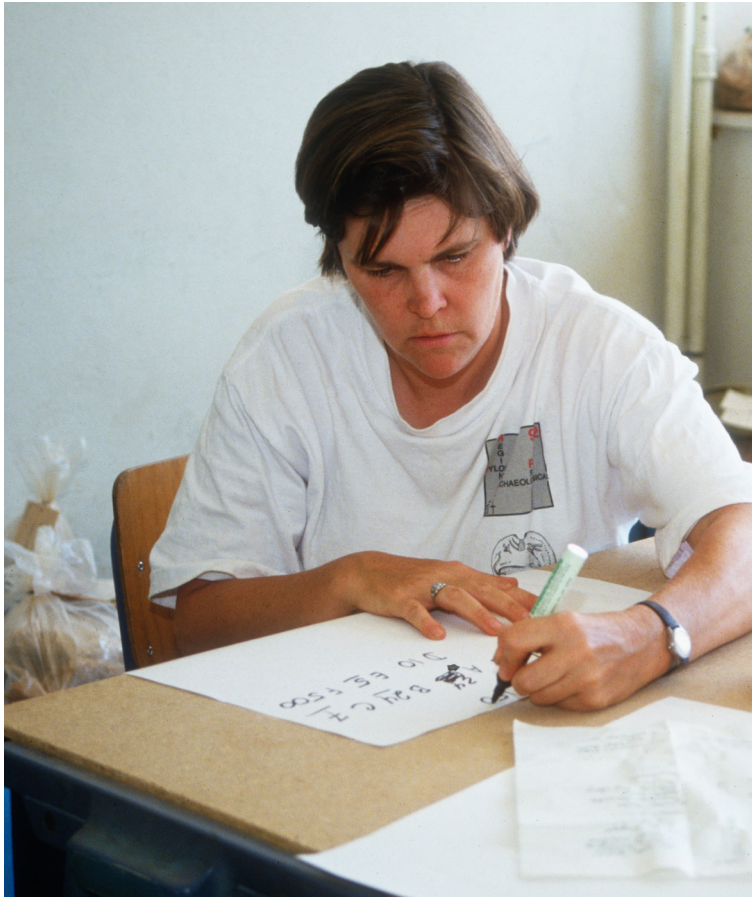


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*KE-RA-ME-JA*

Studies Presented to Cynthia W. Shelmerdine



Cynthia in the Hora School House. Courtesy Department of Classics, University of Cincinnati and the Pylos Regional Archaeological Project.

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*edited by*

Dimitri Nakassis, Joann Gulizio, and Sarah A. James



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## Working the Land: *Ka-ma* Plots at Pylos

*Stavroula Nikoloudis*

It was in Cynthia Shelmerdine's graduate classes at the University of Texas at Austin that I became increasingly aware of the underlying complexity and multiple, if often opaque, levels of interaction among the *dāmos*, palace, and religious sector in Mycenaean society.\* The present contribution is offered to her as a small token of appreciation for her many years of illuminating work on the Mycenaean. It explores the nature of *ka-ma* lands and the function that the *ka-ma-e-we* might have served in the sociopolitical and economic organization of Late Bronze Age Pylos.

*Ka-ma* land and the holders of such land, the *ka-ma-e-we*, feature in a number of Linear B texts

from Pylos: the E series—specifically the Eo/En, Eb/Ep, Ed, and Ea texts—as well as An 261, Un 718, and An 724. Excluded from the present discussion are a couple of Knossos tablets in which *ka-ma* seems to reflect a toponym: KN Ap 637.1, L 520.2 (Aura Jorro 1985–1993, I, 309–310). As other sites have not (yet) yielded *ka-ma* references, the present paper focuses on the Pylian evidence.

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## The PY E Series and Ep 613

PY Ep 613

(S74 H1)

.1	ne-qe-wo e-da-e-wo ka-ma ]o-pe-ro[ du-]wo-u-pi , te-re-ja-e ,	
.2	e-me-de te-re-ja to-so-]de , [pe-mo ] GRA 10 T 1	
.3	] <i>vestigia</i> [ ke-ke-]me-na , ko-to-na , ka-ma-e-u , wo-ze-qe , to-so pe-mo[ GRA ] T 3	
.4	te-re-]ta , su-ko , po-]o-du[-ma o-pe-ro-qe ]du-wo-u-pi , te-re-ja-e-]o-u-qe , wo-ze-] ] <i>vestigia</i>	
.5	to-]šo-de , pe-mo GRA 10[ ]	<i>vacat</i>
.6	a <sub>3</sub> -ke-re-u , a-si-to-po-qo , ka-ma , e-ke-qe , wo-ze-qe , to-so pe-mo GRA 1 T 2	
.7	a--ke-re-u , i-je-ro-wo-ko , ka-ma-e-u , o-na-to e-ke , wo-ze-qe to-so pe-mo GRA 1	
.8	sa-sa-]wō , o-na-to , e-ke , ka-ma-e-u , e-pi-qe , to-me , te-ra-pi[-ke ]to-so , pe-mo GRA 1 T 5	
.9	e-u-]ru-wo-ta , te-o-jo , [do-e-]ro , e-ke-qe[ ka-]ma , o-na-to , wō-ze-qe , ]o-šo , pe[-mo]	GRA 1 T 3
.10	pe-]re-qo-ta , pa-de-we-] e-]ke-qe , ka-ma , o-na-to , si-ri-jo , ra-ke , to-so , pe-mo	GRA 1
.11	pa-]ra-ko , e-ke-qe , ka-ma , ko-to-no-o-ko , e-o to-so , pe-mo	GRA 1
.12	po-]šo-re[-ja te-]o-jo , do-e-ra , e-ke , o-na-to , pa-ro , pa-ra-ko , to-so , pe-mo	GRA T 1 V 3
.13	ko[-tu-ro <sub>2</sub> mi-]ka-ta , pa-de-we-u , ka-ma-e-u , e-ke-qe , wo-ze-qe , to-so , pe-mo	GRA T 5

Ten *ka-ma-e-we* appear on PY Ep 613.1–13, the text of which appears above. This tablet belongs to the land tenure records, known as the Pylos E series. The E series includes two groups of final documents compiled by Scribal Hand 1, which record landholdings in the region of *pa-ki-ja-ne*: (1) the En tablets list the *ki-ti-me-na* holdings of 14 high-status officials, the *te-re-ta /telestai/* (En 609.2) and their tenants/subleasers and (2) the Ep tablets list the *ke-ke-me-na* holdings leased out by the *damo /dāmos/* to various individuals. These final En and Ep records were compiled, respectively, from the preliminary Eo and Eb texts written by Hand 41 (Palmer 1963, 186–218; Ventris and Chadwick 1973, 240–264). Many of the leaseholders of both kinds of lands are connected by their occupational designations to the religious sector (e.g., *i-je-re-u* “priest,” *i-je-re-ja* “priestess,” *te-o-jo do-e-ro/-ra* “servant [masc./fem.] of the god[dess]”). These land parcels are therefore believed to have supported, for the most part, the personnel of the sanctuary called *pa-ki-ja-ne*, in the district known by the same name. The palace is thought to have been located very close to *pa-ki-ja-ne* (Lupack 2008, 44–50, with references).

