

THE LABIOVELARS  
IN MYCENAEAN AND HISTORICAL GREEK

by OSWALD SZEMERÉNYI

In the field of phonology, Mycenaean Greek presents as already accomplished many complex developments known from historical times; such are, e.g., *bh*, *dh*, *gh* > *ph*, *th*, *kh*; *s* > *h* >  $\emptyset$ , or *ty* > *ss*. But there is one important set of sounds where Mycenaean lags behind and shows its archaic character.

As is known, the Indo-European labiovelars, velar stops accompanied by simultaneous lip-rounding<sup>1</sup>, are represented by simple labials, dentals or velars in historical Greek. Thus IE *\*k<sup>w</sup>is* and *\*penk<sup>w</sup>e* appear as *τίς* (Thess. *κίς*) and *πέντε/πέμπτε*; *\*k<sup>w</sup>oteros* and *\*k<sup>w</sup>āli-* as *πότερος* and *πάλι-κος*, while *\*g<sup>w</sup>ou-k<sup>w</sup>olos* gives *βουκόλος*. One of the major surprises held by Mycenaean is the fact that the original labiovelars did not reach this stage by the time of the tablets: for them a special set of signs is used. M. Lejeune has shown in a detailed study<sup>2</sup> that at the time the Linear B signary was devised, signs of Linear A and at least one new sign were used to denote the original labiovelars.

A much more difficult question is whether the sounds so denoted were still labiovelars. Lejeune has pointed out that the Mycenaean forerunner of *ἕππος* is spelt with the same sign as, e.g., *βουκόλος* from *\*g<sup>w</sup>ou-k<sup>w</sup>olos* (= *gou-qoro*) or *ἀμφίπολος* from *\*amphi-k<sup>w</sup>olos* (= *apiqoro*). This would indicate that by the time the signary was constituted there was no difference between an

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<sup>1</sup> See, for a restatement of this old definition, S. W. Allen, *Lingua* 7, 1958, 113.

<sup>2</sup> See now *Mém.* 316; on the problem of labiovelars the same paper 285 f. On *pa<sub>2</sub>* = *qa*, see also Georgiev, e.g. *Izvestija Akademii Nauk* 14, 1955, 275; *Études Mycéniennes* 1956, 53 f; Heubeck, *IF* 63, 1958, 113 f.; 65, 1960, 258. It is rather disappointing that, at this late hour, P. Ramat can still speak of *pa<sub>2</sub>* = *pa* (*PP* 66, 1959, 193 f.) and maintain that *pate* represents *k<sup>w</sup>ā-* (195), although this error was shown up three years before, see Szemerényi, *Gl.* 35, 1956, 103<sup>1</sup>; Winter, *Language* 32, 1956, 506; and more recently Heubeck, *IF* 63, 1958, 136; Lejeune, *Mém.* 290 f.

original  $k^w$  and the sequence  $k + w$  found in IE *\*ekwos*. On the other hand, the sequence  $k + w$ , that appears at morpheme junctures when a suffix beginning in  $w$ - is added to a stem ending in a velar, has so far never been found represented by this set. We have, e.g. *tetukowoa* =  $\tau\epsilon\tau\chi\text{-}\Phi\alpha$  or *parakuwe* and *parakewe*, indicating  $-kwe$ .

Further complications would be introduced if sign 87 were to be identified as *kwe*; in that case one could hardly see the point of differentiating  $-kw$ - and  $k-w$ - by using for the latter, say in *kwe*, not only *kuwe* and *kewe* but also *kwe*. But if the suggestion that sign 87 is *twe* should prove correct, this difficulty disappears.

Now it might be argued that the difference in the use of the labiovelar set on the one hand and the disjunct set *kewe/kuwe* etc. on the other, represents a linguistic reality. Just as  $t(h)y$  develops into Attic  $-\sigma-$  within a word, e.g.,  $\delta\sigma\sigma$   $\mu\acute{\epsilon}\sigma\sigma$ , but into  $-\tau\tau-$  at the morpheme juncture in, e.g.,  $\mu\acute{\epsilon}\lambda\iota\tau\tau\alpha$   $\pi\lambda\acute{\alpha}\tau\tau\omega$ , so there is an obvious difference between *ikwo* on the one hand and *tetukwoa* on the other: the latter does not seem ever to have developed into  $\tau\epsilon\tau\omega(\phi)\alpha$ <sup>3</sup>. As against such considerations, we must not overlook the fact that we would be ascribing a completely anachronistic philological training to our Mycenaean scribes. Yet we see that for them there was no difference between *ikkwo-s* and *amph-ik<sup>w</sup>o-los*, and we would in any case expect the difference between single and geminate consonants to be ignored, since even in the historical period it took the scribes a long time to realize the importance of writing geminates. It is even less likely that morpheme-boundary would have been a meaningful concept.

It seems therefore that we are forced to conclude that the difference between  $k^we$  and *kewe/kuwe* (and *kwe*?) was of a different character. In the case of the labiovelars followed by a front-vowel the obvious inference would seem to be that  $k^w(e/i)$  had already been palatalized, so that the real sound was something like  $tʃ^w(e/i)$ <sup>4</sup>. In that case it is easy to understand why at the morpheme-boundary, where the velar was retained in the language, the sign  $k^we$  or  $k^wi$  was unusable. An indication of such a phonetic development would appear in the spellings *odakweta*, *odakeweta* and *odatweta* if the latter were accepted as the original. Furthermore, the assonance of *tinwasijo* and *ginwaso* may yet turn out to be far from deceptive<sup>5</sup>.

This interpretation entails a further modification of current views. We are still under the spell of the grid-system. This, combined with the uniform Indo-European antecedent  $k^w$  before any vowel, makes us inclined to accept the usual interpretation of the set as *qe qi qo qa*. But if *qe* and *qi* are in rea-

<sup>3</sup> See Allen, *Lingua* 7, 1958, 119<sup>31</sup>.

<sup>4</sup> On the phonetic details see Allen, l. c., 116f., and, on  $k^wi$ , p. 122 f.

<sup>5</sup> See for the time being, Lejeune, *Mém.* 300; on *odatweta* also Gallavotti, *Mycenaean Studies*, ed. E.L. Bennett, 1964, 57.

lity palatalized sounds, we have to give up this uniform interpretation. For obvious reasons *qa* and *qo* can never have represented *tya tyo* or *tš<sup>w</sup>a* and *tš<sup>w</sup>o*. Hence it follows that, in the synchronous system of Mycenaean, *qa* and *qo* are not to be taken in one series with *qe/qi*. Their appearance in one section of the grid has a diachronic foundation but this must not mislead us into construing their synchronous phonetic (and phonemic) status on this diachronic basis. What exactly the phonetic nature of these sounds was, is not at all certain. The argument used above would suggest that they must by then have moved away from *k<sup>w</sup>* or *k<sup>w</sup>* in the direction of the later development; but exactly how far cannot be established with the present evidence.

From the point of view of historical phonology one further problem arises. Some Greek dialects develop the voiceless labiovelar (*k<sup>w</sup>*) into a labial even before front-vowels, notably the Aeolic group. Common Greek πέντε, for example, appears as πέμπε in Lesbian and Boeotian. This labialization is the rule even in the other dialects with the voiced stop *g<sup>w</sup>* and perhaps even with the voiceless aspirated stop (*kh<sup>w</sup>*), if they are followed by *i*; e.g. IE \**g<sup>w</sup>i-* 'live' gives βίος everywhere, and *g<sup>w</sup>hi* is perhaps represented by ὄφις. But with the voiceless stop *k<sup>w</sup>*, the labialization is confined to the Aeolic group. However, it has been argued that this labialization is also found in Arcado-Cyprian. Thus the Cyprian forms πείσει πεισε<sup>6</sup> 'shall pay' correspond to Attic τείσει, τείση (from \**k<sup>w</sup>ei-*) and πεμπαμέρον also presents π, not τ. But here π may be regular before *ā* and πεισε, which in any case curiously contrasts with Arcadian ἀπυτεισάτω, ἀπυτειέτω, ἔστεισιν<sup>7</sup>, may be due to *o*-grade forms (e.g. ποινά) where π was regular. But Strunk has recently gone even further and attempted to enlarge the number in Cyprian, and add examples from Arcadian, and even Pamphylian<sup>8</sup>. In his view *oφi* in the Idalian tablet (l. 29) represents *oφe* from \**yo<sup>k<sup>w</sup>e</sup>* (= *oτε*), and Arcadian ινοφορβίεν derives from \**bhrsg<sup>w</sup>i-* found also in Li. *brizgilas* 'bridle, rein'; the Pamphylian name Πελώρας is identical with Hom. πέλωρ(ιος). But none of these comparisons is tenable or convincing. Mycenaean *ote* shows that it is useless to trace an alleged Cyprian *oφe* to \**yo<sup>k<sup>w</sup>e</sup>*, since the conjunction has an original dental. Mycenaean *poqeja* as forerunner of φορβειά shows the labiovelar but the labial development is due to φορβā (Myc. *poqa*) and -φορβος. The Pamphylian name may, but need not, be connected with πέλωρ; even if it is, a labiovelar is not proved for this word as I hope to show elsewhere; cf. also the text further on.

This question is, we now see, less important from the point of view of Greek dialectology than from the point of view of the constitution of Epic

<sup>6</sup> See now Thumb-Scherer, Griechische Dialekte II, 160.

<sup>7</sup> Schwyzer, Delectus 656, 35, 43, 37.

<sup>8</sup> K. Strunk, Die sogenannten Aolismen der hom. Sprache, Köln 1957, 32f. See my review JHS 79, 1959, 191f.

Greek. Since the labialization is post-Mycenaean there is, from this side, no real obstacle to linking labializing Aeolic more closely with non-labializing Mycenaean: any dialect may develop different features from the original 'stock'. But from the point of view of Homeric language, it is important to know whether labializing forms demand an Aeolic stratum or can still be reconciled with a direct descent from Mycenaean Epic. It is worth recalling that the number of labializing forms in Homer is minimal. Altogether there are five Homeric forms that are still claimed as Aeolicisms<sup>9</sup>:

1. πέλωρ and its derivatives
2. βέρεθρον = Att. βάραθρον
3. πέλομαι and its group
4. πίσυρες/πίσυρας = τέτταρες
5. φήρ = θήρ

But a brief examination shows that this is a rather heterogeneous group.

