MYCENAEAN WINE AND THE ETYMOLOGY OF ΓΛΥΚΥΣ

Dr. J.-P. Olivier in his revision of the Knossos tablets has suggested a new reading which raises such interesting possibilities that it seems worth discussing at length. The text in question is Uc 160, a fragment of a large tablet, of which it is a portion of the right-hand edge. Parts of five lines are preserved on the recto, and although only traces are preserved in the top line, it seems advisable to re-number the lines so that the previous line 1 will now be line 2. The readings of the verso, part of a list of vessels, are not affected.

> .1 sup. mut. .2 z 3 [*131^b s .3 1 1 3 2]v 1 Z Z \mathbf{V} 3 *de-re-u-ko* 2 *125 1[3]v 5 z .4 s 4 VIN 5 z .5]v inf. mut.

Lines 3 and 4 apparently relate to wine, line 5 to cyperus (*125). There is no means of telling whether the quantities at the left of lines 3 and 4 are of liquid or dry measure. The presence of *125 in line 5 shows that this tablet recorded other things as well as liquids.

The vital new reading is the word *de-re-u-ko* in line 4. It was previously read, very doubtfully, as *de-de-ko-wo*; Olivier has shown that the 'second' sign is really two signs, *re-u*, written so close as to overlap, and the last sign is illusory, the tablet being damaged at the edge. I believe this reading to be correct. The first three signs precede the ideogram, the *ko* follows it, and the arrangement strongly suggests that it is an afterthought, added after the ideogram VINUM had been written. The ideogram $*131^{b}$ in the line above has only two uprights with two oblique strokes between them, where the normal form of VINUM has three uprights and oblique strokes on either side of the central one. The form in line 4 is hard to describe exactly; see the photographs in Plate III. It has three uprights, and two oblique strokes to the left of the central upright; to the right the strokes are irregular, but this may be due to haste on the part of the scribe rather than deliberate differentiation¹.

It would seem clear that the word thus inserted around the previously written ideogram must qualify it in some way, and is probably intended to define it more accurately. It may be observed that on the verso the ideograms depicting vessels are accompanied by their names in syllabic script $(a-pi-po-re-we = |amphiphor\bar{e}wes|, i-po-no- = |ipnoi|, possibly [u-do]-ro = |hudroi|)$. Thus any interpretation of de-re-u-ko ought to refer to wine of some kind.

This immediately suggests consideration of the word for 'must', 'new wine' $\gamma\lambda\epsilon\bar{\nu}\kappa\sigma\varsigma$. The Mycenaean spelling to be expected for this would be *ke-re-u-ko*, and although *de* and *ke* are rather similar in form, there is no doubt that the reading here is *de*. But it is not therefore necessary to reject the identification, for it has long been believed that $\gamma\lambda\nu\kappa\nu\varsigma$, to which $\gamma\lambda\epsilon\bar{\nu}\kappa\sigma\varsigma$ is obviously related, represents a development of an earlier * $\delta\lambda\nu\kappa\nu\varsigma$. Thus on this hypothesis *de-re-u-ko* might stand for * $\delta\lambda\epsilon\bar{\nu}\kappa\sigma\varsigma$.

The reason for postulating this change of $\delta\lambda$ to $\gamma\lambda$ is to enable $\gamma\lambda\nu\kappa\nu$ s to be compared with its Latin equivalent *dulcis*. There are no *u*-stem adjectives in Latin, hence the transformation of *-*kus* into -*cis* is almost automatic (cf. $\eta\delta\nu$ s: *suāuis* < **suāduis*). There seems to be no supporting parallel for *dl*- > *gl*- in Greek, but it is common enough in other languages (e.g. Albanian glatë, *gjatë* 'long' from the base of Gk. $\delta o\lambda \lambda \omega$ s, O. Ind. *dīrgha*-, O. Ch. Sl. *dlŭgŭ*, etc.). In medial position the treatment - $\lambda\lambda$ - is attested by the Laconian $\xi\lambda\lambda\omega$ < **sed-lā*.

But there are still problems involved in accepting the equation of the Greek and Latin words. Walde-Pokorny² set up a base **dlku*-, which will yield **dolcis* > *dulcis* regularly in Latin, but to explain $\gamma\lambda\nu\kappa\nu$ it is necessary to postulate not only the change of $\delta\lambda$ to $\gamma\lambda$ but also $-\lambda\nu$ - in place of $-\lambda\alpha$ -, the normal pro-

¹ Cf. E. L. Bennett, Proceedings of the Cambridge Colloquium on Mycenaean Studies, p. 12.

