modern scholars did make so much of the whole problem: both they and ancient critics rejected ἀδρότητα. This word has of course a very concrete, physical force, and I think it was not understood that this is exactly what we would expect in the older elements in Homer ¹). For the meaning one could compare the use of (ἐ)ερσήεις of a plant (Ξ 348 λωπὸν θ' ἐρσήεντα) and of a young man just killed (Ω 419 οἶον ἐερσήεις κεῖται, Ω 757 νῦν δέ μοι ἐρσήεις καὶ πρόσφατος ἐν μεγάροισι | κεῖσαι); (ἐ)ερσήεις to my mind means something like 'in which the saps of life are present'. So it is quite understandable that in antiquity the word (perhaps mostly used of animals and plants, as by Theophrastus) was reinterpreted as 'courage, *virtus*' and then changed to ἀνδροτῆτα, thus rejecting the 'biological' aspect of the original form. This gave a metrical problem, but this was not serious, as there was already one: αδρο- counts — ∪. Here

1) On the antiquity of the passage see B. Snell, *Die Entdeckung des Geistes*, 24 ff. and M. Leumann, *Homerische Wörter*, 218. Though I think that it is not of Mycenaean date, it could still be old.

the first syllable was simply used as if it were short, since the word could otherwise not be used in a hexameter.

I think Ω 7 ἀνδροτῆτα τε καὶ μένος ἦν suggests that here the word was already interpreted as 'courage', as appears from μένος ἦν as against ἦβη in the other passage. (We should then reconstruct in our text ἀδρότητα in Π 857 = X 363, but ἀνδροτῆτα in Ω 7! I want to emphasize that this does not imply that I assume two different poets for our *Iliad*. It is very well possible that the (one and only) poet interpreted ἀδρότητα, in Π 855-8 = X 361-4, which was an old fixed part of the epic tradition, as ἀνδροτῆτα and used it in this meaning in a new context; it would imply of course that the (one) poet thought that in Π and X it meant ἀνδροτῆτα: on this basis one might adopt this reading everywhere; when writing ἀδρότητα we would 'restore' it to its original form and meaning).

The problem was recently discussed by J. Latacz, *Glotta* 43 (1965), 62-76. I agree with nearly all his arguments, but not with his conclusion. He holds that the oldest text had αδρο-, but that it always was meant as ἀνδρο-. I think he is right when asserting that the ψυχή did not leave ἦβη as 'the age of maturity' or other properties of the dead, because these are (also) properties of the ψυχή. The only properties the ψυχή has not are those of corporality and power ('Körperlichkeit und Kraft'). That ἦβη has this meaning is known (Latacz points out that ἦβάζω has this association even more clearly). He therefore holds that ἀνδροτῆτα means '(ein-lebendiger-)Mann-Sein'. When he then says that this agrees with the interpretation of antiquity as ἀνθρωπότητα, τὴν ἀνδρὸς φύσιν, he is evidently wrong: he reads too much in ἀνδρὸς φύσιν, which only explains ἀνθρωπότητα, and ἀνθρωπότητα can only be 'the fact of being *homo sapiens*' and has nothing of 'Körperlichkeit'. To me it is evident that the expected notion of 'Körperlichkeit' testifies for ἀδρότητα (of which Latacz himself asserts that it means 'Dicke, Reife, reife Kraft'). As for me we should return to Dindorf's "veram scripturam ἀδρότητα esse hodie constat" ¹).

1) Addendum. The editor of this journal kindly drew my attention to two articles of Mühlestein, who defends an original ἀντρῆτα. In *Mus. Helv.* 15 (1958), 224 n. 20 he admits that it gives "eine höchst erstaunliche Chronologie" (as the form must be older than our Linear B documents); in

APPENDIX III. Etruscan interpunction

The interpunction in Etruscan and Venetic, which is derived from it, has been the object of renewed discussion in the last years; the two most recent articles known to me are Hoenigswald, *Atti 1° Congr. Mic.* (Rome 1969), 410-6 and Lejeune, *REG* 80 (1967), 40-59.

The facts are that the following sounds are put between dots:

- a) consonants at the end of syllable;
- b) vowels at the beginning of a word.

It has been proposed that this curious phenomenon is a reminiscence of an Etruscan syllabary. Lejeune gives the most convincing hypothesis of the course of events. Suppose there was an Etruscan (Tyrrhenian) syllabary, using spelling rules of the Cyprian type, which remained in use for religious purposes till after 700 B.C.; when alphabetical writing was introduced, syllabic writing became more and more difficult, which caused diacritical marks to be added to make it more easily readable; this interpunction was then taken over when the texts were rewritten in alphabetic script.

I would like to suggest one modification of this theory. I think there are two difficulties in this proposal: 1. what did the added marks mean? 2. why were they taken over in alphabetic writing? As to the first, Lejeune states: "spécifiant notamment les signes CV employés avec valeur C". This leaves two facts unexplained (of which difficulty Lejeune is well aware): a. it does not hold for initial vowel (which is not C instead of CV); b. it does not explain why the *c* of a consonant group (e.g. *cle*) is not punctuated, for it is a clear instance of C instead of CV.

To my mind, all these difficulties can be solved at once in the following way. Suppose a syllabary of the Mycenaean type (of the

Athenaeum N.S. 36 (1958), 365 n. 9 he defends this chronology as follows: "le caractère guerrier et le niveau élevé de la civilisation mycénienne, dès ses débuts, amènent à supposer l'existence de chansons de geste grecques bien plus anciennes que les tablettes". Of course the possibility of so high a date cannot be entirely ruled out, but this fact seems hardly enough to prove it. I confess that it is very tempting to posit for Ἐνυαλίφ ἀνδρειφόντη an original ἀνγφόντη, but here the situation is different in that this could well be a very ancient formula. As to ἀνδροτῆτα I keep the doubts expressed above.

‘underexplicit’ type, as Hoenigswald calls it), which does not write a consonant at the end of a syllable, and which also has no signs for pure vowels. This would mean that a word like **amarcle* was written *macele*. Suppose then that (religious) texts written in this type of script were written out in an alphabetic script. The dots then indicate the sounds that are not indicated by the original text: *.a.ma.r.cle*. This explains 1. that the dots mean the same thing in all cases and why they are not used before and after *c* in *cle*; 2. why this interpunction was used in *alphabetic* texts. That the syllabary was of the Mycenaean type rather than of the Cyprian is only the more probable assumption when we consider the date of departure of the Etruscans from Asia Minor (from where they will have brought it with them).

As a whole, of course, the ‘syllabary-theory’ is very hypothetical, and the fact that the interpunction was taken over for writing Venetic is most astonishing.

OEGSTGEEST, Prinsenlaan 23