1. The reason for assuming a labiovelar in πέλωρ is the Hesychius-gloss τέλωρ· πελώριον, μακρόν, μέγα; τελώριος· μέγας, πελώριος. The word also occurs in the interesting epigram found in Memphis, which begins with the line:

στῆθι λάον κατενώπα τελώριον ἐν τριόδοισι<sup>10</sup>

This poem of six elegiacs, written in Egypt, is surprisingly lavish with high-flown words. In addition to ὑπατος, πύματος (with a not very clear play on these words) and παρὰ θῖν' ἄλός, we find ἔρεσσι, ἐρέων — again only known from Hesychius' gloss ἐρέας· τέκνα. Θεσσαλοί, ἐρέεσφι· τέκνοις — and κέλωρ ('sound, voice' = 'lament'?). It is therefore quite in order that τελώριος, another unusual word, should also appear. The cumulative effect is of course rather different. One cannot help feeling that the author drew on a list of words (epic?, or merely 'recherché'), such as has recently been published — again from Egypt<sup>11</sup>. The words τηλέβιος (hapax, 'long-lived'?) and θεσπέσιος

<sup>9</sup> See Chantraine, *Grammaire Homérique* I, 113f. and Conclusion (1957) 509. Note however that βείομαι, claimed as an Aeolicism (p. 495) is in no way different from ἐνεπε sim.; δε(ι)ομαι was obviously out of the question, since βίος, the leading form of the group, asserted its supremacy. Thumb-Scherer (II 209) seem to ascribe an Aeolicism πῆλυι to Homer. On the problem of Aeolicisms see also Strunk, *Die sog. Äolismen der homerischen Sprache*, 1957, 20 f.; Ruijgh, *L'élément achéen dans la langue épique*, 1957, 2.7f. (both reviewed by me at *JHS* 79, 1959, 191-3); Webster, *From Mycenae to Homer*, 1958, 159f., esp. 161; Kirk, *The Songs of Homer*, 1962, 149; Palmer, at: *A companion to Homer* (ed. A. J. B. Wace & F. H. Stubbings), 1963, 79.102.

<sup>10</sup> I am indebted to P. M. Fraser for identifying the epigram in Peek's *Griechische Vers-inschriften* I, Berlin 1955; it is no. 1313, now dated by Peek in the 2nd c. A.D. (as against Puchstein's 1st c. B.C.).

<sup>11</sup> Cf. *The Hibeh Papyri* II, E. G. Turner, 1955, 1f. "It is not a glossary... Its

(‘fatal’?) are certainly used very idiosyncratically. And τελώριος itself, though probably used in the sense of μέγας, is hardly ‘immense, gigantic’.

As to the Hesychius-gloss, we have no knowledge of how the word was used in the works excerpted. It seems therefore quite unjustifiable to infer from his lemma etymological identity of τελώριος with πελώριος<sup>12</sup>.

Even less likely, in my view impossible, is the further connection with Hom. τέρας on the basis of an IE \**k<sup>w</sup>erās/k<sup>w</sup>erōr*, the latter being dissimilated to \**k<sup>w</sup>elōr*<sup>13</sup>. If nothing else, the meaning of Hom. πέλωρ ‘giant’ rules out a connection with τέρας which is an ‘ominous sign’ and cannot be separated from Hom. τείρεα<sup>14</sup>. And both words are hardly likely to be of Indo-European origin; πέλωρ in particular can be suspected of ‘Eastern’ provenience.

2. The alleged Aeolic character is even fainter in βέρεθρον seeing that Attic also has a labial in βάραθρον. The differing vocalism in the two forms, ε-ε as against α-α, certainly points to assimilation; the original could have been \**g<sup>w</sup>erathron* or \**g<sup>w</sup>arethron*. In the former case<sup>15</sup> the assimilation would be post-Mycenaean (and therefore not uniform in the dialects), as is suggested by Myc. *qerana* ‘ewer, jug’, which is most likely continued by βαλανεῖον etc.<sup>16</sup> In the second case the suffix would seem more normal (cf. ὄλεθρος, ῥέεθρον, θύρετρα, φαρύγγεθρον)<sup>17</sup>. In either case the development is regular in Arc. δέρεθρον (Hes.; also spelt ζέρεθρον)<sup>18</sup>, and Att. βάραθρον. The Homeric vocalism on the other hand has an exact parallel in βέλεμνον. This is from βάλλω which again appears with *a*-vocalism in Att. βάλλω, but with *e*-vocalism in Arc. δέλλω (inscr. ἐσδέλλοντες; Hes. ζέλλειν·βάλλειν). And just as in the case of βέλεμνον — to which βέλος may be added — no one would think of an Aeolicism, since quite clearly the other derivatives of the root, such as βολή, -βολος etc. prevailed with their labial independent of the dialect, so in Hom. βέρεθρον the labial cannot be regarded as a sign of an Aeolic stratum<sup>19</sup>.

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use in fact appears to be that of a *Gradus in Parnassum*” (p. 2). “. . . more than thirty of the words in this list — that is, one in four — are unknown to our lexica” (ibid.).

<sup>12</sup> To mention just one possibility, τελώριος may be based on an adjective \*τελώριος ‘whose time is full = fully grown, big’, from which, under the influence of πέλωρος and its group, both τέλωρ and τελώριος were formed.

<sup>13</sup> See Osthoff, *Archiv für Religionswissenschaft* 8, 1905, 51 f.; Boisacq, *Dict. étym. de la langue grecque*, 765; Lejeune, *Traité de phonétique grecque*<sup>2</sup> 40, 130.

<sup>14</sup> See on this, Scherer, *Gestirnnamen bei den idg. Völkern*, 1953, 30 f.; but he is wrong to admit (31 bottom), even as a possibility, connection with πέλωρ.

<sup>15</sup> Accepted by Kuryłowicz, *Apophonie* 208<sup>66</sup>; see now Szemerényi, *Syncope in Greek and Indo-European and the nature of Indo-European accent*, Naples 1964, 215 f.

<sup>16</sup> This attractive suggestion was made to me by Col. P.B.S. Andrewes.

<sup>17</sup> Schwyzer *GG I*, 533.

<sup>18</sup> Cf. Tsakonian Δέρεῖς, Schwyzer, *GG I*, 295.

<sup>19</sup> See also v. Wijk, *IF* 20, 1907, 343; Specht, *KZ* 59, 1932, 117, on the inflection and vowel-variation.

3. The same circumstances explain  $\pi\epsilon\lambda$ - which adopted the labial on account of  $\acute{\epsilon}\pi\lambda\epsilon\tau\omicron$  and  $\pi\omicron\lambda\acute{\omicron}\mu\alpha\iota$  ( $\pi\omega\lambda$ -).

4. More complex is the case of  $\pi\acute{\iota}\sigma\upsilon\rho\epsilon\varsigma$ . The Indo-European numeral had a complicated ablauting declension, the most important cases having the following forms: nom.  $*k^w\acute{e}tw\omicron\epsilon\varsigma$ , acc.  $k^w\acute{e}tw\upsilon\rho\eta\varsigma$ , gen.  $*k^w\acute{e}tw\omicron\mu$ , loc.  $*k^w\acute{e}tw\upsilon\varsigma\iota$ . This complicated pattern appears in no Greek dialect; each dialect generalized one particular stem-form. Thus Attic (and Boeotian) made use of  $\tau\epsilon\tau\tau\alpha\rho$ -( $\pi\epsilon\tau\tau\alpha\rho$ -) from the loc., as did Ionic<sup>20</sup> which further assimilated it to  $\tau\acute{\epsilon}\sigma\sigma\epsilon\rho\epsilon\varsigma$ ; W. Greek  $\tau\acute{\epsilon}\tau\omicron\rho\epsilon\varsigma$  adopted the vocalism of the nominative. The original weak form only survives in Lesbian  $\pi\acute{\epsilon}\sigma\upsilon\rho\epsilon\varsigma$ <sup>21</sup>. But the divergent development of the dialects cannot reflect a very old dialectal division; Mycenaean must still have possessed the ablauting paradigm. Hence  $-\upsilon\rho$ - in the Homeric form is not an Aeolicism but merely an archaism. Hom.  $\pi\acute{\iota}\sigma\upsilon\rho\epsilon\varsigma$  also diverges from the Lesbian form with its  $\iota$ . This is problematical in any case. It certainly cannot reflect an Indo-European 'reduced' grade<sup>22</sup>; it must be a rather late assimilation of  $\epsilon$ - $u$  to  $i$ - $u$  ( $i$ - $\ddot{u}$ ?)<sup>23</sup>. The  $\sigma$ , instead of  $\tau$ , is probably due to levelling in the original paradigm  $*k^w\acute{e}ss\omicron\epsilon\varsigma$  /  $k^w\acute{e}tw\upsilon\rho\alpha\varsigma$ , and not parallel to  $\acute{\eta}\mu\iota\sigma\upsilon\varsigma$ <sup>24</sup>. So the only point of contact is the initial labial since we would expect  $*\tau\acute{\epsilon}\sigma\upsilon\rho\alpha\varsigma$  or  $*\tau\acute{\iota}\sigma\upsilon\rho\alpha\varsigma$ <sup>25</sup>. And here again it is unnecessary to assume an Aeolic *stratum*. It is quite sufficient to assume that  $\tau\acute{\iota}\sigma\upsilon\rho\alpha\varsigma$  became unusual and was approximated to the living form  $\pi\acute{\epsilon}\sigma\upsilon\rho\epsilon\varsigma$  of the neighbourhood.

5. Even simpler is the case of  $\phi\acute{\eta}\rho$ . It occurs twice; at Il.2, 743 it undoubtedly refers to the Centaurs and the same must be true of I,268<sup>26</sup>. In view of the fact that normal Homeric  $\theta\acute{\eta}\rho$  corresponds with Thess.  $\phi\acute{\eta}\rho$  (in  $\pi\epsilon\phi\epsilon\iota\rho\alpha\kappa\omicron\nu\tau\epsilon\varsigma$ , Larisa, and perhaps  $\Phi\iota\lambda\acute{\omicron}\phi\epsilon\iota\rho\omicron\varsigma$  =  $-\theta\eta\rho\omicron\varsigma$ ), it is possible that  $\Phi\acute{\eta}\rho\epsilon\varsigma$  represents  $*ghw\acute{e}r\epsilon\varsigma$  (as does  $\theta\acute{\eta}\rho\epsilon\varsigma$ ), although we (and the ancients) may be the victims of sound, and  $\Phi\acute{\eta}\rho\epsilon\varsigma$ , the name of the Centaurs, may be just as much a foreign word as  $\text{Κένταυροι}$  seems to be. But even if  $\Phi\acute{\eta}\rho\epsilon\varsigma$  is indigenous, and therefore 'Aeolic', it does not guarantee an Aeolic *stratum*. It is

<sup>20</sup> I do not know of any evidence to claim this form for Arcadian as well, as is done by Buck, *Greek Dialects* 395 (but cf. Bechtel, *GD* I 72).

<sup>21</sup> In spite of Hesychius's  $\pi\acute{\epsilon}\sigma\sigma\upsilon\rho\epsilon\varsigma$ , this seems the correct form, see Bechtel, l.c.

<sup>22</sup> See, e.g., Schwyzer, *GG* I 590.

<sup>23</sup> A parallel, this time in Lesbian, is probably provided by Sappho's  $\pi\iota\sigma\acute{\omicron}\gamma\gamma\omega\nu$ ; see Bechtel, *GD* I 61.

<sup>24</sup> See Schwyzer, *GG* I 590, as against Bechtel, l.c.

<sup>25</sup> The form  $\pi\acute{\iota}\sigma\upsilon\rho\alpha\varsigma$  appears 4 times (Il. 15, 680; 23, 171; 24, 233; Od. 22, 111),  $\pi\acute{\iota}\sigma\upsilon\rho\epsilon\varsigma$  twice (Od. 5, 70; 16, 249); the latter must be based on the former.

