

KI-TI-ME-NA AND KE-KE-ME-NA AT PYLOS*

Two types of *ko-to-na* are distinguished at Pylos by the accompanying participles *ki-ti-me-na* on the Eo and En tablets and *ke-ke-me-na* on Eb and Ep. Both types occur on the short Ea tablets. For the purposes of this article I shall follow the universally accepted interpretation of *ko-to-na* as referring in some way to plots of land.

The usual interpretation of *ki-ti-me-na* and *ke-ke-me-na* is that they refer respectively to «private» and «public» land¹ on the grounds that *ki-ti-me-na* is always associated with individuals and *ke-ke-me-na* nearly always with the phrase *pa-ro da-mo*, «from the community». Two recently published studies² have shown that the second inference is not valid since on Ep 301.8-14 and Ep 704.1 *ke-ke-me-na ko-to-na* are held by individuals with no mention of the *da-mo*³ and on several Ea tablets⁴ *o-na-ta* of *ke-ke-me-na* are held from individuals and moreover the phrases *ke-ke-me-na*, *ko-to-na* and *pa-ro da-mo* are mutually exclusive throughout the Ea tablets⁵. Consequently both Duhoux and Dunkel have independently proposed an entirely different interpretation, that they mean «cultivated» and «fallow». I shall argue below that this pair of meanings is also unacceptable, but first I find it necessary to discuss each word separately, beginning with *ke-ke-me-na*.

* I wish to thank Mr. J. T. Hooker for reading this paper in manuscript.

¹ For references see Y. Duhoux, *Aspects du vocabulaire économique mycénien*, Amsterdam 1976, p. 9 n. 5.

² Duhoux, *op. cit.*, pp. 7-27 (referred to below as *Duhoux*), G. Dunkel, «Mycenaean *ke-ke-me-na*, *ki-ti-me-na*», *Minos* 17, 1981, pp. 18-29 (= *Dunkel*).

³ That the omission of *o-na-to* is not a mistake is in each case demonstrated by the corresponding Eb tablet.

⁴ Ea 59.3, 305, 480, 757, 809; cf. also Ea 270, 801, 802, 922.

⁵ The formula *e-ke o-na-to ke-ke-me-na ko-to-na* with 'no further qualification occurs twice only, on Ea 59.2 and Ea 806 (three times if Ea 336 and 1042 belong to the same tablet. See *PTT I*, p. 91, n. ad Ea 336).

ke-ke-me-na

We have seen that this word cannot mean «common» or «public». There is therefore no need to consider Palmer's suggestion that it is connected with later Greek κοινός, from a verbal root **kei-*⁶. Other interpretations have been effectively dismissed by Heubeck⁷. However three of them deserve further comment.

1) The original suggestion of Ventris and Chadwick⁸ was that *ke-ke-me-na* is from κείμαι, «to lie». It has often been objected that there is no trace of a perfect of κείμαι in Greek, nor is there likely to have been, since the present tense already has a perfect sense⁹. The cognate Sanskrit verb, *śēte*, however does have a perfect, *śīśyē*¹⁰, of which the participle, *śāśayanā*, occurs several times in the Vedas¹¹, with the meaning «having lain» or «having been lying»¹². Such a meaning would of course be difficult for our texts, but Maddoli compares κατακείμενος, «mortgaged», in the Gortyn law-code¹³. The objection of Heubeck and Duhoux, that the perfect participle of κείμαι would be **ke-ki-me-na*, has been countered by Dunkel¹⁴, who points out that κείμαι, like *śēte*, is one of a rare group of I-E verbs which have full grade in the weak forms. This is true of the present medio-passive (we would expect *κίμαι, as in τίθεμαι) but we have no way of telling whether it would be so in the hypothetical perfect. Dunkel attributes a meaning «lying fallow»¹⁵

⁶ *TPS* 1954, p. 28; *The Interpretation of Mycenaean Greek Texts*, Oxford 1963, pp. 85-86, 187-188 (= *Interpretation*). Palmer's hypothesis involves the ad hoc invention of a completely unknown Greek verb, which is also morphologically suspect. We should expect **ke-ki-me-na*, according to A. Heubeck, «Myk, *ke-ke-me-no*», *ŽA* 17, 1967, p. 19.