It is important to note at the outset that there are many large gaps in our understanding of the Mycenaean land tenure system (Ventris and Chadwick 1973, 443; Killen 2008, 162). Several plausible interpretations still exist, for instance, regarding the nature of *ki-ti-me-na* and *ke-ke-me-na* lands. In the Ep texts, the formulaic *pa-ro da-mo* “chez (or from) the */dāmos/*” (Killen 2008, 164) reveals that

*ke-ke-me-na* lands were held from the *dāmos* of *pa-ki-ja-ne*. The *dāmos* could be interpreted as the whole village community (e.g., de Fidio 1987, 130; Killen 1998, 20) or, more specifically, its formal, local body of land administrators (e.g., Lejeune 1972, 146; Palaima 2004, 231). The land in question was closely connected to the local community. The nature of *ki-ti-me-na* lands is debated, however. Some scholars view the *ki-ti-me-na* of the En texts as palace property, granted to individuals or functionaries (the *telestai*) by the king as benefits in return for their service (e.g., Palmer 1963, 85–87; Deger-Jalkotzy 1983, 95–97, 102–103), while others argue that they too could have belonged to the *dāmos*, especially in view of their connection with the *telestai*, who are linked to the *dāmos* in certain contexts (e.g., Carlier 1987, 68–69; de Fidio 1987, 145–147). Still, the *telestai* would have been ideally suited to liaise directly with the palace (de Fidio 1987, 147). Whether *ki-ti-me-na* lands belonged to the palace or the *dāmos*, the discovery of the entire PY E series in the palatial archives seems to point to the palace’s interest or involvement in calculating and collecting the contributions owed to it from all these recorded landholdings (Palmer 1998–1999, 240; Killen 2008, 162–163).

Etymologically, it is possible to think of *ki-ti-me-na* lands as “settled, inhabited” from \*κεῖμαι from the root \*ktei- > kti- “settle, inhabit” (from which the later κτίζω is derived) and *ke-ke-me-na* as either “lying” from κέιμαι from the root \*kei- “lie” or “cut” from κείζω from the root \*kei- “cut, split,” the latter implying that there also existed

“uncut, unsplit” *dāmos* land (Aura Jorro 1985–1993, I, 366–367; Palmer 1998–1999, 230). Agricultural definitions have also been suggested, such as “cultivated, under cultivation” for *ki-ti-me-na* from the same root \**ktei-* and “abandoned, fallow” for *ke-ke-me-na* from the root \**ghē-* (e.g., Duhoux 1976, 17–27; de Fidio 1987, 145). However, according to this line of thought, it is difficult to explain how the *a-ki-ti-to* land on PY Na 926, as “uncultivated” land (with privative *a-*), should still be expected to contribute its forecasted flax contribution (Ventriss and Chadwick 1973, 470) unless it was simply understood that the recorded forecast would not be met and it was treated as an exemption (Duhoux 1976, 172–173). Some scholars suggest that *ki-ti-me-na* lands were located close to the settlement and were of better quality, whereas *ke-ke-me-na* lands may have been situated farther away, as marginal land being made available when the need arose (Carpenter 1983, 88). A distinction between *ki-ti-me-na* as “private” land in the hands of the *telestai* and *ke-ke-me-na* as “communal” land managed by the *dāmos* is also prevalent, though not unanimously accepted (see Palmer 1998–1999, 238). Detailed overviews of Mycenaean scholarship on the land tenure records are provided by Palmer (1998–1999) and Lupack (2008).

The fact that some individuals held more than one parcel of land may be explained, in part at least, as related to economic strategies of risk management based on crop and soil diversity (cf. Palmer 1999, 465). The PY E tablets do not, however, specify the geographical locations of the lands that they record. Their chief concern seems to have been the total land allotments and the contributions expected from them (Bennett 1956, 120; Zurbach 2006, 271–272; Killen 2008, 163–164). At the end of each entry is a certain amount of GRA. This is thought to reflect the amount of seed grain required to sow a particular piece of land, thereby indicating its relative size/surface area (Duhoux 1974, 31; Del Frio 2005, 7). (For the estimate GRA 1: 1.92 ha, based on a sowing of 50 liters of grain per ha, following Near Eastern farming techniques, see Ventriss and Chadwick 1973, 237–238, 394; for GRA 1: 0.55 ha, based on 175 liters of grain sown per ha, following Jardé’s work on classical Greece, see Duhoux 1974, 31–33.) The contributions owed to the palace would have been calculated on the basis

of the recorded information. While the holders of these lands were expected to provide a contribution (agricultural produce and/or perhaps service of some kind) to the palace in whose records they were registered, it is believed that there also existed other lands at *pa-ki-ja-ne* that did not carry such a levy and were not therefore recorded.

In the PY E series, *ka-ma* plots seem to constitute a type of *ke-ke-me-na* land. Since they are listed exclusively in the Ep set, it is reasonable to conclude that they, like other parcels of *ke-ke-me-na* land, were administered by the *dāmos*. The Ep set begins with tablet Ep 301, which lists parcels of land leased out to the *ko-to-no-o-ko* /*ktoinookhoi*/ “landholders,” literally “holders of a *ktoinā*,” as stated in line 2a, which could be viewed as part of the heading. Next, Ep 613 opens with the *ka-ma-e-we* “*ka-ma* holders” (Ep 613.1–13), and they are followed by an assortment of religious personnel who hold land in the remainder of the Ep tablets. The 12 *ktoinookhoi* (who include at least six *telestai* encountered in the En texts) are thought to have been intimately tied to the *dāmos*, possibly even members of its central committee or managerial board of administration (for details, see Lejeune 1972, 144, 146–147; Lupack 2008, 61). This theory is supported by the fact that the term *ko-to-no-o-ko* of the preliminary record Eb 297.2 is replaced by the term *da-mo* in the corresponding final record, Ep 704.5. This interchangeability is telling. The *pa-ro da-mo* formula is missing in some of the *ko-to-no-o-ko* entries, but this could be explained as the result of the realization that it was unnecessary or redundant to state that they were holding land “from the *dāmos*,” since they *were* the *dāmos*. The reason for the absence of the *pa-ro da-mo* formula from the *ka-ma-e-we* entries is less clear, although it may be, as Susan Lupack (2008, 61) suggests, again simply a matter of its being omitted but implied, given the known association of these lands with the *dāmos*.

The 10 *ka-ma-e-we* listed on Ep 613.1–13 (see Table 17.1) are individuals of different backgrounds whose titles or cross-references based on their personal names generally suggest a high status. While designations are missing in the second and sixth entries, the first man, *ne-qe-u*, who is an *e-da-e-u* (meaning unknown), shares his patronymic *e-te-wo-ke-re-we-i-jo* (Aq 64.15) with an *e-qe-ta*



(An 654.8–9), suggesting that *ne-qe-u* might also be an *e-qe-ta* /*hequetās*/. The *hequetai* are generally accepted to be of elevated status, closely connected with the palace administration, carrying out both military and religious duties (Shelmerdine 2008, 131–133). The person *su-ko* is simultaneously designated a *te-re-ta* and a *po-ro-du-ma*, the latter position belonging to the local village-level administrative hierarchy, possibly reflecting a religious official (cf. *du-ma* in Palaima 2001, 158–159). In fact, *su-ko po-ro-du-ma* may refer to a “deputy-supervisor of figs” (for details, see Del Frio 2005, 95–97). If so, the resulting missing name of this third *ka-ma-e-u* might be *po-to-re-ma-ta* (Ep 539.7). This is a smith’s name elsewhere in the corpus (PY Jn 601.4), but the lack of intertextual links leaves open the possibility that these were two distinct individuals sharing the same name. The eighth man, *pe-re-qo-ta*, is known from elsewhere (En 659.1) to be a *te-re-ta* (Aura Jorro 1985–1993, II, 106–107). The terms *a-si-to-po-qo* (line 6), behind which may lie an intended *a-to-po-qo* or *\*si-to-po-qo* “baker”/“cook,” and *mi-ka-ta* “mixer” (line 13) may belong to the secular or religious spheres, while *i-je-ro-wo-ko* “sacrificing/officiating priest” (line 7) and *te-o-jo do-e-ro* “servant of the god” (line 9) are

clearly religious in character, and *pa-de-we-u*, the title of two men (lines 10, 13), is taken to be a priest or religious functionary (Aura Jorro 1985–1993, I, 109–110, 276, 452–453, II, 66–67, 330). The potential number of *ka-ma* landholders connected to the religious sphere illustrates the trend of religious personnel noted for the PY E series as a whole and should not necessarily be viewed as a defining characteristic of *ka-ma* lands.