<sup>26</sup> In spite of the different print in the Oxford text, curiously inverted in Monro's school-edition.

quite possible that the story of the Φῆρες, first sung by local bards in Thesaly, was received into the main stream of epic poetry, naturally with the local form of the name.

We must therefore conclude that the representation of the labiovelars in Homeric Greek does not justify the assumption of an Aeolic phase in Epic poetry. Our evidence on this point is compatible with the view that epic diction is in the direct line of descent from Mycenaean Epic <sup>27</sup>.

Even less successful have been attempts to find Mycenaean instances of early labialization. The only convincing instance is *ipopoqo* (PY Fn 1192, 1 : *zeukeusi ipopoqoique*) which is *ἵπποφορβός* and thus represents earlier *ikwo-phorg<sup>w</sup>os*; but *ippo-* is obviously due to assimilation to the following labial <sup>28</sup>. The often quoted variation between Pylian *phereqota/qereqota* cannot be regarded as a sign of incipient labialization <sup>29</sup>; it is simply a lapsus or dissimilation <sup>30</sup>.

Another important fact revealed by the tablets is that Mycenaean preserves the labiovelar even when it is followed by a consonant. A well-known instance is *qirijato* = (ἐ)πρίατο. Even more important is the fact that the historical ending *-oψ* is still *-ok<sup>w</sup>s* (spelt *-oqoso*), for it is difficult to believe that the historical *-oψ* is not the direct descendant of Myc. *-ok<sup>w</sup>s* but based on the analogy of the oblique cases where the labiovelar appeared before vowels <sup>31</sup>. It is rather the alleged or real instances of the loss of the labial element (Ἴξαι, ἄτρακτος, ἄνιγρον, ὄταλλος) that require a special explanation; they are either to be rejected (almost certainly ἄτρακτος) or due to dissimilation (πολύοκτος, from πολυ-οπτος). Regular also are such sequences as *ψ* in *λείψω*, *νίψω*, etc. For original *k<sup>w</sup>s* two interesting and contradictory examples appear in Mycenaean. The Classical name *Μόψος* is still *mogoso* <sup>32</sup>; here the sequence

<sup>27</sup> See Webster, *From Mycenae to Homer*, 1958, esp. 159 f.; Strunk, o. c. C. H. Whitman (*Homer and the heroic tradition*, 1958) does not seem to pay any attention to this question; see his discussion pp. 22 f. 60 f.

<sup>28</sup> Lejeune, *Mém.* 302 (followed by Heubeck, *IF* 65, 1960, 256.258), speaks of 'dissimilation régressive' but if this were the case, *ikwo-phorg<sup>w</sup>os* ought to have developed into *iko-*, not *ippo-*. The incorrectness of 'dissimilation régressive' is made patent by Heubeck's clearer definition (*Glotta* 39, 1961, 165): the first labiovelar loses its velar (!) element and becomes a labial (!). In other words, in *ikwo-phorg<sup>w</sup>os* *kw* loses *k* and *w* becomes *p*. This is pure paper-phonetics. Dissimilation would have led to loss of the labial element as stated above and as is shown by a generally recognized case of regressive dissimilation such as *καπνός* from *\*kwapnos*. The other examples — all names — must be ignored.

<sup>29</sup> Recently Gallavotti, *RFIC* 36, 1958, 113, 115, 117.

<sup>30</sup> See Lejeune, *Mém.* 249, 302; Heubeck, *IF* 65, 1960, 254 f. But cf. fn. 28 above.

<sup>31</sup> Schwyzer, *GG* I, 299 bottom, after Georgiev. This is now recognised even by Kuryłowicz, *Apophonie* 360 f., who denies the Indo-European origin of labiovelars. See also Lejeune, 312 f.

<sup>32</sup> On this name and its identification with Hittite *Mukšuš* etc., see Kretschmer, *Anzeiger der Österreichischen Akademie*, 86, 1949, 201 f.; H. Grégoire, *La Nouvelle Clío*

-*k<sup>w</sup>s-* developed into -*ψ-* as in the type in -*οψ*. But historical *ξίφος* is now known to have been *k<sup>w</sup>siphos* in Mycenaean times (dual *qisipee*). Here, then, instead of expected \**ψίφος* we find *ξίφος*, obviously due to a post-Mycenaean dissimilation of the labial element in *k<sup>w</sup>* caused by the following labial: *k<sup>w</sup>siphos* > *ksiphos*<sup>33</sup>; cf. *καπνός* < *kwap-*. This is somewhat surprising since *ψέφας* seems to correspond with Skt. *kṣap-* 'night' etc., and here the sequence \**k<sup>w</sup>sep(h)* developed normally.

One further question concerns the historical development of *g<sup>w</sup>i*. If the phonetic interpretation of Pisani and Allen<sup>34</sup> is correct, as seems to be the case, then we can expect no palatalization: *βι* is regular, *δι* cannot appear. Yet the form *ἐνδεδιωκότα* at any rate has long been regarded as proving such a development<sup>35</sup>. This form occurs in the well-known Heracleean tablets (Schwyzer, *Delectus* 62, 120): *ταῦτα δὲ πάντα (: δένδρα) πεφυτευμένα παρήξοντι καὶ ἐνδεδιωκότα, ὅσσα ἐν ταῖ συνθήκαι γεγράφεται*. Since Roscher's study<sup>36</sup> it is generally agreed that the word corresponds to Theophrastus' *ἐμβεβιωκότα*, and therefore it is assumed that the normal Greek *βιώω* is represented by *διόω* at Heraclea. But the assumption of *διός* *διόω*, instead of *βίος* *βιώω* is so monstrous that any explanation that will rid us of these forms must be welcome<sup>37</sup>. Now the dialect of Heraclea goes back, via Tarentum, to Laconia. In Laconian, earlier *dz* from *gy* or *dy* appears as *δδ* or *δ-*: *μικιχιδδόμενος*, (Aristoph.:) *γυμνάδομαι* *μυσίδδην* (= *μυθίζειν*), *Δεύς*<sup>38</sup>. It is therefore reasonable

I, 1950, 162 f.; Barnett *JHS* 63, 1953, 140 f.; *Studies H. Goldmann*, 1956, 215; Chadwick, *TPS* 1954, 5<sup>1</sup>; Hanfmann, *HSCP* 63, 1958, 72 f.; Heubeck, *Lydiaka*, 1959, 43 f.; *Documents* 421; Goetze, *JCS* 16, 1962, 53. In view of the fact that the coexistence of Greek *Μόφος* and Hittite *Mukḫas* might be found puzzling, it is of interest to note that the name of the German town *Mobschatz* (N. W. of Dresden) which in 1091 A. D. appears as *Mococize* and in the local dialect still sounds *Mugš*, is also recorded as *Mobschitz* as early as 1288; see W. Fleischer, *Beiträge zur Gesch. der deutschen Sprache u. Literatur* (Halle) 81, 1959, 318 f.

<sup>33</sup> This as also Lejeune's view, *Mém.* 315 f. Ventris-Chadwick, *Docs.* 348, considered it a loanword, which is more likely than an Indo-European derivation (Heubeck, *Minos* 6, 1958, 55 f.), although Egypt. *hepeš* is hardly suitable. Benveniste's derivation of Ossetic *aexsyrf* 'scythe' from *kšipra-* is denied, on grounds of semantics, by Abajev, *Voprosy Jazykoznanija* 1959/2, 146 f.; cf. Szemerényi, *Syncope* 205<sup>1</sup>. 408.

<sup>34</sup> Pisani, *Studi* 600; Allen, *Lingua* 7, 1958, 121.

<sup>35</sup> Cf. Schwyzer, *GG* I 300; see also Pedersen, *Travaux du Cercle Linguistique de Prague* 8, 1939, 289. If *Ἄντιδιος*, *ἀίδιος*, *ἴδιος* started with a labiovelar, Hamp's solution (*Glotta* 38, 1960, 196) would account for them.

<sup>36</sup> *RhM* 44, 1889, 312-6.

<sup>37</sup> Pisani, *Ricerche Linguistiche* 1, 1950, 176, suggested that an original sequence \**g<sup>w</sup>e-g<sup>w</sup>i-* regularly developed into *δεβι-* and then assimilated into *δεδι-*. But, as is known, the reduplication follows the root (*ἐπεφνε*, not *ἐτεφνε*, even less *ἐτεθνε*), not the other way round. Besides, the term used is an obvious calque of *ἐμβιόω* and so of a rather late date, which means that the native verb was substituted for Attic *βιώω*. Hamp's attempt (*Glotta* 38, 1960, 197) is not adequate.

<sup>38</sup> Thumb-Kieckers, *Handbuch der griechischen Dialekte* I<sup>2</sup>, 1931, 85 f.



to assume that original ζήω (Att. ζῶ) became \*δήω, \*δέω. Heracleian on the other hand shares with other dialects the tendency to use a stem-extension in -ω- (cf. subj. περιῶι from περιόη, fut. περιωσεῖ, i.e. περιῶω in contrast to Att. περίω)<sup>39</sup>, which is also attested in the perfect, especially in Doric dialects: ἐθῶκατι Hes., Theran ἱαρεύωκα, Cyr. ἱαριτευωκότων ἐφορευωκότων, Delph. κατεσκεύωκε κατεσκεύωται<sup>40</sup>. It seems therefore that Heracleian -δεδιωκότα represents δε-δη-ω-κότα, the 'normal' perfect of \*δήω 'ζῶ'<sup>41</sup>, with the normal change of εω to ω.

From the point of view of Greek dialectology the difference between (completely) labializing and non-labializing dialects is often used for far-reaching conclusions. Yet we should not lose sight of the fact that the development is much more complex in 'both areas', as can be seen from the following tables:

	<i>General treatment</i>	<i>Aeolic</i>
	τέτταρες	πέσυρες
	ἔτεισα	ἔπεισα
<i>h<sup>w</sup>e</i>	τηλόθεν, τηλοῦ	πήλοι
	πέντε	πέμπε
	τε	τε
	τέλος	τέλος
	τίσις τίνω	τίσις τίνω
<i>h<sup>w</sup>i</i>	τίς τις	τίς τις ( <i>Thess.</i> κίς)
	τιμή	τίμα τίμιος
		ἄτιτος
	ἀδήν	
	δέρη	δέρα
<i>g<sup>w</sup>e</i>	δελφός ἀδελφός Δελφοί	ἀδέλφεος Βέλφοι βέλφιν
	δήλομαι   βούλομαι	βελλ-   βολλ-
	ὀδελός	ὀβελος

<sup>39</sup> Thumb-Kieckers, 99; Buck, Greek Dialects 126.

<sup>40</sup> Schwyzer, GG I 775; Buck l. c. Cf. ἀνθεῶσθαι, Thumb-Kieckers I 100.

<sup>41</sup> See Thumb-Kieckers 96; the assumption of δήω seems justified in spite of the fact that some other dialects (e. g. Cretan) show ζῶω, and that Heracleian has presents in -ίζω and the words Ζωπύρω ζαμιώσονται (Thumb-Kieckers 97, 99). At a time when Koine-influence is already very extensive, such forms are not surprising; they do not imply that 'Heracleian' (or 'Tarentine') separated from Laconian before ζ became δ(δ). Note Tarantine -σσω, innovated for -ζω, Thumb-Kieckers I 98 f.; Leumann, KSchr. 162.