⁷ *Op. cit.*, pp. 17-21 (= Heubeck).

⁸ *JHS* 73, 1953, p. 98; *Documents in Mycenaean Greek*², Cambridge 1973, p. 233 (= *Documents*²).

⁹ e.g. *Duhoux*, p. 11.

¹⁰ Palmer, *TPS* 1954, p. 27, n. 1, however, disqualifies this evidence, claiming that *śīśyē* is an innovation in Sanskrit since it does not occur in the earliest texts. This is a non sequitur and anyway, *śāśayanā* is unequivocal.

¹¹ G Maddoli, *SMEA* 12, 1970, pp. 23-27.

¹² e.g. *RV* 7.103.1 (A. A. Macdonell, *A Vedic Reader for Students*, p. 141).

¹³ *IC* 4: 47.1.10; R. F. Willetts, *Aristocratic Society in Ancient Crete*, London 1955, pp. 54 ff.

¹⁴ P. 29.

¹⁵ P. 20.

2) Heubeck himself preferred to take *ke-ke-me-na* as /ke-kesmena/, from the root **kes-*, «cut», as in *κεάζω*, *κείων*¹⁶. However -s- is not usually ignored before -m- (cf. *do-so-mo*, etc.), and we should expect **ke-ke-se-me-na*¹⁷.

3) The only other solution that Heubeck allows as morphologically possible is that suggested by Ruijgh¹⁸ that *ke-ke-me-na* is the perfect passive pariciple of **κίχημι* (κεχεμένα as in τίθημι : τεθεμένα). This is certainly the most plausible explanation since it is the only one which both matches the syllabic spelling perfectly and postulates a verb which is known to have existed in Greek, supplying the aorist forms of Homeric *κίχάνω*, later *κίγγάνω*, although it must be admitted that the perfect of this verb is not attested either.

In spite of this Heubeck rejects it. **κίχημι* is evidently cognate with Sanskrit *jāhāti*, «leaves», «abandons», a meaning which survives in the Greek words *χῆτος*, *χῆρος*, *χήρα* and the derivatives *χηρόω*, *χηρεύω*, *χηροσύνη*, *χηρωστής*, and which was seen to be appropriate for *ke-ke-me-na* by Calderone¹⁹ who was the first to connect it with the latter group of words. This etymology has now been endorsed by Duhoux to produce the meaning «left fallow»²⁰. However the Homeric and Classical meaning of *κί(γ)χάνω* is «to light upon, find, meet with, acquire, obtain, arrive at», and this development is, according to Heubeck, unlikely to be post-Mycenaean. Ruijgh, on the other hand, is obliged to construct two semantic developments: (a) «left fallow» > «communal», and (b) as a racing metaphor, «to leave (someone) behind» > «to overtake, reach»²¹. This hardly accounts for the diversity of meaning that *κίχάνω* has already achieved in Homer. Both authors have created unnecessary difficulties. There is nothing to prevent us looking for an explanation which approaches the Homeric meaning of «to find, obtain», etc. The reason this has never been

¹⁶ Pp. 20-21; M. Lejeune, *Mémoires de philologie mycénienne III*, Rome 1972, pp. 142, 145.

¹⁷ M. D. Petruševski, *SMEA* 12, 1970, pp. 124-125.

¹⁸ C. J. Ruijgh, *Études du grec mycénien*, Amsterdam 1967, pp. 365-366 (= *Études*).

¹⁹ *Siculorum Gymnasium* 13, 1960, p. 96.

²⁰ Pp. 23-24.