These 10 *ka-ma-e-we* are connected to the palace, the *dāmos*, and/or the religious sector. The multiple spheres of activity of many of these individuals may stem from the underlying processes through which the three main sources of authority in the Mycenaean world probably continually renegotiated and reinforced their respective positions of power and influence. These processes, often involving collaboration with preexisting local village systems of control and resource management (cf. Palaima 1995, 124–125; 2001, 154–155; Shelmerdine 1999, 23–24; Lupack 2008, 44–50, 92; Nakassis 2008, 560–561), would have resulted in many individuals owing professional service and personal allegiance to more than one entity at a time. For instance, *ne-qe-u*, very likely an *e-qe-ta* and, as such, a representative of the central palatial

Name	Title(s)	Landholding (and Obligation)	Action
(1) <i>ne-qe-wo</i>	<i>e-da-e-wo</i>	<i>ka-ma o-pe-ro du-wo-u-pi te-re-ja-e</i>	<i>e-me-de te-re-ja</i>
(2) [ko-i-ro]		<i>ke-ke-me-na ko-to-na ka-ma-e-u</i>	<i>wo-ze-qe</i>
(3) <i>su-ko</i> (?)	<i>te-re-ta</i> , <i>po-ro-du[-ma]</i>	<i>o-pe-ro-qe du-wo-u-pi te-re-ja-e</i>	<i>o-u-qe wo-ze</i>
(4) <i>a<sub>3</sub>-ke-re-u</i>	<i>a-si-to-po-qo</i>	<i>ka-ma e-ke-qe</i>	<i>wo-ze-qe</i>
(5) <i>a-.ke-re-u</i>	<i>i-je-ro-wo-ko</i>	<i>ka-ma-e-u o-na-to e-ke</i>	<i>wo-ze-qe</i>
(6) <i>sa-sa-wo</i>		<i>o-na-to e-ke ka-ma-e-u</i>	<i>e-pi-qe to-me te-ra-pi-ke</i>
(7) <i>e-u-ru-wo-ta</i>	<i>te-o-jo do-e-ro</i>	<i>e-ke-qe ka-ma o-na-to</i>	<i>wo-ze-qe</i>
(8) <i>pe-re-qo-ta</i>	<i>pa-de-we-u</i>	<i>e-ke-qe ka-ma o-na-to si-ri-jo ra-ke</i>	
(9) <i>pa-ra-ko</i> (and <i>po-so-re-ja</i> )	<i>ko-to-no-o-ko</i> ( <i>te-o-jo do-e-ra</i> )	<i>e-ke-qe ka-ma</i> ( <i>e-ke o-na-to pa-ro pa-ra-ko</i> )	
(10) <i>ko-tu-ro<sub>2</sub></i>	<i>mi-ka-ta</i> , <i>pa-de-we-u</i>	<i>ka-ma-e-u e-ke-qe</i>	<i>wo-ze-qe</i>

Table 17.1. The 10 *ka-ma-e-we* recorded on PY Ep 613.1–13. Numbers in parentheses refer to individuals in order of appearance on the tablet.

administration, was also obligated, as discussed below, to fulfill certain requirements of the *dāmos* with respect to his *ka-ma* holding.

That a *ka-ma-e-u* actually denotes a “holder of a *ka-ma* plot” is clear from the alternation between *ka-ma-e-u* and the expression *ka-ma e-ke* “has/holds a *ka-ma*” between preliminary and final records (e.g., Eb 177.A/Ep 613.6, Eb 156.1/Ep 613.9). The land term *ka-ma* has been related to a gloss in Hesychius regarding a Cretan word for “field”: *καμάν* τὸν ἀγρόν, Κρήτες (Aura Jorro 1985–1993, I, 309). The Mycenaean word is generally accepted to be a neuter singular noun \**kámas* /*kamas*/, based on the verb *κόμνω* “labor, toil, work” (e.g., Heubeck 1966, 268; Duhoux 1976, 29–30). As indicated in Ep 613.1–13, *ka-ma* plots usually have two main characteristics: (1) they are large, and (2) they have obligations attached to them. In terms of size, regular *ke-ke-me-na* plots often range between T 1–3, whereas *ka-ma* plots are usually around GRA 1 (= T 10) in size (Ep 613.6–13). The *ka-ma* holdings of *ne-qe-u* and *su-ko* are more exceptional, measuring about GRA 10 (Ep 613.2, 5). The obligations attached to *ka-ma* lands are not clearly understood, but Maurizio Del Freo’s recent analysis (2009, see below) provides significant insights.

The three verbs indicating obligations, *te-re-ja*, *wo-ze*, and *te-ra-pi-ke*, are probably third singular present indicative forms based, respectively, on the verbal roots \**tel-* “fulfill, complete (a service?),” \**werg-* “work,” and the noun /*t<sup>h</sup>eraps*/ with a present verb in *-isko* equivalent to *θεραπεύω* “treat, care for” (Del Freo 2009, 37–46, with references). Forms associated with the verb *wo-ze* are found in contexts clearly related to work (as opposed to religious or other obligations) and would also fit here in the sense of working/farming the land: for instance, the participle *wo-zo-me-na* describes wheels in the process of manufacture on KN So(2) 4438, and the *we-ka-ta* BOS<sup>m</sup> “working oxen” of KN Ce 59 refer to animals working the earth (Del Freo 2009, 42, 45). The apparent interchangeability of *te-re-ja* and *wo-ze* in *su-ko*’s record (Eb 149.1 and Ep 613.4, respectively) suggests that these two words may have had a similar meaning: *te-re-ja* may itself refer to bringing agricultural work to completion (Del Freo 2009, 40, 45–46). It is possible that *te-ra-pi-ke* also relates to agricultural work, especially given that *θεραπεύω* is used by classical authors in the sense of caring for, or

cultivating, plants and vegetables (Del Freo 2009, 45, with references).

Most of the obligations noted on Ep 613 are satisfied, in part or in full. Six of the 10 men work their lands as required (*wo-ze* or *te-ra-pi-ke*). The person named *ne-qe-u* is obligated to work two holdings (*o-pe-ro du-wo-u-pi te-re-ja-e*) but works only one of them (*e-me-de te-re-ja*), while *su-ko* is obligated to work two plots but does not work them (*o-u-qe wo-ze*). Whether the negated verb reflects noncompliance or, instead, an exemption granted to the landholder is debatable (for the second option, based on exemptions similarly expressed in the Ma taxation series, see Del Freo 2009, 35–36). Relevant information is missing for *pa-ra-ko* and difficult to decipher for *pe-re-qo-ta*, where interpretations of *si-ri-jo ra-ke* range from Leonard Palmer’s “in the allotment of S.” (1963, 451) to Del Freo’s toponym (2005, 96, 169–170).