$g^w i$	βίος βία	βίοςτος βία
$g^w h e$	θεσσάμενος Θετταλός θερμός	Boeot. θιό-φεστος <sup>42</sup> Φέτταλος θέρμος
$g^w h i$	ὄφιος?	

It will be seen that, even in the non-labializing group,  $g^w$  (and  $g^w h$ ?) are labialized before  $i$ , though not before  $e$ . But it is just as important to note that in the labializing area  $k^w$  shows no labialization before  $i$  (τις, τίσις, τίνω) and the particle  $k^w e$  is never  $\pi e$ <sup>43</sup>. In point of fact, in Lesbian only  $\pi\eta\lambda\upsilon\iota$ ,  $\pi\acute{\epsilon}\sigma\upsilon\rho\epsilon\varsigma$  and  $\pi\acute{\epsilon}\mu\pi\epsilon$  are really well-established, and it is not impossible that 'full' labialization occurred in Thess.-Boeotian only after the departure of the future colonizers of the Aeolis<sup>44</sup>.

In view of these facts we can hardly draw any conclusions as to the original focus of labialization within the Greek world. If there really was a powerful labializing centre in the Aeolic group, it is rather surprising to find that it did not engulf such important and common terms as  $\tau\acute{\iota}\varsigma$   $\tau\iota\mu\acute{\alpha}$  and  $\tau\epsilon$ . One might just as well assume that the partial labializing tendency (before velar vowels) coming from the still prestige-endowed areas of the old Mycenaean empire was carried beyond its legitimate confines in the Aeolic group — although not before certain important words had chosen the natural development.

The patchy character of 'full' labialization also speaks in my view against its connection with the really complete labialization of the Oscan-Umbrian group, where we do find labialized  $p\acute{i}s$   $p\acute{e}$  etc.<sup>45</sup> This also rules out the alleged isogloss between Greek and Armenian (even Albanian) in the matter of palatalization of labiovelars. Whereas Armenian does not palatalize original  $g^w$  before  $e$  and  $i$ , Greek does palatalize before  $\epsilon$  ( $\delta\epsilon\lambda\phi\acute{\upsilon}\varsigma$ ,  $\acute{\alpha}\delta\eta\gamma\acute{\nu}$ ,  $\delta\eta\lambda\omicron\mu\alpha\iota$ ) but not before  $i$  ( $\beta\acute{\iota}\omicron\varsigma$   $\beta\acute{\iota}\alpha$ ). Similarly, if Armenian does palatalize

<sup>42</sup> I do not count ( $\acute{\epsilon}$ ) $\theta\acute{\epsilon}\lambda\omega$  (as is done by Scherer) since it does not have a labiovelar; Debrunner, Fs. Zucker, 1954, 83-110, showed that  $\acute{\epsilon}\theta\acute{\epsilon}\lambda\omega$  is the primary form and this rules out connection with OS  $\acute{z}elati$ , in spite of Debrunner's remark (109) that  $\acute{\epsilon}$  might be a preverb. See the text further on, p. 43.

<sup>43</sup> See on this point Allen, *Lingua* 7, 1958, 127<sup>70</sup>.

<sup>44</sup> See Hamm, *Grammatik zu Sappho und Alkaios*, 1957, 15 f.

<sup>45</sup> I stress this because Pisani has now repeatedly claimed that the Aeolic group is closely linked with Oscan-Umbrian. See, e.g., *RhM* 98, 1955, 9 with fn. 9; *RIL* 89, 1956, 9, 13, 16 (*lega linguistica*). Against the combination of the Greek and Osco-Umbrian labializations see also Ambrosini, *ASNSPisa* 25, 1956, 72; Leumann, at *Leumann-Hofmann-Szantyr*, *Lateinische Grammatik II*, 1965, 20\*.

$g^wh$  before  $e/i$  and thus  $*eg^whis$  appears as  $iž$ , Greek does not palatalize before  $\iota$  and hence we find  $\delta\phi\upsilon\varsigma$ . Hence the behaviour of Armenian and Greek, though showing some superficial resemblance, dissolves into a series of disagreements when examined more closely. It is quite unjustified to state that the development of labiovelars before palatal vowels is identical in the two languages and then proceed to draw even geographical conclusions concerning the early migrations of the Greeks <sup>46</sup>.

But whereas, in the case of Armenian, the distance of the historical habitats in itself counsels caution, with dialects that, in historical times, lived in close proximity of, and are known to have had contacts with, the Greek world, the question of linguistic interaction acquires renewed interest.

That the Lycians meet both these conditions is clear; especially close were their connections with the Pamphylians <sup>47</sup>. Now one of the few points of Lycian grammar that seem to be well-established is that the relative-indefinite was  $ti-$  <sup>48</sup>. Since Lycian, as a member of the Anatolian group, can be presumed to have shared the relative-indefinite  $k^wis$  of this group, its  $ti-$  obviously derives from  $k^wi-$  and thus shows the same development as E. Greek  $\tau\iota\varsigma$  <sup>49</sup>.

But this type of palatalization of a labiovelar to  $t(i)-$  is unique in the Indo-European world: being confined to these two languages, it is unlikely to be independent in both. Since, on the other hand, it is found in the whole Greek area, it cannot, even if this were theoretically possible, be due to Lycian influence on E. Greek. Surely it must be the other way round: the peculiar Lycian development is due to the influence of Greek.

A similar problem would seem to arise with Lydian whose connections with the Greek world are also well-known. There the relative is said to appear as  $pid/pid$ , obviously continuing IE  $k^wis/k^wid$ . Now Lydia is close to the Aeolis, with its 'marked' labialism. Since the labialism is more consistent here than in other areas of Greek, one might suggest that this is due to a foreign impulse, and I did, in fact, consider the possibility that Lydian with its complete labialization (seeing that  $k^w > p$  even before  $i$ ) might have

<sup>46</sup> See for the linguistic evidence Pisani, *Ricerche Linguistiche* 1, 1950, 165 f., esp. 175, 176, 192; and for the conclusions RhM 95, 1952, 16 f.; 97, 1954, 47 f.; 98, 1955, 11.

<sup>47</sup> See Thumb-Scherer II 176 f.

<sup>48</sup> Pedersen, *Lykisch und Hittitisch*, 1945, 21 f.; Heubeck, *Lydiaka*, 1959, 72; Georgiev, *Issledovanija po sravnitel'nomu jazykoznaniju*, 1958, 156; Laroche, *BSL* 55, 1960, 175 f.; Houwink ten Cate, *The Luwian population groups of Lycia and Cilicia*, 1965, 69 f.

<sup>49</sup> This is also observed by Pisani (RhM 98, 1955, 11) who, however, draws no conclusions; nor does his pupil A. Steiner in his long discussion, *RIL* 88, 1955, 334, esp. fn. 31, although p. 337 seems to hint at an extensive palatalization, affecting even Lycian. But in my view it is a historical process, within a well-defined area.

been the source. But the peculiar behaviour of Aeolic which avoids the labial exactly where the Lydian would show it, tends to discourage such a conclusion, however well it might suit the principles of linguistic geography. It is to be abandoned altogether if Heubeck is right in arguing that the Lydian word is not *pis* but *k<sup>w</sup>is* (or sim.)<sup>50</sup>.

The facts outlined inevitably suggest that we cannot be right in attempting to split up the Greek world into well-regulated labializing and non-labializing areas. The only peculiar feature of, that is to say the only real exception to, the well-established rule that the development of the labio-velars is solely determined by the following vowel (and preceding *u*), is in the groups *g<sup>w</sup>(h)i*, where, however, the labialization is general<sup>51</sup>. It is therefore worth trying a different approach.

If one examines the examples of the labialization of voiceless labiovelars, one is struck by the fact that the two most reliable instances are represented by the numerals '4' and '5'. Now it is well-known that these numerals show very similar irregularities in other languages, too. In Germanic, for instance, IE *\*k<sup>w</sup>etwōres* and *\*penk<sup>w</sup>e* ought to result in (Gothic) *\*hwidwor* and *\*finhw*, but we find *fidwor* and *fimf*. As will be seen, the changes are identical with those observed in *πέσυρες* and *πέμπε*. Yet no one would assume labialization for Germanic. It is quite clear that in Germanic internal and serial assimilations took place: in *\*finhw* the initial assimilated the final (labio)velar, and in *fidwor* the initial *f-* is due either to *fimf* or to the influence of *-w-*, or possibly to both factors. It is very likely that the same process accounts for the development of IE *\*penk<sup>w</sup>e* to Latin *quinque*, i.e. both inherited *-que* and *quattuor* contributed to its *qu-*; exactly the same happened in Celtic where we find OIrish *cóic* beside *cehair*, and OWelsh *pet-guar* beside *pimp* (Modern *pedwar/pump*)<sup>52</sup>. It is therefore legitimate to as-

<sup>50</sup> Lydiaka, 1959, 15 f., esp. 40 f.; cf. Friedrich, IF 65, 1960, 191 f.; Vetter, Sitzungsber. Österr. Akad. 232/3, 1959, 36<sup>17</sup>; Masson, OLZ 1961, 354 f.; R. Gusmani, Lydisches Wörterbuch, 1964, 33 f. This instance shows the dangers of using ill-established data of these ill-attested languages where practically everything is ill-established. This also applies to the argument concerning Lyc. *ti-* above.

<sup>51</sup> That is, if the explanation of Heracleian ἐνδεδιωκότα given above is correct. I should add here that Palmer's connection of Mycenaean *qino-* with βινέω fits in, while connection with Hom. δινωτός would be 'irregular'; cf. D.M. Jones, Glotta 37, 1958, 115, and Chantraine-Dessenne, REG 70, 1959, 301-11.

<sup>52</sup> It is quite unjustified to construct a 'sound-law' for the sake of *quinque* and *coquō querus* (from *\*peh<sup>w</sup>ō* *\*perh<sup>w</sup>us*) and especially to connect this change with the one seen in Celtic (W. *pimp*, *pobi* 'cook'); see, e.g., Leumann-Hofmann 129, and most recently, Krahe, Sprache und Vorzeit, 1954, 84; Porzig, Gliederung des idg. Sprachgebietes, 1954, 100. That the change in Lat. *quercus* is independent from the Celtic change is shown by *Hercynia (silua)* which shows no assimilation from *\*perkun-* (see also Krahe, Mélanges Mossé, 1959, 230; Bolelli, Ricerche linguistiche 5, 1963, 102); it even suggests that the Latin change presupposes an inflection *\*perkus/gen. \*perkw-os* from which a

sume that the labialization in πέσυρες and πέμπε is due to analogical processes, and not to a general sound-change.