² Indogermanisches Wörterbuch I. 816, J. Pokorny, new ed., p. 222.

duct of l, by influence of the v of the second syllable. Moreover $\gamma\lambda\epsilon\tilde{v}\kappa\sigma\varsigma$ has then to be explained as an analogical formation (cf. $\zeta u\gamma \acute{o}v \cdot \zeta\epsilon\tilde{u}\gamma\sigma\varsigma$) based upon $\gamma\lambda u\kappa \acute{v}\varsigma^3$. M. Lejeune has pointed out to me that the building of neuter s-stems from adjectives in - $\dot{v}\varsigma$ with the full e-grade is characteristic of archaic words in Greek: $\beta\alpha\theta\dot{v}\varsigma \cdot \beta\acute{e}v\theta\sigma\varsigma$, $\kappa\rho\alpha\tau\dot{v}\varsigma \cdot \kappa\rho\acute{e}\tau\sigma\varsigma$, $\theta\rho\alpha\sigma\dot{v}\varsigma \cdot \theta\acute{e}\rho\sigma\sigma\varsigma$; contrast later $\beta\dot{\alpha}\theta\sigma\varsigma$, $\kappa\rho\dot{\alpha}\tau\sigma\varsigma$, $\theta\dot{\alpha}\rho\sigma\sigma\varsigma$. Thus $\gamma\lambda\epsilon\tilde{v}\kappa\sigma\varsigma$ will have to be an archaic formation if analogical; but if * $\delta\lambda\nu\kappa\dot{v}\varsigma$ had already developed for the adjective in Mycenaean times, the analogical models were probably already present, though they cannot be demonstrated, upon which to build * $\delta\lambda\epsilon\tilde{\nu}\kappa\sigma\varsigma$.

When $\gamma\lambda\epsilon\bar{\nu}\kappa\sigma\varsigma$ is called a «late» innovation, it should be noted that it is attested as early as the 5th century B.C. in three inscriptions from Gortyn in Crete⁴. Its first use in literature is in Aristotle (*Mete.* 380^b 32); but it is hardly likely that he learned the word from Crete, and we may reasonably infer that the word had a long history in Greek. In any case it is never safe to deduce from a word's absence from extant literature before the 4th century that it was a new formation of that date, provided it is a specialised term of this kind.

But if it is ancient, is it possible that we have an ablauting base of the type *dleuk-/dluk-, which would explain the Greek words very simply? The problem here is the Latin form, which could only be derived from *dlukus by postulating an improbable metathesis of *dluk- to *dulk-. Initial *dl- in Latin appears to yield *l*-, if *longus* < *dlongos (cf. O.Ch.Sl. $dl\check{u}g\check{u}$), just as $*tl- > l-(l\bar{a}tus, \text{ etc.})$.

Having discussed this question with M. Lejeune, to whom I am grateful for advice and permission to quote his views, I think there is a lot to be said for his suggestion that the restriction of this word to Greek and Latin may indicate a foreign origin. The only parallel proposed is Armenian k after, and attempts to

³ H. Frisk, GEW I p. 315: «Das hochstufige γλεῦκος ist späte Neuerung nach den vielen gleichgebildeten neutralen σ-Stämmen.»

⁴ M. Guarducci, *Inscriptiones Creticae* IV.77.3, 79.4, 144.4; all classed by the editor among the *tituli vetustiores*, and the first two at least must be before the end of the 5th cent.

derive this from the same root seem unconvincing. But if it is a loan presumably both the adjective (meaning 'sweet to the taste' as opposed to the more general meanings of $\hbar\delta\psi\varsigma/suauis$) and the substantive 'sweetness' > 'sweet new wine' may have been borrowed. The language of viticulture is well known to be non-Indo-European (e.g. $\delta\nu\sigma\varsigma/uinum$, $\delta\mu\pi\epsilon\lambda\sigma\varsigma / pampina$?) and a borrowed word could easily fit into this context. The alternatives, if we suppose a direct I.E. origin, involve *ad hoc* assumptions, and although it is hard to come to a definite conclusion, perhaps this is the simplest explanation of the facts.

A possible objection to the interpretation might be the presence of $\gamma\lambda\nu\kappa\nu$ s or derivatives in Mycenaean with the spelling *k-r-* instead of *d-r-*. Two examples have been proposed, neither of which carry much conviction. The word *ku-ru-zo* occurs on at least four, possibly eight, jars from Thebes⁵. It has been suggested, first by H. Mühlestein⁶, that *ku-ru-zo* represents the comparative of $\gamma\lambda\nu\kappa\nu$ s, $\gamma\lambda\nu\kappai\omega\nu$ i.e. $|gluts\bar{o}s| < *gluki\bar{o}s$. But it has yet to be proved that any of the legends on jars describe their contents in this way⁷; all of the clear legends consist of personal names, with or without additional details such as place of origin. Hence O. Masson (in Raison, *l.c.*) suggested that this was the comparative of $\gamma\lambda\nu\kappa\nu$ s used as a man's name. But if it is a name, there is no reason for associating it with $\gamma\lambda\nu\kappa\nu$ s; for some at least of the names attested on vases appear to be non-Greek.