Further interpretative difficulties arise with the small plot that *po-so-re-ja* holds from *pa-ra-ko* (Ep 613.12), and the leases that she (Ep 539.5) and *me-re-u* (Ep 539.7) hold from two separate *ka-ma-e-we*, whose names are not preserved, on a tablet otherwise listing regular *ke-ke-me-na* plots. It would seem that the two holdings in question on Ep 539 (ll. 5 and 7) were also *ka-ma* lands. In contrast, it is possible that *ko-i-ro*’s small plot (Eb 862/Ep 613.3), listed among the *ka-ma* plots of Ep 613 but described as a *ke-ke-me-na* plot, may not have constituted a *ka-ma* (see Del Freo 2009, 48). Outside of these ambiguous cases, the only plot of regular *ke-ke-me-na* type that had obligations attached to it was a double one, with a *wo-ze* obligation, held by *ka-pa-ti-ja*, the “key-bearer” (Eb 338/Ep 704.7–8).

Finally, the *ka-ma-e-we* of the Eb/Ep texts and their associated landholdings are noted on the totaling tablets Ed 236 and Ed 411 (for details and interpretations of the totals entered on these records, see Ventris and Chadwick 1973, 451–453; Del Freo 2005, 103–104).

The PY Ea series features only one certain *ka-ma* holding: Ea 28 states simply that a *ra-pte* “stitcher/leather-sewer” holds a *ka-ma*; there is no indication of associated obligations, and the plot size is not preserved (Del Freo, 2009, 46 n. 76). The Ea tablets share the same land terminology discussed above, but they deal with land that may have been situated in a different locality from that of the En/Ep tablets (Palmer 1963, 220; Lindgren 1973, II, 187).

On the basis of the evidence of the PY En/Ep texts, both the size and the attached obligations of *ka-ma* holdings suggest that these would have been intensively worked tracts of land (Duhoux 1976, 39–41; Del Frio 2009, 46–47). As early as the 1950s, Martín Ruipérez (1957, 206 n. 2) had associated the *wo-ze* obligation of *ka-ma* holdings with the act of plowing common fields with teams of working oxen. Del Frio (2009, 47) allows for the possibility that *ka-ma* tracts may have undergone radical processes of transformation whereby unused lands, such as wastelands or fallow lands, were turned into productive, cultivable lands. He adds that the obligations associated with such lands might also point to the actual cultivation and maintenance of the tracts, which could have been planted with vines, figs, and other fruit trees.

The “working” clearly associated with the *ka-ma* lands of Ep 613 may have involved the clearing of scrub and other dense vegetation, especially if located in the wilderness or on the outskirts of town, as well as plowing to prepare the soil for cultivation, and then planting, watering, controlling weeds, repeated digging (for tree crops) to increase moisture availability (cf. Foxhall 2007, 121–123), pruning if applicable, and picking or harvesting the crop(s). Any or all of these activities would have improved the quality of the land in question.

How might such relatively large tracts of land be accounted for within the sociopolitical and economic systems of land management and use at Pylos? To begin with, it is assumed here that regular-sized *ke-ke-me-na* plots may have featured small vegetable patches that provided daily sustenance for their leaseholders, many of whom would have held more than one plot, not all of which are registered in the Linear B records. In contrast, the products of the larger *ka-ma* lands would have surpassed the subsistence needs of a family (although, it must be acknowledged, there is still much work to be done on this topic). As a working hypothesis, it is tentatively proposed that the primary goal of the intensive working of the larger *ka-ma* plots was to support workforces, such as those gathered by the palace to perform specialized work at or near the center. Evidence for such workforces includes the building and craft personnel of the An texts, including the sawyers, potters, and bowmakers of An 207 (e.g., Deger-Jalkotzy 1998–1999; Killen 2006, esp. 77–85) and the female textile and other workers of the

Aa-Ab series (Chadwick 1988). The women of the A series are often thought of as dependent personnel, who were supplied with subsistence rations by the palace, but Alexander Uchitel (1984, 273–282, esp. 276) uses parallels from the Mesopotamian Ur III dynasty (end of the third millennium B.C.) to propose that some of them, like many of the male workers noted above, were *corvée* laborers. These individuals were engaged by the palace at specific locations for a certain length of time during the year to carry out work for the palace administration, during which time their daily sustenance was provided by it. The blurred distinction between rations and wages, especially in the context of *corvée* labor, which is usually deemed to be (unpaid) obligatory work, is noted by Palmer (1989, 90–91, 92–93 n. 11). It is proposed that the large *ka-ma* lands could have provided an avenue through which to acquire the amount of food required to feed/pay groups of palace workers.

In particular, *ka-ma* lands may have been the source, or one of the sources, of the cereals, figs, and olives noted in the Linear B texts and often supplied as rations or wages to palace workers, whether they were permanent or temporary laborers. The possibility that the third *ka-ma-e-u* on PY Ep 613 is a “deputy-supervisor of figs” is suggestive in this regard. In the PY Ab texts, each woman worker is allotted a monthly ration of about 20 liters of wheat (GRA) and 20 liters of figs (NI); on PY An 128, wheat and figs (with NI reconstructed on the *recto*) form the rations of men who seem to include specialized swordmakers (line 3); tablet PY An 7 (= Fn 7) lists rations of barley (HORD) and olives to male workers, including wallbuilders and sawyers (see Palmer 1989, 96–98, 110; Killen 2004, 161; for an evaluation of the traditional equation of \*120 = GRA “wheat” and \*121 = HORD “barley,” see Killen 2004, 163–168).

While these texts lack the details required to pinpoint the specific products yielded by *ka-ma* lands, combination farming offers an attractive model for the use of these lands in the scenario envisaged here. As Lin Foxhall (2007, 112–116) notes, there is evidence from the Classical period for mixed farming of arable crops and trees on the same land (although the best land was probably often reserved for cereals) and for different kinds of crop trees on the same plot. Figs, grapes, and olives, the latter taking longer to bring a return, were often planted

together. In terms of maintenance, vines, vegetables, and edible herbs would have required more intense labor or specialized attention than field crops, olives, and orchard trees (Burford 1993, 132–137). Mixed orchards are attested in Homer's *Odyssey* (e.g., Laertes' orchard in *Od.* 24.244–247, 336–344), and Linear B tablet PY Er 880 demonstrates a connection between the fig trees and vines of a wealthy landowner, though not necessarily grown on a single plot in this particular case (see Palmer 1994, 46, 64–65). Wine is another possible end product of *ka-ma* lands: it was consumed at the palace and was used in the perfume industry, though it never appears as a ration or handout for lower-level personnel (Palmer 1994, 119).

The hypothesis that *ka-ma* lands were worked primarily to produce food for workers is based in part on the evidence of An 261 (discussed below). However, given the lack of detail in the texts about the actual products of *ka-ma* lands and given the strong likelihood that mixed farming was practiced in the Bronze Age (Palmer 1994, 103), the possibilities are in fact numerous. One could speculate, for instance, that *ka-ma* lands yielded other products as well, such as legumes, which do not seem to be recorded in the Linear B texts, and flowers and plants used in the Pylian perfume industry, such as fresh roses, sage, and so forth (such items are discussed in Shelmerdine 1985, 17–39 and Palmer 1999, 465, 469–470, 477). It may have been useful for the palace to have access to a fairly stable reserve of land somewhere nearby, dedicated to producing agricultural products required for the running of its industries, both workers' rations/wages and ingredients for those industries. Even if it could obtain many items through taxation from elsewhere, having easy access to fresh items would have been a bonus (cf. Palmer 1999, 482–483).