Even clearer seems to be the case of τηλόθεν / πήλοι. On the basis of the alternation τ/π it is generally assumed that the initial was IE \*k<sup>w</sup>-; outside cognates usually quoted are Welsh *pell* 'far', *pellaf* 'extreme', and Skt. *carama-* 'last, extreme'<sup>53</sup>. Since in that case we have to start from an Indo-European root \*k<sup>w</sup>el- (and \*k<sup>w</sup>els- in Celtic?), Greek presents a rather surprising lengthened-grade form. Serious difficulties arise when we take into account Greek πάλαι, which is again generally attached to this group. For Mycenaean now clearly shows that πάλαι cannot derive from an old labiovelar. The forms *parajo* and *paraja*, representing the adjective παλαιός<sup>55</sup>, are spelt with *pa* and this is never used for an original k<sup>w</sup>a.

This means that the customary equation of τηλοῦ/πήλοι must be given up<sup>56</sup>. We are now left with two unrelated groups: πῆλοι, πάλαι, παλαιός with original π- on the one hand, and the group represented by Hom. τηλόθεν etc., on the other. But since there is no need any longer to regard the τ- of the latter group as deriving from an Indo-European labiovelar, we may suggest that this group belongs with τηλίχος, Lat. *tālis*, and Lith. *tōl(iai)*, all descended from IE \*tālis 'of that size, stature'<sup>57</sup>. Particularly close is, seman-

new nom. \*perk<sup>w</sup>us was derived. Since, then, there are only three cases on the Latin, and two on the Celtic side, it seems much more likely that the change originated in one case — by 'accident' — and was then transferred to one or two similarly structured forms by the process called 'philological Lautersatz' by A.S.C. Ross (*Studia Neophilologica* 30, 1958, 11-16; see also Pisani, *Rendiconti di Istituto Lombardo* 75, 1942, 172-190; *L'etimologia*, 1947, 96 f.). There can be little doubt that in both groups the leading word was \*penk<sup>w</sup>e which became \*k<sup>w</sup>enk<sup>w</sup>e. During the time original \*penk<sup>w</sup>e and new \*k<sup>w</sup>enk<sup>w</sup>e were in competition, the old form \*pek<sup>w</sup>ō (and \*perk<sup>w</sup>us in Latin) also acquired a byform \*k<sup>w</sup>ek<sup>w</sup>ō (and \*k<sup>w</sup>erk<sup>w</sup>us).

<sup>53</sup> See Boisacq, *Dict. étym.* 740, 966; Schwyzer, *GG* I 295, 300, 631; Pokorny, *IEW* 640.

<sup>54</sup> The fact that Lesbian also shows η, excludes the possibility of η being due to compensatory lengthening.

<sup>55</sup> See, e.g., Lejeune, *Mémoires* 118-120, 311. Heubeck (*Sprache* 4, 1958, 90<sup>49</sup>, followed by Thumb-Scherer, II 334) is obviously wrong in trying to separate *parajo* from παλαιός. Note especially the contrast between *paraja* in PY Sa 787 and *newa* PY Sa 843 (+ Xa 1190 + Sa 1270); see Chadwick, *Minutes of the London Seminar*, 28.5. 1958, but especially Chadwick-Baumbach, *Glotta* 41, 1963, 232; Doria, *Testi Micenei* II, 1958, 23.

<sup>56</sup> How dangerous it is to operate with personal names is shown by Τηλεφάνης which is usually grouped with the words under discussion and equated with an Aeolic Πηλεφάνης. But the crucial Π- of the Aeolic form is not attested (see Hamm, o. c., 15<sup>2</sup>) and Τηλεφάνης, together with Τήλεφος, may be borrowed from Asianic *Telepinus*, as is suggested by Barnett, *Studies H. Goldmann*, 1956, 219.

<sup>57</sup> I have discussed this group in *Annali, Istituto Universitario Orientale, Napoli, Sezione Linguistica*, II, 1960, 1 f.

tically, the Baltic group formed by Lithu. *tolì*, adv. 'far', *tolìus*, adj. 'far', *tòlis* 'distance', *tolùmà*, *tolùmàs* 'id.', *tòlimàs* 'far, distant', (*nu*)-*tòliti* 'go away' (Fr. 's'éloigner', Germ. 'sich entfernen'); Latv. *tāls* 'far, distant', *tāle* 'distance', *tālu* 'far away', *tālums* 'distance'; O Pruss. *tālis* 'farther away'<sup>58</sup>.

Turning now to the voiced labiovelar, we find that the Aeolic forms (Lesb.) βόλλομαι, (Thess.) βέλλομαι, (Boeot.) βείλομη (from βήλομαι), show not only a labial but also varying vocalism. Attic-Ionic βούλομαι agrees in its vowel with Lesbian βόλλομαι while the Thessalian-Boeotian vocalism is paralleled by W. Greek (Heracleean, Theran, Cyrenaean, Rhodian, Coan, Calymnian, Elean) δήλομαι and (Phocian, Locr.) δείλομαι. A further peculiarity is seen in the present-form βόλομαι which is found in Arcadian (Schwyzer, Delectus 654<sub>9</sub> βόλετοι, but note that ω is not used in this inscription; 656<sub>24</sub> βολόμενον, ω used; 657<sub>46</sub> βόλητοι, ω used; 665<sub>40</sub> διαβολευσσάμινος, ω is used; 674<sub>3</sub> βόληται, ω used), Cyprian (? cp. σί βόλε· τί θέλεις, Κύπριοι Hesych.) and Ionic (Thasos, 777 A<sub>2</sub> βόλην; Eretria 808<sub>32</sub> βολόμενον, βόληται; Oropus, 811<sub>31</sub> βόληται, 1.43 βολομένοι).

The alternation between β- and δ- is indicative of an original labiovelar: the root is \*g<sup>w</sup>el-. The development of the labiovelar is in agreement with the general rules applying to the labiovelars, but from our point of view the Aeolic forms of the mainland are noteworthy because Thess. βέλλομαι and Boeot. βείλομη show labial development before a front-vowel and thus seem to bear out the doctrine of Aeolic labialization. But the varying vocalism of this verb is still obscure and it can only be clarified if we gain a better insight into the general pattern of its inflexion than has been the case hitherto.

To begin with, the etymology of this verb cannot be regarded as satisfactorily established. Today, Kretschmer's suggestion that our verb is a middle form of βάλλω, is accepted by many<sup>59</sup>. He thought that the semantic gap was bridged by certain uses of βάλλομαι, especially such phrases as Hom. βάλλεσθαι ἐνὶ θυμῷ, ἐνὶ φρεσὶ, μετὰ φρεσὶ; the perfect βέβουλα, expressing the result, thus acquired the meaning 'to wish' which was then somehow transferred to the present too (l.c. 164). But the last two steps are by no

<sup>58</sup> The clear equation τηλο- = Lithu. *tolì*- favours Vasmer's suggestion (REW I 327) that the Slavic group of Russ. *dal'* 'distance', *dalèkij* 'far, distant' is transformed from \**īal*- under the influence of *dolgij* 'long', *davě* 'long ago' etc. It is even probable that the interpenetration went deeper. The Slav comparative *dalje* cannot have an original *ā* (Vaillant, Gram. comp. II 575 f.); in the same way, *davě* 'of old, once (upon a time)' has a strange lengthened grade *if* it derives from IE \**deu-*, not explained by Otrębski, Sprache 6, 1960, 165. Both are clear if original \**delje* and *dev-/dov-* became *dā-* under the influence of \**īal*-, while the latter changed to \**dāl*-.

<sup>59</sup> Kretschmer, Glotta 3, 1912, 160 f. Cf. Schwyzer, GG I 284, 693; Fränkel, IF 59, 1948, 156 f.; Hamm, o. c., 127; Frisk, GEW I 259.

means convincing, and even the first step is unsatisfactory as a starting point. A phrase like (Od. 12, 217-8):

σοὶ δὲ κυβερνήθ', ὧδ' ἐπιτέλλομαι· ἄλλ' ἐνὶ θυμῷ  
βᾶλλε, ἐπεὶ νηὸς γλαφυρῆς οἴηια νωμᾶς,

clearly shows the meaning expected of βᾶλλω: 'tu autem in corde tuo iacta, voluta'; cp. 'tales iactantem pectore curas' (Virgil, Aen. I 321), 'atque haec ipse suo tristi cum corde volutat' (*ibid.* VI 185), etc. From this meaning we can never get to our goal<sup>60</sup>.

Curiously enough, the clearest cognate of our verb has so far escaped notice. The Slavonic languages present Russ. *želát'* 'desire', Old Church Slavonic *želěti*, *želati* ἐπιθυμεῖν, θέλειν etc., which show not only the required meaning, but also the required form: together with Gk. βούλομαι they derive from IE \*g<sup>w</sup>el-. The reason for the failure to recognize this clear relationship is the attachment to another Greek verb, θέλω, which, together with the Slavonic group, is traced to IE \*g<sup>w</sup>hel-<sup>61</sup>. But a few years ago the late Debrunner cogently proved that θέλω was a secondary form, arisen from ἐθέλω by aphaeresis<sup>62</sup>. This would seem to put an end to any comparison of ἐθέλω with *želěti*. Oddly enough, Debrunner himself thought (*l. c.*, 109) that the equation could be saved by resorting to a prefix ἐ- so that the stem would still be \*θελ-. But the plain fact is that ἐθέλω would be the only instance in the whole Greek vocabulary in which this mysterious prefix, unattested in any other Indo-European language (!), would make its appearance<sup>63</sup>. This is quite sufficient to give up the etymology, especially as now we have the equation βολ-/δελ- = *žel-* which suffers from no disability<sup>64</sup>. But the

<sup>60</sup> See also the misgivings of K. Forbes, *Glotta* 36, 1958, 22.

<sup>61</sup> See, e.g., Vasmer, *REW* I 414; Pokorny, *IEW* 489, etc. - ON *gildra* 'trap', *gilja* 'lure' cannot derive from \*g<sup>w</sup>h- in any case.

<sup>62</sup> Debrunner, *Festschrift Zucker*, 1954, 83-110, esp. 105. See also the earlier discussions by Schulze, *GGA* 1897, 911<sup>3</sup>; Schwyzler-Debrunner, *GG* II 491; Fränkel, *Lingua Posnaniensis* 3, 1951, 116 f.

<sup>63</sup> I am not here concerned with other prefixes such as o-, ē-, ō-, on which see Schwyzler-Debrunner, II 491; Pokorny, *IEW* 280 f.; and quite recently Bailey, *BSOAS* 20, 1957, 48; and, with especially large claims, Steinhauser, *Zeitschrift für deutsche Mundartforschung* 27, 1960, 101 f. Greek ἐγείρω, as against \*ger- of the other languages, remains difficult, but a prefix is most unlikely (see Schwyzler, *GG* I 648 with fn. 3, but also Specht *KZ* 62, 1935, 56). This should be taken into account when we try to assume ἐγείρω already for Mycenaean (see Palmer, *TPS* 1958, 13 on *to-no-e-ke-te-ri-jo*).