²¹ Ruijgh, *SMEA* 15, 1972, pp. 91-93.

suggested is presumably that such a meaning seems closer to received notions about *ki-ti-me-na*, to which we now turn.

ki-ti-me-na

The distribution of the phrase *ko-to-na ki-ti-me-na*²² is very simple to describe. It is always²³ qualified by a personal name in the genitive and is never the direct object of the verb *e-ke* or *e-ke-ge*²⁴. On this basis an interpretation as «private plot», or «individual holding»²⁵ seems reasonable. In addition it appears from En 609.1-2 that the persons concerned may be described as *te-re-ta*. Palmer has argued²⁶ that these men must have received their plots from a higher authority, that is to say the wanax, or «king». This interpretation has been accepted by Duhoux²⁷, but it is not based on any stronger evidence than Palmer's own hypothesis that *te-re-ta* means «man of the service» and an analogy with Hittite land-tenure which cannot be said to be directly relevant²⁸. However the observed distribution does not compel us to take *ki-ti-me-na* as the word which describes private ownership. This is more likely to be implied by the word *ko-to-na*, as is suggested by the use of the word *ko-to-no-o-ko*²⁹.

No more can be deduced from context alone. When we turn to philological considerations we find that there is about as much evidence as we have a right to ask for:

a) while there is no exact counterpart in later Greek, the Homeric compound ἔκτιμενος is very close;

²² The contrasting word order, *ko-to-na ki-ti-me-na: ke-ke-me-na ko-to-na*, is very striking, but its significance cannot now be ascertained, despite the bold attempt of O. Panagl, *Acta Classica (Debrecen)* 9, 1973, pp.3-14.

²³ I leave out of account the doubtful readings of KN X 7753 and PY Er 880.1.

²⁴ The only exception is Eo 278, where *ki-ti-me-no* is presumably to be understood. Compare En 467.1.

²⁵ Palmer, *Interpretation*, p. 428, s.v. *ki-ti-me-na*.

²⁶ *TPS* 1954, pp. 37-40; *Interpretation*, pp.190-192.

²⁷ Pp. 16-17, 50-52.

²⁸ So J. T. Hooker, *Mycenaean Greece*, London 1976, p. 186; *Kadmos* 18, 1979, p. 103.

²⁹ This is on the assumption that *ko-to-no-o-ko* means «holders of *ko-to-na* of whatever kind», as argued by G. F. Polyakova, *VDI* 139, 1977, pp. 61-67. It could refer to only once kind, though whether this *ki-ti-me-na* or *ke-ke-me-na* is not easy to tell. See Palmer, *Gnomon* 43, 1971, pp. 175-177.

b) there are a number of obviously related words on the tablets: *ki-ti-je-si*, *a-ki-ti-to*, *ki-ti-ta*, *me-ta-ki-ti-ta*, the last three of which have exact Greek counterparts, deriving from the verb κτίζω;

c) all these words can be traced back to a well known Indo-European root, **k̑tei-*, seen in Sanskrit *kṣēti*, Avestan *šāēti*, «dwells», Armenian *šēn*, «village», etc.³⁰.

The meaning of all these words is nearly always related to the ideas of establishing, building, settling, inhabiting. This does not amount to «clear and overwhelming etymological evidence that *ki-ti-me-na* means 'cultivated'»³¹. Of the Indo-European cognates listed by Pokorny only Sanskrit *kṣētra* has the meaning «landed property, field, place», etc. (compare Avestan *šōiθra*, «settlement, habitation»). The same impression is given by Greek κτίζω, «to build, establish, found (a colony)», περικτίονες, «dwellers around», κτίστης, «founder», κτίτης «inhabitant», etc. So too with Homeric εὐκτίμενος. This epithet is used with islands³², cities³³, streets³⁴ and houses³⁵ with the meaning «good to live in» or «well-built» vel sim. It is also found with the word ἀλώη, meaning «well made threshing floor»³⁶. However in three cases ἀλώη means «garden» or «orchard»³⁷, where some such meaning as «well cultivated» would be appropriate, but even here it is more likely to mean «well planted» (ie. «established») ³⁸. Finally, the single occurrence of ἄκτιτος in the Homeric hymn to Aphrodite³⁹ is usually translated «untilled»⁴⁰, though «uninhabited» would fit the context just as well.