Who worked the *ka-ma* lands? Work teams of men (and women) may have been assembled periodically by the *ka-ma-e-we* to work their *ka-ma* plots as required. Who these laborers were and whether they were permanently or temporarily engaged by the *ka-ma-e-we* is unknown. Some activities may have benefited from the use of animals as well, such as oxen for plowing and the grazing of sheep and goats as a means of clearing grass and weeds, not to mention the use of their dung as fertilizer (Foxhall 2007, 82–83). Different tasks during the agricultural cycle would have required different

numbers of agricultural laborers (e.g., more people at harvest time). Clearly, the *ka-ma-e-we* would have been in a position to mobilize manpower, or were connected to others who could provide them with the laborers needed, to work their plots.

So, it is proposed that the palace administrators at Pylos had negotiated an arrangement with the *dāmos* whereby a certain amount of *dāmos* land was opened up, or reserved, for a special kind of "working." Their desire to obtain *dāmos* land could point to a lack of cultivable land in the surrounding area, perhaps due in part to a steady growth in population (e.g., Shelmerdine 2001, 113–115), or it could have been motivated by a variety of other factors, such as the location or the soil quality of the *ka-ma* land or even a political strategy to develop closer ties with the *dāmos*. It would seem that these *ka-ma* leaseholdings were open to all members of the community (including religious personnel), but they carried the condition, perhaps imposed by the *dāmos* as a safeguard, that the land be worked, as shown by the *wo-ze* obligation. If this obligation to work *ka-ma* plots was not satisfied, the *dāmos* may have reserved the right to retrieve the land and lease it to someone else. Similar obligations and penalties for noncultivation of land are found in the Law Code of Hammurabi and the Hittite Laws (Ventriss and Chadwick 1973, 233, 255) and in the leases preserved from the Classical period (Palmer 1963, 204; Burford 1993, 180–181).

The precise amount and type of return expected to be handed over by the *ka-ma-e-we* to the *dāmos*, as ultimate owner or custodian of *ka-ma* lands, and to the palace, in whose archives the E series as a whole was found, is unknown, but presumably the relevant size/production capacities of the lands (expressed in GRA) would have been taken into account in those calculations by the relevant authorities. Nor is it certain whether the leaseholders dealt separately with each institution regarding the matter of taxation or whether they were directly accountable to the *dāmos*, which in turn was responsible for collecting and handing over to the palace an overall tax expected from the *dāmos*'s landholdings listed in the PY E series. The latter situation seems reasonable, given the corporate nature of the *dāmos* (Lejeune 1972, 142; Deger-Jalkotzy 1983, 90–91; Lupack 2008, 65–67). A tax in the form of agricultural produce or some other contribution was probably involved.

It is pertinent, then, to consider why anyone would desire to lease a *ka-ma* plot under such conditions. The assumption made here is that as long as the expected contributions were received by the *dāmos* and the palace (the latter including the bulk of *ka-ma* produce destined to feed the palace's workforces), the *ka-ma-e-we* would be allowed to use the rest of the land to cultivate whatever they liked or to use the rest of their yield for personal benefit. Such a situation is somewhat akin to that which has been proposed for the "collectors" in the context of sheep rearing and textile production. The "collectors" served the palace but were also capable of amassing a degree of private wealth (Killen 1995, 218; see also Lupack 2008, 86–98, who views the "collectors" at both Knossos and Pylos as local elites who actually owned the flocks). It has been argued that many individuals were able to profit from the economic and managerial tasks allocated to them by the palace (Nakassis 2008, 558–559 on smiths as elites). Of particular interest to the present discussion, Ruth Palmer (1999, 478–480) has suggested that the nine individuals in the MY Ge tablets were large landholders required to provide fresh herbs and spices to the palace at Mycenae for its cooking needs and perfume production. These men may have been allocated land by the palace for this specific purpose and allowed to grow other crops on it as long as they satisfied their obligations, or they may have set aside some of their own land to grow the required condiments (Palmer prefers the latter scenario for the MY Ge series). In the case of the *ka-ma-e-we* at Pylos, perhaps after directing an amount of their produce to the *dāmos*, to the palace, and to the agricultural laborers who worked their *ka-ma* plots, these men could then exchange their surplus for desired items in their community or neighboring ones, tapping into potentially profitable local exchange networks. Working the land for the palace might have brought along such benefits. For some produce (e.g., vegetables and fruit), freshness would be of paramount concern, but other items (e.g., grains, nuts, dried fruits) would be relatively less susceptible to time restraints.

There are numerous reasons why the *dāmos* might have agreed to the *ka-ma* leasing arrangement with the palace, as sketched above. This arrangement may have constituted part of the wider agreement on the basis of which some of the *dāmos*'s land—that which is recorded in the PY

E series—was taxed by the palace. While the political power exerted by the centralized palatial bureaucracy may have been a factor in this agreement, the *dāmos* itself stood to gain economically from such agricultural collaboration. For instance, there is textual evidence on PY Vn 20 for the sending of wine by the palace to the nine district centers of the Hither Province (Palmer 1994, 75–78) and the Knossos Ch tablets may indicate that working oxen were loaned out by the palace to *dāmos* communities to assist in the plowing of their lands (Killen 1998, 23; 2008, 172–173 n. 34; Halstead 1999, 321). Unrecorded benefits may have included a commitment from the palace to supply coordinated protection against foreign attack or food in bad years (e.g., Killen 2008, 173–174 n. 37) or to support the community in other ways, all of which would have strengthened the social and political fabric of Mycenaean society. An explicit connection with *ka-ma* lands is absent in these specific instances, but it is possible to envisage the *dāmos* benefiting in similar ways for making some of its land, such as *ka-ma* plots, available to the palace for direct exploitation. The overall sense is one of potential conflict over land resources being averted by the palatial and local *dāmos* administrators through the promotion of mutually beneficial alliances that allowed for the peaceful coexistence of, and cooperation between, older (*dāmos*) and newer (palace) elements of society.

The picture sketched above of the arrangement regarding *ka-ma* lands between *dāmos* and palace could be extended to include a similar arrangement between *dāmos* and sanctuary. One possibility is that, as argued above, the religious personnel listed among the 10 *ka-ma-e-we* of Ep 613 may have been leasing this special kind of *dāmos* land from the *dāmos* and working it for the palace. Alternatively, under a separate agreement between the *dāmos* and the sanctuary of *pa-ki-ja-ne*, they may have been working it for their sanctuary (and its workforces). Admittedly, it might be more difficult in this case to explain why these entries would be included in the palace's records (when the size and expected contributions of *ka-ma* lands under such an arrangement would have been of direct interest only to the *dāmos* and the sanctuary); perhaps it would interest the palace to know the amount of the *dāmos*'s *ka-ma* land that was currently held by sanctuary-related individuals, whose leases the palace could

seek to obtain in the future. Otherwise, if, as suggested above, all the *dāmos*'s land in the E series was taxed as a whole by the palace, regardless of the individual leaseholders, it would make sense, according to standard practice, for all the landholdings involved to be registered.