<sup>64</sup> I should mention here that *želěti* means not only 'ἐπιθυμεῖν, θέλειν' but also 'πενθεῖν, κλαίειν', and the nominal derivative *žalb* means 'μνημεῖον' and *želja* is 'θρήνος'. For this reason some scholars think the whole group must be connected with that of Lithu. *gėlti* 'sting, smart', *gėlā* 'pain', OHG *quāla* 'pain', OHG *quelan* 'to suffer pains', OE *cwellan* 'die', ON *kvelia* 'cause pain, torture', OE *cwellan*, OHG *quellen* 'kill' (see,

group of IE *\*g<sup>w</sup>el-* 'desire, wish' is not confined to the two verbs mentioned so far. In view of its meaning, 'desire, long for', the Slavic verb represented by Russian Church Slavonic *žьlděti*, Serbian Church Slavonic *žьlděti*, 'desiderare', unmistakably belongs with our *\*g<sup>w</sup>el-*. This means that Skt. *gr̥dhyati* 'is greedy, desires violently', *gardha-* 'desire', Avest. *gərōda-*, usually equated with this Slavic group, must also be derived from IE *\*g<sup>w</sup>el-dh-*, and not from *\*gheldh-*<sup>65</sup>. Thus the hitherto assumed IE *\*gheldh-* 'desire', confined to Aryan and Slavic, will have to disappear from our dictionaries; instead, a new IE *\*g<sup>w</sup>el-* will have to be entered, attested in Greek, Aryan and Slavic<sup>66</sup>.

Having settled the question of the etymology, we must now turn to the peculiar paradigm of βούλωμαι: how is the bewildering variety in the vocalism, and especially the vocalism of the present, to be interpreted?

That the present βουλ-/βολλ-/δηλ- absorbed a consonant after the root-final -λ- was recognized fairly early. Brugmann was the first to posit a primitive *\*gelnomai* / *golnomai*<sup>67</sup>. But this explanation was attacked on the

e.g., Pisani, *Rendiconti, Istituto Lombardo*, 77, 1944, 550; Fränkel, *Lingua Posnaniensis* 3, 1951, 118; but cf. Vasmer, *REW* I 414). But whereas the semantic shift from original 'sting' to 'pain, torture, kill' is clear, the further change to 'compassion, mourning', but especially to 'desire', is impossible. The reverse, however, from 'desire' to 'miss, mourn for', is just as clear and in line with Horace's well-known address, consoling Virgil, disconsolate at the death of his dearest friend Quintilius (Carm. I 24, 1): *Quis desiderio sit pudor aut modus tam cari capitis?* And in general *desiderium* is 'dolor ipse et molestia, quae sentitur in carentia rei optatae', 'grief for the want of anything, regret'. Note also that in Slavic *želěti* there is no trace of the meanings 'pain, torture', whereas *želo*, truly connected with Lith. *gėlti* 'sting', has the meaning 'sting'. It is therefore clear that, apart from the last-named, all the other Slavic words (Russ. *želát', žalél', žal', želja*) are to be connected with *\*g<sup>w</sup>el-* 'desire, wish'.

<sup>65</sup> Cf., e.g., Pokorny, *IEW* 434. It goes without saying that Slavic *goldo-* 'hunger', if correctly connected with *žьld-*, also derives from *\*g<sup>w</sup>ol-dho-*, not *\*gholdho-*. A nice point concerning the history of Indo-European philology would be to establish who first invented the initial *gh-* for this group; there is not the slightest indication of it either in Sanskrit or, naturally, in Slavic. We must also doubt whether the Aryan group could be grouped with Gothic *grēdus* 'yearning) hunger' etc., since its vocalism fits in much more naturally with *\*g<sup>w</sup>el-dh-*.

<sup>66</sup> The gloss φαλίζει· θέλει (Hes.) should be dismissed from any debate on ἐθέλω. For more recent explanations, cf. Pisani, *Rendiconti, Istituto Lombardo*, 77, 1944, 550-1 (in spite of Debrunner, *Festschrift Zucker*, 1954, 110<sup>17</sup>); Fränkel, *Lingua Posnaniensis* 3, 1951, 117. We must not lose sight of the fact that the glossographers noted words in poetic and prose texts because the usage was peculiar, usually a bold metaphor. The damage done by indiscriminately taking as an ordinary meaning of a word a lemma entered in a glossographer is by now almost irreparable. To use φαλίζει for comparative purposes, when we cannot have the faintest idea of the context in which it was used, is highly perilous.

<sup>67</sup> Brugmann, *Curtius' Studien* 4, 1871, 121.



ground that original  $-\lambda\nu-$  cannot give  $-\lambda-$  with compensatory lengthening<sup>68</sup>, and that from  $-\lambda\nu-$  we would have either  $-\lambda\lambda-$  (cp. ἔλλυμι, ἔλλός) or  $-\lambda\nu-$  (: πίνναμαι)<sup>69</sup>. Since original  $-\lambda\sigma-$  would meet the requirements, Meillet suggested that βούλομαι derived from \*βόλοσμαι, the aorist subjunctive of βόλομαι; βέλλομαι / δήλομαι preserved the old  $e$ -vocalism of the aorist, while \*βόλοσμαι was analogically reformed after the present βόλομαι<sup>70</sup>. Kretschmer noted the peculiar  $o$ -vocalism of the present βόλομαι and thought that it could only come from the perfect \*βέβολα, which, as we have seen, he regarded as the resultative form ('I have decided = I will') of the middle of βάλλω. In his view the original paradigm (in Attic) was:

pres. βάλλομαι aor. subj. \*δέλοσμαι perf. βέβολα

which, under the influence of the perfect, became

\*βόλομαι                      \*βόλοσμαι                      \*βέβολα

and, after the change of βόλοσμαι to βούλομαι, the new paradigm was adjusted to

βούλομαι                      βούλωμαι                      βέβουλα<sup>71</sup>.

The development in the other dialects did not, in his view, call for further comment (*l. c.* 164).

A few years later, Meillet seems to have slightly modified his earlier view: βόλλομαι is no longer regarded as an aor. subj., "on ne peut penser qu'à une formation du type de lat. *quaesō* (ancien \**quaiissō*) en face de *quaerō*; c'est une sorte de désidératif"<sup>72</sup>.

Today, the Meillet-Kretschmer view is generally accepted<sup>73</sup>. But there are several difficulties which are not really faced, especially in Meillet's view. On his view, the pivot of the whole system is a primeval present with  $o$ -vocalism represented by βόλομαι; it is this that induces the change from the expected aor. subj. (or present desiderative) \* $g^w el-s-$  to \* $g^w ol-s-$ . But it is also acknowledged that  $o$ -vocalism is exceptional in the present<sup>74</sup>, in other

<sup>68</sup> See O. Hoffmann, *Die griechischen Dialekte I*, 1891, 218. He assumed that the original cluster was  $-\lambda y-$ , which, in βόλομαι, was simplified to  $-\lambda-$ , but all this is impossible.

<sup>69</sup> J. Schmidt, *KZ* 32, 1893, 385.

<sup>70</sup> Meillet, *IF* 5, 1895, 328.

<sup>71</sup> Kretschmer, *Glotta* 3, 1912, 161 f.

<sup>72</sup> Meillet, *MSL* 20, 1918, 130-1; no notice is taken of Kretschmer's discussion.

<sup>73</sup> See, e.g., Boisacq 129, 1101; Specht, *KZ* 59, 1932, 104; Schwyzer, *GG I* 284, 693; Chantraine, *Morphologie* 291, *Gram. Hom. I*<sup>3</sup> 311. 426; Frisk, *GEW I* 259; Lejeune, *Traité de phonétique grecque*, 1955<sup>2</sup>, 108.

<sup>74</sup> See, e.g., Meillet-Vendryès, *Gram. Comp.* 235; Chantraine, *Morphologie* 247, *Gram. Hom. I* 311. Meillet's view that  $o$ -vocalism points to an early athematic inflection (*MSL* 19, 1915, 181 f.; 20, 1918, 103 f.; *Introduction*<sup>7</sup> 203) is contradicted by the enormous number of athematic presents with  $e$ -vocalism. Most of his positive material

words it is highly irregular and requires some more rational explanation than tacit acquiescence. It is likewise difficult to see why a desiderative as distinct from the future, should be introduced into the Greek verbal system. There is no trace of it in the living system.

If one is prepared to acknowledge that ἀλέξω might have had a desiderative -σ- originally, in Homer it is a pure, independent present, with no non-desiderative ἀλέκω at its side <sup>75</sup>. The difficulties caused by νίσσομαι or νίσσομαι do not disappear with the assumption of a desiderative suffix <sup>76</sup>. It would be much easier to accept the aor. subj., since with a verb of this meaning the generalization of a "subjunctive" is at least attested in Gothic *wiljau*, OHG *willu*, OE *wille* <sup>77</sup>; the tendency to use *uelim*, *nolim*, *malim* is also well known. But the change of the expected \**g<sup>w</sup>el-s-* to \**g<sup>w</sup>ol-s-* would be incomprehensible: no other example of such a change seems to be attested. We can also see the reason for this: far from succumbing to the pressure of other tenses, it is the aorist that leads the way. This is clear in βούλομαι itself: the dialectal βελλ- / δεηλ- can owe their *e*-vocalism only to the aorist \**g<sup>w</sup>el-s-*. Finally, we should note that the aorist subj. or desiderative interpretation is solely based on the assumption that the last consonant cannot be -v- and therefore must be -σ-. But this assumption is quite clearly wrong. There can be no doubt that an original \**g<sup>w</sup>ol-n-* would have resulted in βουλ-/βωλ-/βολλ- <sup>78</sup>. From the phonetic point of view there is therefore no difficulty in starting from a present \**g<sup>w</sup>olno-/g<sup>w</sup>elno-* as was maintained by Brugmann throughout his life <sup>79</sup>. The only question is whether this formation can be justified.

is quite inadequate for the task. Arm. *utem* 'eat' does not prove \**ōd-* as will be shown elsewhere. Lat. *uomo*, *tonat*, *domo* have nothing to do with an *o*-grade athematic and the use of Russ. *stonú* etc., when both OSlav. *stenjō* and Lithu. *stenù* show that it is due to the noun *ston*, seems incomprehensible. From Slavic *padō* 'fall' Meillet deduces that it is an original athematic (lengthened!) *o*-grade aorist of \**ped-*; but is there any other example of such an aorist? It is impossible to produce here the whole material but even a cursory check shows that there is no foundation for the doctrine. Meillet himself points out that in some cases composition may be responsible for the *o*-grade (which is not so different from Hirt's suggestion in Ablaut, 1900, 175 f., whom he subsequently attacked in MSL 20, 103). In others, one should stress, nominal forms have exerted an influence; *padō* is clearly connected with the lengthened *o*-grade of *pōd-* 'foot'. It should also be noted that in many of his examples the *o* is preceded by a labial. A thorough reevaluation of the very heterogeneous material would be a distinct service; at present, see R. Hiersche, IF 68, 1963, 149-159.

<sup>75</sup> Cf. Chantraine, Gram. Hom. I 440.

<sup>76</sup> Chantraine, l. c., and 313, as against Morphologie 291.

<sup>77</sup> Prokosch, Compar. Germanic Grammar, 1939, 224 f.; Braune-Helm, Ahd. Gram., 1950<sup>7</sup>, 306-7; Sievers-Brunner, Altenglische Gram., 1951<sup>2</sup>, 392-3.