There is also the word ku-ru-ka (KN Vc 5510) which is presumably a man's name; it belongs not to the main Vc set, which is in hand 124 (Room of the Chariot Tablets), but probably to a small group from the West Magazine (hand 115?)⁸. This has been interpreted by O. Landau as /*Glukas*/⁹, but not only is the formation difficult, but Landau himself has noted that it is paralleled by Linear A ku-ru-ku (HT 87.4), and there is no reason

⁵ Z 840, 841, 845, 856; restored on Z 843, 879, 959, 960: see J. Raison, Les vases à inscriptions peintes de l'âge mycénien, pp. 110-115.

⁶ Museum Helveticum 15 (1958) 222; see Raison, l.c., for further references.

⁷ Cf. M. Lejeune, *Minos* 6 (1958) 24.

⁸ J.-P. Olivier, Les scribes de Cnossos, p. 57.

⁹ Mykenisch-griechische Personennamen, pp. 77, 270; Georgiev had already suggested that it represented Γλύκη.

why it should have to be a Greek name. The sacrifice of these two suggestions is a small one.

The new evidence of Mycenaean *de-re-u-ko* at least appears to be confirmation of the presumed earlier form $\delta \lambda \nu \kappa \nu s$ for $\gamma \lambda \nu \kappa \nu s$, whatever the ultimate origin of the word. The presence of a word which can be interpreted as 'must' in immediate contact with and apparently qualifying an ideogram long known to stand for 'wine' is strongly in favour of the identification, and although some doubt must subsist owing to the difficulty of reading the signs, the reading proposed by Olivier looks highly probable.

We must now reconsider the question of the value of the reduced form of the ideogram VINUM, transcribed as $*131^b$, which stands in line 3 of this tablet. Bennett¹⁰ has been reluctant to accept the suggestion that since this appears on one other tablet (PY Un 267) in conjunction with the normal sign for VINUM, it must represent something different. In the present case the differentiating factor (e.g. an addressee) might have stood in the lost portion at the beginning of the two lines in question. But in PY Un 267 there is no such possibility; lines 5-8 enumerate commodities followed by quantities:

ko-ri-a ₂ -da-na	*123	6		
ku - pa - ro_2	*123	6		
	*157	6		
	PO + KA	2	т	5
	VIN	20		
	ME	2		
	LANA	2		
	*131 ^b	2		

In a list of this type the repetition of the same commodity with a different quantity seems highly unlikely; in all parallel cases known to me, either there is a heading referring to a different person or place, or the ideogram is modified by ligature, adjunct or appended syllabic word so as to express the difference. There-

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¹⁰ Cambridge Colloquium, pp. 13-15.

J. CHADWICK, Mycenaean Wine... Plate III.



(a) KN Uc 160 recto.



- (b) Enlargement of part of line 3.
- (c) Enlargement of part of line 4.

(Photographs by courtesy of Dr. J.-P. Olivier)

fore, if two similar but not identical ideograms stand in a single list, there is a *prima facie* case for distinguishing their meanings.

Hence the proposal made in *Documents* (p. 223) that $*131^{b}$ might be 'must' as distinguished from 'wine' in general. It seems unlikely that such a modified form of the ideogram can represent an entirely different substance; hence we must look for a meaning akin to 'wine', which is well established for the normal ideogram VINUM¹¹. It is probable that the ideogram originally represented a vine grown on a trellis, and its application to a drink made from a different substance is therefore unlikely. Since spirits were unknown in antiquity, it seems safe to argue that the meaning must be a variety of wine, and since it is an incomplete version of the full sign, the obvious choice is 'new wine'.

Against this it might be argued that if the scribe of KN Uc 160 wrote $*131^{b}$ for 'must' in line 3, he would have written it again in line 4, and therefore, if *de-re-u-ko* is 'must', $*131^{b}$ should have a different meaning. It is hardly possible to answer this argument without knowing what stood at the left end of these two lines; but if there was an addressee, then in each case he may have received a quantity of wine and a quantity of must. The more complete ideogram in line 4 will then be an error, which was corrected by the insertion of the word *de-re-u-ko* rather than by deletion and rewriting. But such a hypothesis must remain conjectural, though it is perhaps fair to remark that similar errors and corrections are frequent in the Room of the Chariot Tablets to which this tablet belongs.

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¹¹ Note especially its appearance on sealings (PY Wr 1358-1361) from the building at Pylos identified by the archaeologists as a wine-store.