In any case, peaceful coexistence and cooperation could be tempered by political competition. The first three men on Ep 613 could arguably be viewed as palace-related individuals forming a cluster at the start of the tablet: the first one as a likely *e-qe-ta*, the third as a *te-re-ta*, and the second by association (though note his lack of occupational designation and smallest amount of land of all 10 *ka-ma-e-we*, Eb 862/Ep 613.3). The total amount of *ka-ma* land of the first three *ka-ma-e-we* on Ep 613 is just over 20 GRA (although the amount actually “worked” is smaller), while the total land of the remaining seven *ka-ma-e-we*, at least four of whom seem clearly connected to the religious sphere (i.e., *a-ke-re-u*, *e-u-ru-wo-ta*, *pe-re-qo-ta* and *ko-tu-ro*) is between GRA 7–8. Palace

and sanctuary, as represented by the variety of *ka-ma-e-we* on Ep 613, may at times have been vying for the use of the *dāmos*'s *ka-ma* land, with varying degrees of success.

Of course, as acknowledged earlier, personal and/or professional allegiances may have been manifold. For instance, *ko-tu-ro*<sub>2</sub> was both a religious functionary (*pa-de-we-u*, Ep 613.13) and possibly a member of the formal *dāmos* administration (as a *ko-to-no-o-ko*, Ep 301.13). It is impossible to tell whether his holding of *ka-ma* was directly, if at all, contingent upon his affiliation with the *dāmos* or the sanctuary. A clue may lie in the fact that his fellow *ka-ma-e-u*, *pa-ra-ko*, who was also a *ko-to-no-o-ko* (Ep 301.12), is registered on Ep 613 as such (line 11), but *ko-tu-ro*<sub>2</sub> is not. Perhaps *ko-tu-ro*<sub>2</sub>'s designation on Ep 613 as a *pa-de-we-u* indicates that he held his *ka-ma* plot on behalf of, or at least in connection with, the sanctuary.

The references to *ka-ma* lands and *ka-ma-e-we* at Pylos found on tablets outside the E series are considered next.

## PY An 261

Tablet PY An 261 is a difficult text to interpret, but a thorough analysis is provided by Sigrig Deger-Jalkotzy (1998–1999). The text of this record is as follows:

PY An 261 (H 43; S615 H1)

*recto*

.1 ]we-ke ke-tu-wo-e  
 .2 o-two-we-o , ke-ro-si-ja a<sub>3</sub>-nu-me-no VIR 1[  
 .3 o-two-we-o , ke-ro-si-ja qo-te-ro VIR[ 1  
 .4 o-two-we-o , ke-ro-si-ja a<sub>2</sub>-e-ta [ VIR 1  
 .5 o-two-we-o , ke-ro-si-ja , o-du-\*56-ro [ VIR 1  
 .6 a-pi-jo-ṭo , ke-ro-si-ja , ku-ṭe-ṭe-u VIR [ 1  
 .7 a-pi-jo-to , ke-ro-si-ja , o-wo-to VIR 1  
 .8 a-pi-jo-to , ke-ro-si-ja , a-ra-i-jo VIR 1  
 .9 a-pi-jo[-to ] ke-ro-si-ja , ri-zo VIR 1  
 .10 ta-we[-si-jo-]iṭo , ke-ro-si-ja , wa-[ ] VIR 1  
 .11 ta-we-ṣi[-jo-]jo , ke-ro-si-ja , [ ] VIR 1  
 .12 ta-we-si-jo-jo , ke-ro-si-ja , [ ]wa-ne-u VIR 1  
 .13 a-pi-qo[-ta-o] , ke-ro-si-ja , a<sub>3</sub>-ṣo-ni-jo VIR 1  
 .14 a[-pi-qo-ta-o ] ke-ro-si-ja , a[ ]te VIR [ 1  
 .15 ] ke-ro-si-ja , a[ ] VIR 1  
 .16 ke-ro-]ṣi-ja , [•]-ka-[•] VIR 1  
 .17 a-[ ke-ro-]ṣi-ja , o-pa-[ ]vacat [VIR 1

.18 vacat [ ] vacat

.19 vacat [ ] vacat

*verso*

.1 ta-we-si-jo-jo , ke-ro-si-ja , te-wa[ VIR 1  
 .2 ta-]wē-si-jo-jo , ke-ro-si-ja , tu-ru-we-u VIR 1  
 .3 ] angustum  
 .4 ta-]wē-si-jo-jo , ke-ro-si VIR 20  
 .5 a-pi-qo-ta-o , ke-ro-si-ja VIR 17  
 .6 a-pi-o-to , ke-ro-si-ja VIR [1]8  
 .7 o-to-wō[-o ke-]ṛo-si-ja VIR [1]4  
 .8 angustum [ ] [ ]  
 .9 ka-ma-e[-we] VIR 1ṭo

This tablet seems to bring together two chief concerns of the Mycenaean palatial system: land and labor. Land is represented by the *ka-ma-e-we*, recorded last, who as seen above are specifically connected with land in the PY E series, while labor is provided to the palace by the *ke-ro-si-ja* members. Following Deger-Jalkotzy, *ke-ro-si-ja* are perhaps best understood as kin-based groups whose members are expected to carry out obligatory work assignments for the central palatial administration. Deger-Jalkotzy (1998–1999, 74–81, see esp. 75–78)

in fact regards each *ke-ro-si-ja* /*geronsia*/ as a body of *gerontes*, the senior (distinguished or experienced, but not necessarily old) representatives of a kin group. According to paleographic considerations, the last word in line 1 could be restored as *ke-ke-tu-wo-e*, an active perfect participle, meaning that the task performed had been completed, even if the underlying verb is difficult to decipher (Deger-Jalkotzy 1998–1999, 67–68). Eighteen men are individually recorded by name and identified as belonging to one of four distinct *ke-ro-si-ja* groups (on recto lines 2–17 and continuing on verso lines 1–2): this is largely Hand 43’s work. The rest of the verso was copied from text Un 616 by Hand 1 and features the four *ke-ro-si-ja* groups in question (verso lines 4–7). Each *ke-ro-si-ja* seems to have provided three to five men, resulting in 18, a number characteristic of workteams, as seen from texts such as An 1282 (concerned with chariot equipment). In Deger-Jalkotzy’s view (1998–1999, 78) the *ka-ma-e-we* registered at the end of the tablet represent another group owing obligatory service to the palace (reflected by the verb *wo-ze* on Ep 613), specifically in return for their plots of land. However, since Del Freo (2009) has shown that the verbs reflecting obligations on Ep 613, including *wo-ze*, could refer to agricultural work carried out on the land itself, it might be worth considering a different explanation for the presence of the *ka-ma-e-we* on An 261.

At least two other scenarios present themselves. First, one might ask whether the *ka-ma-e-we* noted on verso line 9, deliberately set off from the rest of the text, were supposed to serve in some supervisory capacity with regard to the labor force(s) drawn from the groups registered above them. Could it be that the 18 men recorded individually on this tablet were the actual workers of a *ka-ma* plot? Did they plow the lands, or plant vegetables, or pick fruit from *ka-ma* lands, under the supervision of a *ka-ma-e-u*? Could this explain the connection on An 261 between labor groups and the *ka-ma-e-we*?