<sup>78</sup> Cp. Schwyzer's characteristic hesitating attitude (GG I 283) with Lejeune's much more discriminating and clear-cut exposition, Traité de phonétique grecque, 1955<sup>2</sup>, 132 f.

<sup>79</sup> Cf. Brugmann, Griech. Gram., 1900<sup>3</sup>, 73.88.288; IF 32, 1913, 184 f.; Grundriss<sup>2</sup> II 3, 1916, 122 f. 316.

We have seen above that the Indo-European antecedent of βούλομαι was of the form \*g<sup>w</sup>el-. Whatever the origin of the labiovelars, this form was certainly in a 'Reimverband' with the root \*wel- 'choose, wish'. Now beside the original athematic form \*wel-mi, represented by OLithu. *pa-velmi*, Lat. *uolō* and Germanic *wiljan* (which is an optative of the athematic inflection), we find, in Aryan, several other formations in the present. In Vedic the 9th conjugation *vr̥ṣṭe* is the only type in use, but from the Upaniṣads onwards the 5th conjugation *vr̥ṣoti* / *vr̥ṣute* is also attested<sup>80</sup>. The antiquity of both types is guaranteed by the fact that both occur in Avestan from the Gathas onwards<sup>81</sup>. It seems therefore reasonable to assume that at least one of these types was also used in the Early Greek present of \*g<sup>w</sup>el-. In trying to reconstruct the primitive Greek form, we should bear in mind that the Aryan forms are middle and show the nil-grade of the root in the present. We shall therefore posit for Early Greek either \*g<sup>w</sup>l-na-mai or \*g<sup>w</sup>l-nu-mai. What forms can be expected from these antecedents in historical Greek?

The problem of the development of a sonant liquid faces us in some -νῦμι-presents, too. The verbs θόρνυμαι ὄρνυμι στόρνυμι ὀμόργνυμι are also based on a root form with *ʒ* and, as can be seen, *ʒ* is in them represented by ορ. We need not discuss here the reasons for the deviation from the normal αρ/ρα<sup>82</sup>. But we may observe that the tendency noticed in these verbs would be reinforced by a preceding labiovelar. We can therefore expect from \*g<sup>w</sup>l<sup>h</sup>nu-mai no other development than \*g<sup>w</sup>olnumai > \*βολλυμαι / \*βόλυμαι. In the same way, \*g<sup>w</sup>l<sup>h</sup>namai would have resulted in \*βολλαμαι / \*βόλαμαι. Support came also from the noun βουλή as we shall see presently.

It is rather difficult to choose between these two antecedents. In the case of \*βολλαμαι / βόλαμαι the transfer to the thematic inflection would be of the same type as that seen in κάμνω τάμνω δάκνω<sup>83</sup>. The mode of transfer is indicated by such forms as μαρνοίμεθα (Od. 11,513), its reality by ἐζεινεν beside ζείναμεν. Hom. εἶλομαι presents an exact parallel. On the other hand, an original \*βολλυμαι / \*βόλυμαι, most forms of which differed from the thematic type only in having -υ- instead of -ο- (\*βόλυμαι, \*βόλύμεθα, βόλύμενος etc.), could just as easily be transferred to that group.

The noun βουλή 'will, decision; counsel', with the dialect variants βολλα / βωλα, may also have helped in stabilizing the thematic inflection, since

<sup>80</sup> See Whitney, *Roots*, 1885, 163.

<sup>81</sup> See Bartholomae, *Altiranisches Wörterbuch*, 1904, 1360 f.

<sup>82</sup> Ruy Pérez discussed the problem in *Emerita* 17, 1949, 106-118, but his assumption of disyllabic roots (with  $\bar{r} > \omega\rho > \sigma\rho$ ) is hardly convincing, see Risch, *Glotta* 33, 1954, 217.

<sup>83</sup> See Schwyzler, *GG* I 693. On πίνω see now Leumann, *Mus. Helv.* 14, 1957, 75 f., esp. 78 f., and Frei, *Cahiers F. de Saussure* 16, 1959, 3 f., esp. 9 fn. 35; L. Gil, *Emerita* 32, 1964, 174; on κάμνω, τάμνω, G. Cardona, *Language* 36, 1960, 502 f.

the pattern 'thematic noun : thematic verb' was pervasive, while 'thematic noun : athematic verb in -ουμαι' was not. That this noun is derived from our verb cannot be doubted<sup>84</sup>. The antecedent is less clear. Theoretically it could be either \**g<sup>w</sup>ol-sā* or \**g<sup>w</sup>ol-nā*. Meillet (*l. c.* 131) thought that βουλή "doit être un ancien \**g<sup>w</sup>olsā*". But the only parallels he can give come from Slavic, for the very good reason that in Greek there are no suitable instances<sup>85</sup>. On the other hand good, and archaic, examples such as ποινή, ὠνή (Aeol. ὄνῃ, from \**wos-nā*: \**wes-* 'to buy') and κποινά (from κτι-<sup>86</sup>), are definitely in favour of \**g<sup>w</sup>olnā*<sup>87</sup>. But whether the antecedent of βουλή was \**g<sup>w</sup>olnā* or \**g<sup>w</sup>olsā*<sup>88</sup>, it is clear that the existence of an Early Greek \**g<sup>w</sup>ollā* was of considerable help in establishing the initial \**g<sup>w</sup>oll-* in the present of the verb, too, which, as we have seen, derived from *g<sup>w</sup>l-n-*.

One last problem in this group is presented by the present βόλομαι of Arcado-Cyprian and some Ionic areas. After what has been said above we can no longer accept Meillet's suggestion that it is the thematized form of an old athematic *o*-grade present<sup>89</sup>. But it is just as unlikely that it should represent a reduced \**g<sup>w</sup>lomai*<sup>90</sup> or \**βάλομαι*<sup>91</sup>, since there is no reason why the full-grade should be avoided. Frisk envisages the possibility that βόλομαι is a short-vowel subjunctive of an old athematic aorist<sup>92</sup>. But the recourse to the aor. subj. again fails to answer the question why the aorist and why

<sup>84</sup> "En réalité, on n'a aucun droit de lier la forme du verbe 'vouloir' à celle du substantif . . . ; les sens divergent, et il n'est pas évident que βουλή soit un nom verbal soit sur βόλομαι" (Meillet, MSL 20, 130) is a very strange statement indeed. For the femantic development of βουλή from 'will, decision' to 'counsel' see Porzig, *Namen für Satzinhalte im Griechischen u. Indogermanischen*, 1942, 230.

<sup>85</sup> See Schwyzer, GG I 516. The only promising word that seems to combine *o*-grade deverbative formation with an *s*-suffix, the noun δόξα, is not really parallel; it has -ā and its ending -sā is not original, see Leumann, *Homerische Wörter*, 1950, 173 f.; J. Egli, *Heteroklisie im Griechischen*, 1954, 79 f. D. Tabachovitz (*Homerische eī-Sätze*, 1951, 140 f.) criticizes Leumann's view, but has nothing to offer. Cf. Frisk, GEW I 410; Szemerényi, *Syncope*, 1964, 376<sup>4</sup>.

<sup>86</sup> See on this and Myc. *koṭona*, Palmer TPS 1954, 25 f.; Myc. Greek texts, 1963, 186 f.

<sup>87</sup> This form was posited by Brugmann, *Grundriss<sup>2</sup> I* 358; Porzig, *Namen für Satzinhalte*, 1942, 230; Lejeune, *Traité de phonétique*, 132, 192; while Meillet's \**g<sup>w</sup>olsā* is accepted by Chantraine, *Formation des noms*, 1933, 23; Buck, *Comparative Grammar of Greek and Latin*, 1948, 149.

<sup>88</sup> But this certainly cannot be based on the aor. subj. βολσ- as is strangely taught by Frisk, GEW I 259. On the other hand, the *terminus technicus* βολά 'council' in Argolic, Cretan and Boeotian, is not an Aeolic element in Doric, nor a Common Greek \**g<sup>w</sup>olnā* (Porzig, *Namen für Satzinhalte*, 1942, 230) but borrowed from Ionic-Attic.

<sup>89</sup> Meillet, MSL 19, 186; Meillet-Vendryès, *Gram. comparée* 235.

<sup>90</sup> Specht, KZ 59, 1932, 104.

<sup>91</sup> Brugmann, *Grundriss<sup>2</sup> II* 3, 122 f., 316<sup>1</sup>.

<sup>92</sup> Frisk, GEW I 259.

the subjunctive should have been used. It is worth recalling that Wackernagel emphasized that, as shown by Goth. *wiljan*, Latin *uelim* and Greek ἐραίμην etc., it was the optative that was commonly used of this type of verb, not the subjunctive<sup>93</sup>. Here again, I believe, Aryan gives a clue to our problem. Gathic Avestan in particular offers, besides the suffixed forms *vṛnu-*, *vṛnā-*, the unenlarged athematic present *\*vartai*. The attested forms are: *varatā* (Y.30,5) 'they chose', *vardmaidī* (Y.32,2) 'we choose'<sup>94</sup>, *vairīmaidī* (Y.35,3) 'we might choose' (pot.), *fravarətdā* (Y.31,10) 'chose', *fravarānē* (Y.12,8,1) 'I wish to choose', *ni-varāni* (Y.53,4) 'I will love'<sup>95</sup>. In accord with this, we find in Vedic the root-aorist based on the nil-grade of the root: indic. 1. sg. *ávri*, 3. sg. *ávrita*, opt. 3. sg. *vurīta*, but also the s-aorist forms *ávṛsi*, *ávṛdhvam*, *ávṛṣata*. Accordingly, we now have reason to assume for Early Greek a present *\*g<sup>w</sup>el-mai*, subj. *\*g<sup>w</sup>elomai*, and a root-aorist *\*(e)g<sup>w</sup>l-mān*, subj. *g<sup>w</sup>l-omai*, perhaps also an s-aorist *\*(e)g<sup>w</sup>l-s-to*, *\*(e)g<sup>w</sup>l-s-nto*. But there is no foundation for assuming, as has always been done to date, an s-aorist *\*(e)g<sup>w</sup>els-mān*.