A verb **kteimi* will account for *ki-ti-me-na*, *ki-ti-je-si* (*κτίενσι) and εὐκτίμενος and corresponds to classical κτίζω in the same way that κάθημαι does to καθίζω; *ki-ti-me-na* will therefore

³⁰ J. Pokorny, *Indogermanisches etymologisches Wörterbuch I*, Berne 1959, p. 626.

³¹ *Dunkel*, p. 20. This is the interpretation favoured, more circumspectly, by *Duboux*, pp. 17-22.

³² Lemnos, Φ 40; Lesbos, δ 342; Ithaca, χ 52, etc.

³³ e.g. Ἰλίου ... εὐκτίμενον πολιεθρον, Δ 33, Θ 288, Φ 433, etc.

³⁴ εὐκτιμένας κατ' ἀγυιάς, Ζ 391.

³⁵ οἶκον, δ 476, § 315, etc.; δόμον, ω 214.

³⁶ Y 496.

³⁷ Φ 77 (cited by *Dunkel*, p. 19), ω 226, 336.

³⁸ Compare Pindar, P. 5.89.

³⁹ Line 123.

⁴⁰ So *Duboux*, p. 22.

be perfect in sense⁴¹, «established», «built» or «inhabited»⁴². In this way it is possible to provide a consistent interpretation of *ki-ti-je-si*, «they inhabit», *ki-ti-ta*, «settlers» and *me-ta-ki-ti-ta*, «fellow or new settlers»⁴³, and the connection may well be a direct one, as has been argued⁴⁴.

The great merit of Duhoux's study is that it covers all the available evidence and attempts a consistent interpretation of all the relevant terms, while frankly admitting the difficulties. Two of his arguments are particularly convincing⁴⁵:

1) *ki-ti-me-na* and *ke-ke-me-na* are complementary terms, not opposites, since the opposite of *ki-ti-me-na* is *a-ki-ti-to* and on the Knossos Uf tablets another adjective, *pu-te-ri-ja* is used to describe *ko-to-i-na*⁴⁶;

2) *pu-te-ri-ja* itself belongs to a large family of Mycenaean words based on the stem **phut-* (*pu-te*, *pu₂-te-re*, *pu-ta*, *pu-ta-ri-ja*, [*pu₂-te-me-no*, *e-pi-pu-ta*]), and probably has some such meaning as «cultivated», «planted» or «planted with trees». Since *ki-ti-me-na* does not occur at Knossos it may be that these two words are equivalent if not identical in meaning, a supposition which is reinforced by the phrase *pu-te-re ki-ti-je-si* (PY Na 520). At any rate, the implication is, according to Duhoux, that *ki-ti-me-na* and *ke-ke-me-na* are agricultural terms, not legal or tenurial ones, a conclusion which certainly deserves consideration. However the more specific interpretation as «cultivated» and «fallow» favoured by Duhoux and Dunkel is open to more general objections as well as the linguistic difficulties discussed above. The most important of these is fully considered by Duhoux himself⁴⁷. If one word

⁴¹ J. Chadwick, Mycenaean Seminar of the London Institute of Classical Studies, 21/2/79, summarized in *BICS* 26, 1979, p. 130. This analysis makes Palmer's «won from the waste» (*TPS* 1954, p. 26) difficult. See *Documents*², p. 444. Palmer relies on the use of $\kappa\tau\epsilon\alpha\tau\iota\zeta\omega$ with this meaning at ω 206, but the connection of $\kappa\tau\iota\zeta\omega$ etc., if any, with this word is very remote, as Palmer recognizes (*loc. cit.* n. 2).

⁴² So T. B. L. Webster, *BICS* 1, 1954, p. 13; G. Pugliese Carratelli, *PP* 12, 1957, p. 82.

⁴³ For the last two, see *Documents*, Glossary *s.v.v.*

⁴⁴ e.g. by M. S. Ruipérez, *Minos* 5, 1957, p. 205 and Chadwick, *op. cit.* (note 41).

⁴⁵ *Duhoux*, pp. 11-17.

⁴⁶ KN Uf 981, 1022, 1031. It is also possible that *ko-to-na* could stand on its own, because further description was sometimes either unnecessary or unknown to the scribe at the time of writing. See Ea 812.