Second, and perhaps more productively, one might consider that cross-references of these *ke-ro-si-ja* members’ personal names reveal connections with the smiths of the Jn series, making it likely that these men were bronzeworkers (Carlier 1995, 363; Deger-Jalkotzy 1998–1999, 68–72, 80). The

reconstruction of the first word of the heading of An 261 as *ka-ke-]we* /*khalkēwes*/ “bronzesmiths” is therefore appealing (Deger-Jalkotzy 1998–1999, 79), and it would line up with other Linear B texts, which tend to record by name skilled craftsmen rather than dependent or lower-level workers, to which category a collective of humble fruit pickers might be relegated. It should be stressed, however, that unlike the bronzesmiths on the Jn tablets who worked in their own areas, the 18 men on An 261 are believed to have carried out their work assignment at the palace center, as suggested by the absence of a toponym and by the fact that some of these men are known from other texts to have been present at the center (Deger-Jalkotzy 1998–1999, 71). As noted above, diverse workers were called from their hometowns to the center from time to time to carry out specialized work (Killen 2006, 77–85). Therefore, the palace might have required extra produce to support such temporary/seasonal workers. The *ka-ma* land may have provided sustenance in the form of vegetables, or fruit, or grain, for these workers. This land may have been set aside by the *dāmos* for the palace, specifically for such purposes. The four *ke-ro-si-ja* groups listed on An 261 verso lines 4–7 seem to represent the total available pool of bronzesmiths that the palace could engage for this particular task or at this particular time. It is proposed that the entry citing 10 *ka-ma-e-we* may similarly reflect the total number of *ka-ma-e-we* available to supply the required sustenance for such men. This explanation attempts to account for the apparent link on An 261 between workers for the palace, identified in this instance as groups associated with bronzeworking, and the *ka-ma-e-we*, who elsewhere (Ep 613) are clearly responsible for working the *dāmos*’ *ka-ma* land.

It is tempting to consider whether the 10 *ka-ma-e-we* mentioned as a group on An 261 are the same 10 *ka-ma-e-we* listed individually on Ep 613 (Lindgren 1973, II, 71). And, if the purpose of *ka-ma* land was in fact intensive cultivation to produce (or supplement) the food intake of palace workers, one could further speculate on the nature of the obligations attached to these lands: could the *wo-ze* obligation, for instance, have been imposed by the palace itself, to be enforced by the *dāmos*, in order to ensure the ongoing productivity of such land?

## PY Un 718

Tablet PY Un 718 seems to highlight an inherent link between *ka-ma* lands and groups of people. The text of this document is as follows:

PY Un 718 (S312 H24)

.1 sa-ra-pe-da , po-se-da-o-ni , do-so-mo  
 .2 o-wi-de-ta-i , do-so-mo , to-so , e-ke-ra<sub>2</sub>-wo  
 .3 do-se , GRA 4 VIN 3 BOS<sup>m</sup> 1  
 .4 tu-ro<sub>2</sub> , TURO<sub>2</sub> 10 ko-wo , \*153 1  
 .5 me-ri-to , v 3  
 .6 vacat  
 .7 o-da-a<sub>2</sub> , da-mo , GRA 2 VIN 2  
 .8 OVIS<sup>m</sup> 2 TURO<sub>2</sub> 5 a-re-ro , AREPA v 2 \*153 1  
 .9 to-so-de , ra-wa-ke-ta , do-se ,  
 .10 OVIS<sup>m</sup> 2 me-re-u-ro , FAR T 6  
 .a -ma  
 .11 VIN S 2 o-da-a<sub>2</sub> , wo-ro-ki-jo-ne-jo , ka-  
 .12 GRA T 6 VIN S 1 TURO<sub>2</sub> 5 me-ri[  
 .13 vacat [ me-]ri-ṭo v 1

At a place called *sa-ra-pe-da* (line 1), whose precise location is unknown, contributions of food and drink are to be offered to the god Poseidon. The internal ordering of this text (Lejeune 1973, 71–72) features two pairs of contributors: (1) *e-ke-ra<sub>2</sub>-wo* and the *dāmos* and (2) the *ra-wa-ke-ta* and the *wo-ro-ki-jo-ne-jo ka-ma*. The pattern underlying each pair is that of “individual and group,” and it is thought that the members of each pair are bound by a close relationship (Nikoloudis 2008, 589).

It could be argued, on the basis of the verb *do-se* “will give,” which is stated or implied for each of the four parties (lines 3, 7, 9, 11), that four animate subjects are involved. Thus, both *da-mo* and *ka-ma*, originally (inanimate) land terms, could be seen as also capable of denoting a group of people closely associated with these respective land types. This is clear from other contexts for the *dāmos* (Palmer 1963, 188; Palaima 2004, 231), as in its dispute over the status of the priestess Eritha’s landholding (PY Ep 704.5–6), where it clearly constitutes an entity with a voice of its own. As already noted, the *dāmos* is generally viewed as either the local group of land administrators or the local village community as a whole. Its root, \**deh<sub>2</sub>*- “divide,

distribute,” reflects the group’s role in the distribution of land. Given that the root of the word *ka-ma* has to do with “work, labor” (noted earlier), it would not be surprising if an animate *ka-ma* referred to workers of *ka-ma* lands. The *ka-ma* of Un 718 may itself denote a group of agricultural laborers belonging to a larger group of “outsiders” that the palace sought to integrate into the wider Mycenaean community through the office of the high-ranking *ra-wa-ke-ta* (for details, see Nikoloudis 2008). If so, this might qualify as another instance in which a *ka-ma* holding, itself *dāmos* land, was subject to palatial oversight.

The *ka-ma* on Un 718.11 is qualified as being *wo-ro-ki-jo-ne-jo*. According to Alfred Heubeck (1966, 270), the term *wo-ro-ki-jo-ne-jo* could be interpreted as an adjective based on a toponym meaning “Place of the Breaks,” in which case the *ka-ma* concerned (both the land and the group) may have been associated with a particular locality. In John Killen’s opinion (1983a, 83–84), the term *wo-ro-ki-jo-ne-jo* is a possessive adjective based on a collector’s personal name, \**wo-ro-ki-jo /Wroikiōn/*. Such adjectives were regularly used to designate male and female groups of workers who were dependent on, or at least closely associated with, individuals of higher status than themselves (e.g., *ku-ru-me-ne-jo* [masc. pl.] KN Fh 5502 < *ku-ru-me-no* KN Sc 236, *we-we-si-je-ja* [fem. pl.] PY Aa 762 < *we-we-si-jo* PY Jn 431, KN Le 654, discussed in Killen 1983a, 81–83). Killen’s interpretation, in particular, highlights the possibility that a workgroup of some kind also lies behind the *wo-ro-ki-jo-ne-jo ka-ma*.

This might also help to explain the otherwise awkward genitive *ne-qe-wo* on the preliminary text Eb 495 (the relevant section is not preserved on the corresponding final text Ep 613.1): if not simply due to a scribal oversight, the genitive case points to “*Neqeu’s ka-ma*” as the party “obligated” to work the land. This would imply that *ka-ma* could indeed refer to an animate entity as well, most likely the group working a *ka-ma* landholding.



## PY An 724

Tablet PY An 724, a naval record, also features *ka-ma* land:

PY An 724 (S657 H 1, Cii)

*recto*

- .1 ro-o-wa , e-re-ta , a-pe-o-te ,  
 .2 me-nu-wa , a-pe-e-ke , a-re-sa-ni-e  
 .3 o-pi-ke-ri-jo-de , ki-ti-ta , o-pe-ro-ta ,  
 .4 e-re-e VIR 1 VIR  
 .5 e-ke-ra<sub>2</sub>-wo-ne , a-pe-e-ke , a<sub>2</sub>-ri-e ,  
 .6 o-pe-ro-te , e-re-e VIR 5  
 .7 ra-wa-ke-ta , a-pe-e-ke[ ]e VIR !  
 .8 ta-ti-qo-we-u , o-[ ]-qe-[·]-jo , VIR 1  
 .9 a-ke-re-wa , ki-e-u , o-pe-[ ]e , a-ri-ja-to VIR 1  
 .10 ki-ti-ṭa VIR 1 o-ro-ti-jo , di-qo , a-[ ] *vestigia*  
 .11 o-pe-ṭo , [ ] , e-ko-si-qe , e-qe-ta , ka-ma[ ]  
*vestigia*  
 .12 e-to-ni-jo , e-nwa-ri-jo VIR 1 [ ] *vestigia*  
 .13 wo-qe-we , ḍi-qo-te , ru-ki-ja , a-ko-wo VIR  
 .14 ri-jo , o-no , e-qo-te VIR !0[ ]

*verso*

Sketch, probably of a boat.