Against this background, we might still wish to maintain that the aor. *\*g<sup>w</sup>l-mān*, *\*g<sup>w</sup>l-so*, *\*g<sup>w</sup>l-to* etc., developed, with the change of *\*g<sup>w</sup>l-* to *\*βολ-*, into *\*βολ-μᾶν*, *\*βολ-σο*, *\*βολ-το*, showing the required stem-form *\*βολ-*, which could then induce a similar change in the present form *\*g<sup>w</sup>el-mai*, *\*g<sup>w</sup>elomai* to *\*βολμαι*: *\*βόλομαι*. But it will now be clear that the alternation between *βολλ-*/*βελλ-* is better understood as being, in the latter case, due to an amalgamation of the two present-types *\*g<sup>w</sup>ollomai* / *\*g<sup>w</sup>elmai* into *\*g<sup>w</sup>ellomai*. And if this is true, *βόλομαι* is also likely to represent a blend of the two presents, but of a slightly different kind: *\*g<sup>w</sup>ollomai* affected *\*g<sup>w</sup>elomai* only to the extent of changing its root-vowel to *o*. In this the noun *\*g<sup>w</sup>ollā* (from *\*g<sup>w</sup>olnā*) may of course also have played its part. As far as the problem of the initial labiovelar in this group is concerned, we now see that whereas in W. Greek the development of *\*g<sup>w</sup>ellomai* to *δήλομαι* / *δείλομαι* was 'regular', in E. Greek the *o*-grade, with concomitant *β*, was generalized in *βουλ-*/*βολλ-*/*βολ-*, except in mainland-Aeolic where the coexistent presents *g<sup>w</sup>ollomai*/*\*g<sup>w</sup>el(o)mai*, led to *g<sup>w</sup>ollomai*/*\*g<sup>w</sup>ellomai*, eventually with the suppression of the former, but with the retention of its labiovelar development. It is of course possible that the labiovelar development in *βέλλομαι* is not due to (a long dropped) *βόλλομαι* but to the noun *βολλά* and/or the aorist *έβλόμην*. The latter line would be paralleled by *πέλομαι* / *έπλόμην*, while the former seems

<sup>93</sup> Wackernagel, *Vorlesungen über Syntax*, I<sup>2</sup>, 1926, 60.

<sup>94</sup> See M.W. Smith, *Studies in the Syntax of the Gathas*, 1929, 71, as against Bartholomae, *AiWb.* 1361.

<sup>95</sup> Smith, *o. c.*, 158. Note that Humbach's interpretations (*Die Gathas des Zarathustra I-II*, 1959) are in many cases rather different.

to have a correspondance in *πεισαι* (: Att. *τεῖσαι*) which is, to all appearances, solely conditioned by *ποινά*.

If one is still prepared to believe in Aeolic labialization, the use of *ἀδελφρός* in Lesbian poetry and inscriptions is surely bound to be rather disconcerting. That poets who use *παρθενικά* for the *παρθένος* of other dialects, should eschew their dialect-form in this important kinship-term is hardly credible. Nor is it any more likely that *δέρα* 'neck' is again a foreign import. The place-name *Βελφοί*, as compared with the more widespread *Δελφοί*, certainly suggests a labiovelar, although one does not really feel that a comparison with *δελφός* *δέλφαι* etc. is very helpful — we may be the victims of popular etymology. But even if the name is of Indo-European origin, with a true labiovelar, a primitive *\*g<sup>w</sup>elbho-* could develop into *βελφο-* in the same way as *πέμπε* developed from *\*penk<sup>w</sup>e*, i.e. by simple assimilation of the labiovelar to the following labial. We should not, however, lose sight of the fact that an original *\*belpho-* may in some dialects have been dissimilated to *\*delpho-*. An exact parallel to the latter process is supplied by the contrast of Boeot. *βέφυρα* and Cret. *δέφυρα* (with a third variant in *γέφυρα*) where Indo-European origin, and with it a labiovelar, is utterly unlikely<sup>96</sup>. As far as the common noun Att. *δελφίς*, Lesb. *βέλφινες* is concerned, it would seem reasonable to assume borrowing of a Mediterranean term rather than internal derivation from *δελφός* etc.; but even in the latter case *g<sup>w</sup>-ph > b-ph* could be normal in Aeolic, as in the now famous *ἰκωφοροί < ikwophorg<sup>w</sup>o-*.

Another often quoted example of Aeolic labialization is the Boeotian name *Θιόφειστος*, derived from *θέσσασθαι / ποθέω*. But the name is also spelt *Θιόφειστος* and the second part as (*Πτωιο-*) *φηστος*<sup>97</sup>. It is therefore by no means certain that *-φειστος* represents *\*g<sup>w</sup>hedh-tos*. It may just as easily, in fact more easily, derive from *\*φαιστος* (cf. *φάεννος*) with the Boeotian contraction of *αι* to *η* (later *ει*). It is equally unfounded to infer from the contrast Thess. *Πετθαλοί*: Boeot. *Φετθαλοί*: Att. *Θετθαλοί* that the primitive form had a labiovelar. Since the original form of the name is unknown, and Indo-European derivation is made rather difficult by the presence in the local form of *-τθ-* it is probably best to regard it as an autochthonous, certainly non-Indo-European and pre-Indo-European, name which may have started as *Θετθαλοί* (or sim.) with subsequent dissimilation to *Φ-T-* and *Π-τθ-* or, more likely,

<sup>96</sup> Cf. Lejeune's note (*Traité de phonétique* 38<sup>a</sup>), who evaluates the data differently. For the dissimilatory processes note (see Grammont, *Traité de phonétique*, 1956<sup>b</sup>, 310) OE *taþor* 'candle' from *papyrus*; Slav *topoľ* 'poplar' from Lat. *pōpulus*; Serbian *đabar* 'beaver' from *бѣбрь*, on the one hand, and, on the other, Dutch *kapel* 'butterfly' from *papilio*; Lithu. *klebonas* 'priest' from MLat. *plēbānus*, in all of which one of two consecutive labials is dissimilated to a dental or velar.

<sup>97</sup> See for the references Thumb-Scherer II 30, 33.

as Πετθαλοί which in nearby Boeotia became Φετταλοί and was then transposed into the 'correct' dialect-form in Att. Θετταλοί<sup>98</sup>.

These observations will make us rather distrustful of the only remaining example, Thess. φήρ, contrasting with θήρ in other areas. We have already mentioned the Φήρες of the Iliad (1,268; 2,743) and suggested that their appearance in Homer was due to a Thessalian story being woven into the epic texture. Now we should point out that the identification of these Φήρες with Θήρες cannot be anything else but popular etymology. The Centaurs are, at the beginning of our tradition, neither beastly nor beast-like beings; the theriomorph representation does not reach further back than the 6th century B.C.<sup>99</sup> An excellent example is Chiron, the φήρ θεῖος of Pindar (P. VI 119). Once we realize that the 'realia' make it impossible to connect their name with θήρ, it is difficult to escape the conclusion that it is rather to be connected with the numerous place-names that appear in the form Φεραί or Φηρή, Φηραί, Φᾶραι, scattered over the Peloponnese and Boeotia-Thessaly<sup>100</sup>. The founder and eponymous hero of Thessalian Φεραί is called Φέρης and his name may be identical with Macedon Βέρης, just as the Macedon place-name Βέροια seems connected with Φεραί<sup>101</sup>.

It would seem to be more difficult to challenge the authenticity of the verbal form πεφειρακοντες, πεφειρακοντες attested several times in inscriptions of Larissa, celebrating those who took part in the game of bull-chasing<sup>102</sup>. For this is quite clearly the Thessalian equivalent of Att. τεθηρακότες. But it is strange, to say the least, that the two inscriptions concerned come from the 1st century B.C. (IG IX 2, 536) and the beginning of that century (IG IX 2, 535) respectively. What is more, other inscriptions from the same period, when they have to give a noun-equivalent of the expression οἱ τὸν ταῦρον πεφειρακόντες, use οἱ νενεικηκότες ταυροθηρία (IG IX 2, 531, 10 f.) or οἱ νε-νικηκότες ταυροθηρίαν (*ibid.* 532, 8-9) or simply ταυροθηρίαν (533, 9; 534, 9). It is rather difficult to accept that in all these inscriptions ταυροθηρία shows κοινή-influence, while in πεφειρακόντες the local form tenaciously

<sup>98</sup> Other place-names, quoted by Thumb-Scherer II 30, 60, are so unimpressive that they are ignored here.

<sup>99</sup> See Bethe, RE XI, 1921, 172 f., esp. 178.

<sup>100</sup> Cf. RE XIX, 1938, 1980 f., 1796 f.; RE Supplem. 7, 1940, 984 f.

<sup>101</sup> See D. Detschew, Die thrakischen Sprachreste, 1957, 53 f. Brandenstein, RE XIX, 1808, 30 f. would derive Φαραί from IE \*bhā- 'shine', so that the place-name would mean 'clearing', while Φερά would be connected with IE \*bher- 'hervorragend'. Since the form Φαραί appears in Elis, I would rather regard it as the Elean form of Φηραί (with η > α) and feel rather doubtful about an Indo-European etymon. It is worth pointing out that the name of Φεραί which in literature (Strabo IX 405; Steph. Byz.) and on coins occurs as Φαραί, shows the same change of ερ to αρ as the name of Κιέριον which appears also as Κιάριον (Thumb-Scherer II 52).

<sup>102</sup> On the ταυροκαθάψια see RE VA, 1934, 24 f.

survives. The total absence of such forms as φέρμος, ἀβέλφειος or βέρα (for θερμός, ἀδελφ(ε)ός, δέρη) makes it extremely unlikely that this should be the case. The impression is strong that with the dying out of the patois<sup>103</sup> efforts were, from time to time, made to revive it, and these efforts, as usual, often led to hyperdialectal features<sup>104</sup>. That some sort of feeling existed that an Attic (or non-Aeolic) dental corresponded with a Thessalian (and sometimes general Aeolic) labial is, and was, clearly shown by the shibboleth, the name Πετθαλοί as against Θετταλοί. Further examples, no doubt always interpreted in this way, were Βελφοί / Δελφοί, βέλλομαι as compared with W. Greek δήλομαι and others.

Viewed from this angle, the interpretation of the Φῆρες as θῆρες acquires renewed interest. For it shows that a name that was originally a mere ethnic, was filled with a new, awe-inspiring, content which was the result of a false linguistic feeling - of popular etymology. It is not unreasonable to assume that this fatal step was first taken by 'foreigners'. But once it was taken, it was bound to shape the very figure of the Φῆρ (or Centaur), who, so far a mere, or (ab)normal, human had henceforth to accommodate the attributes of a θῆρ. This would account for the curious fact that the horse-aspect is so late to emerge.

To sum up. Our re-examination of the peculiar Aeolic labialization, has led to the surprising result that this labialization, at least as a regular phonological change, is non-existent. There are individual instances of a labial development — where other dialects show the 'normal' dental development — but they are due to special circumstances, such as the pressure of the paradigm (πεῖσαι : ποινά, βέλλομαι : βολλ-) or the pressure of the system (πέτταρες because of πέμπε) or the phonetic shape of the word (πέμπε). But, generally speaking, the Aeolic dialects are no more of a markedly labializing disposition than the others<sup>105</sup>. Throughout the Greek lands, the development of the labiovelars is, apart from 'accidents', determined by the following vowel (and a preceding *υ*). The only real exception, and this again general, is the voiced labiovelar which, before *ι*, gives, rather unexpectedly, β.

<sup>103</sup> See A. Debrunner, *Geschichte der griech. Sprache II* (Sammlung Göschen 114), 1954, 43.

<sup>104</sup> Cp. the monstrosities of Hellenistic Cretan, such as ἀμέν ὑμέν τινεν συγγενίεν κρίνοντεν (Debrunner, l. c. 40), 'restoring' the dialect-form in lieu of Koine -ες.

<sup>105</sup> Strunk, *die sog. Äolismen der hom. Sprache*, 1957, 26, also thought that labialization was "im Äolischen selbst gar nicht durchgängig."