⁴⁷ *Duhoux*, p. 24.

meant «cultivated» and the other «fallow», we would expect each person to have at least one plot of each, and this is rarely so. Moreover, although it is true that *ke-ke-me-na ko-to-na* is not indissolubly connected with *pa-ro da-mo*, the repeated concurrence of the two phrases in Eb and Ep is nevertheless very striking, as is the connection of *ki-ti-me-na* with individuals. It is not enough to wonder whether we have lost a few tablets on which *ki-ti-me-na* and *pa-ro da-mo* may have occurred together⁴⁸. We require two complete sets to correspond to Eo/En and Eb/Ep only with the words *ki-ti-me-na* and *ke-ke-me-na* interchanged. Dunkel for his part appears to have misunderstood the significance of fallow land⁴⁹. Its vital importance lies in the need for the soil to replenish itself⁵⁰. I agree with Duhoux that the Mycenaean could have and no doubt did practise a system of crop rotation based on alternating cultivated and fallow fields, as their descendants have done up to the present day, but I cannot agree that this process is described by the words *ki-ti-me-na* and *ke-ke-me-na*.

I cannot pretend to offer a solution to the problem. I shall therefore conclude with a summary of the framework within which I think such a solution is to be found.

ke-ke-me-na describes a type of land which is usually held by the community, but sometimes by individuals. It is possibly connected with $\kappa\epsilon\iota\mu\alpha\iota$, but is more likely to be the perfect passive participle of $*\kappa\acute{\iota}\chi\eta\mu\iota$, «to find, happen upon» (I would not exclude «bring into cultivation»).

ki-ti-me-na is always associated with private individuals, but on the analogy of *ke-ke-me-na*, it is unlikely itself to mean «private». Its identification as the present passive participle of $*kteimi$ is practically certain and its meaning is probably close to «built» or «inhabited» or «established». «Cultivated», though not impossible, is less likely.

I suspect that if we were to examine the landtenure terminology of almost any civilisation we should find an abundance of

⁴⁸ Dunkel, p. 28.

⁴⁹ Dunkel, pp. 20-21.

⁵⁰ See A. Jardé, *Les céréales dans l'antiquité grecque*, Paris 1925, pp. 81-90, especially p. 87.

pairs of suitable technical terms and that is why several theories based on such analogies have seemed attractive.

The following hypothesis seems to me to be consistent with the evidence. *ki-ti-me-na* could refer to the best land, closest to the village, described as «enclosed» (ie. «built») or «inhabited» (close to the settlement), and held by a few individuals⁵¹. *ke-ke-me-na* could be outlying and perhaps poorer or marginal land, brought into cultivation as needed. Such land might well be described as «lying» or «found», «happened upon». The high correlation between *ke-ke-me-na* and *pa-ro da-mo* on the Eb and Ep tablets may reflect the special circumstances of the need to provide for cult personnel who could not be sufficiently accommodated with *o-na-ta* of *ko-to-na ki-ti-me-na*, this provision being undertaken by communal effort⁵². If *ke-ke-me-na* land is actually poorer (as well as being more distant), this may explain the fact noticed by E. L. Bennett⁵³ that *o-na-ta* in Eb/Ep are consistently larger than those in Eo/En, the most frequent quantity being τ 2 in the former compared to τ 1 in the latter, perhaps to compensate for a lower yield.

I will not speculate any further, nor have I considered how other terms such as *ka-ma* and *e-to-ni-jo* are to be fitted into such a scheme. This I hope to do in the future.

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⁵¹ Who could be priests, heads of households or perhaps tribal representatives (see M. Lang in *Proceedings of the Cambridge Colloquium on Mycenaean Studies*, Cambridge, 1966, pp. 255-257) or even recipients of land in return for services rendered.

⁵² I do not think that the Ea series similarly refers to a cult centre, since it lacks those features, such as «slaves of the god» and female land holders, which lead us to believe that *pa-ki-ja-ne* was such a centre.

⁵³ E. L. Bennett, *AJA* 60, 1956, pp. 114, 123-124.