Del Frego (2002–2003) offers a compelling analysis of this important but poorly preserved tablet. Four locations in the Hither Province are noted: *ro-o-wa* (line 1), *a-ke-re-wa* (line 9), *wo-qe-we* (line 13), and *ri-jo* (line 14). The first section (lines 1–8) records rowers who are absent (*a-pe-o-te* / *apehontes* / ὀπλεόντες) from *ro-o-wa*. Del Frego argues that these rowers are absent not because they have been excused from rowing service by their patrons (i.e., *me-nu-wa*, *e-ke-ra<sub>2</sub>-wo-ne*, the *ra-wa-ke-ta* and *ta-ti-qo-we-u*) but, on the contrary, because these settlers (*ki-ti-ta*) have been excused (“let go”) from their other activities (which are not specified) in order to perform their obligatory naval service as rowers (Del Frego 2002–2003, 163–164). Support for this proposal is provided by the striking correspondence between the total number of eight rowers absent from *ro-o-wa* from An 724 and the eight rowers recorded as originating from *ro-o-wa*, presently on their way to Pleuron, on PY An 1 (Del Frego 2002–2003, 165; for the idea that An 1 represents a ship’s crew recruited from the total available manpower listed on An 610, see Killen 1983b, 76–79 and note the useful parallel provided by these texts for the

team of bronzeworkers and the total available men believed to be registered on An 261).

The *ka-ma* land appears in the second section of this tablet (lines 9–12), which concerns the location of *a-ke-re-wa*. By restoring *a-[ko-wo]* at the end of line 10 (Del Frego 2002–2003, 154), lines 10–12 may be translated as follows: “. . . *Olonthios* (*hapax*), being *di-qo* (meaning unknown), without sons or without apprentices/boys, is obligated [to row or perhaps even to serve in some other capacity] and the *e-qe-ta* (pl.) have/hold the *ka-ma* . . . as *e-to-ni-jo* for [the god] *Enuwaios*” (see Del Frego 2002–2003, 154–158, with references). Without anyone to send in his place, *Olonthios* must go to perform his duty himself, and his *ka-ma* landholding has therefore been transferred (perhaps temporarily) to a group of *hequetai*.

If *Olonthios* is taken to be a man closely connected to the palace, as the other named individuals on the text seem to be, it could be argued that *ka-ma* land is regarded by the palace as too important to be left unattended and unworked during *Olonthios*’s absence (and also thereby potentially risking its re-possession and redistribution by the *dāmos*). Thus, its palatial agents, the *hequetai*, have been entrusted with its maintenance to ensure its continued productivity. Whether or not the *hequetai* mentioned on An 724 are the three *hequetai* associated with *a-ke-re-wa* on the *o-ka* tablet An 656 (lines 14, 16, 19–20) is unclear (Deger-Jalkotzy 1983, 99).

The term *e-to-ni-jo* is applied to three landholdings at Pylos: (1) the priestess Eritha’s *o-na-to* (Eb 297.1/Ep 704.5), (2) the priest Amphimēdēs’ *o-na-to* (Eb 473.1/Ep 539.14, and (3) the *ka-ma* held by the group of *hequetai* above (An 724.11). This special status is believed to have exempted the land so designated from all, or some, of the tax normally levied on it (e.g., Ruijgh 1967, 109–110, who proposes that the underlying term, ἔτωνιον, is derived from a compound \*ἔτωνος “having real benefit/profit,” comprised of ἔτός “true” and ὄνος “benefit”; Deger-Jalkotzy 1983, 100; Lupack 2008, 66 n. 199). The issue of tax revenue is perhaps why the *dāmos* disputes Eritha’s claim that her land is of *e-to-ni-jo* type. If *e-to-ni-jo* status was granted directly by

the palatial administration (for this idea, see Lupack 2008, 75–76), An 724.11–12 could reflect a situation in which the palace has freed the *hequetai* from an otherwise expected levy to the palace or the *dāmos*, or both (again, the details of the taxation system are far from clear) in return for their assistance. For the *hequetai*, taking on the supervision of Olonthios's *ka-ma* plot probably meant sacrificing a good deal of time, attention, and resources otherwise spent on their own ventures. Perhaps the palace attempted to make it more attractive for these men to take on the responsibility by exempting the land from (some) tax and by dividing the task between a number of *hequetai*, thereby further reducing the burden inherent in working it. If correctly understood, An 724 shows that the palace was keen to hold on to *ka-ma* land whenever possible.

## Concluding Remarks

The information contained in the E series, An 261, Un 718, and An 724 from Pylos suggests that *ka-ma* landholdings were a special kind of *dāmos* land. In particular, their size and accompanying obligations mark them as unusual. Their potential yields, which would have exceeded those of regular-sized plots, and the specific link between workers for the palace and *ka-ma-e-we* on PY An 261 raise the possibility that *ka-ma* lands were reserved for intensive cultivation primarily geared toward feeding large groups of workers. It is tentatively proposed that a special arrangement was worked out between the *dāmos* and the palace, whereby a portion of *dāmos* land, known as *ka-ma*, was set aside for this purpose, due to its desirable location or soil quality or some other factor. Indeed, tablets Un 718 and An 724 indicate that officials closely connected to the palace (the *ra-wa-ke-ta* and *e-qe-ta*) could be associated with the supervision of the *dāmos*'s *ka-ma* lands.

The ability to use surplus produce from these lands for one's personal benefit would help to explain why such *dāmos* land would have been in demand at the level of the individual, relatively wealthy, leaseholder, as in the case of the larger

It is worth noting that the priest Amphemēdēs, in the second example of *e-to-ni-jo* above, was probably also a *hequetās* (see Lindgren 1973, I, 29, II, 47 for his identification with the *e-qe-ta* on Ed 317). Could it be that, in all three examples of *e-to-ni-jo* land, the palace was interfering in the land allocations of the *dāmos* by granting exemptions and currying favor with influential individuals, including sanctuary personnel, whose share in the expected collective contribution of the *dāmos* to the palace would then fall on other members of the community (cf. Deger-Jalkotzy 1983, 100; Lupack 2008, 76)? Such a situation would expose the *dāmos*'s relationship with the palace to be, at times, problematic, thereby highlighting again the complicated interplay between *dāmos*, palace, and religious spheres.

landholdings of the first and third *ka-ma-e-we* recorded on Ep 613. It is tempting, but premature, to view such individuals as agricultural entrepreneurs, working the land for the palace and making a personal profit when possible. At an institutional level, the distinction between the palatial and religious associations of some *ka-ma-e-we* on Ep 613 might point to a degree of competition between the palace and sanctuary over the leasing of *ka-ma* plots; however, it would be dangerous to place too much emphasis on this point, given the possible overlap between spheres of interest. Finally, one wonders whether the absence of the *pa-ro da-mo* formula in the *ka-ma* entries of Ep 613.1–13 might stem from the ambiguous character of *ka-ma* plots: that is, according to the hypothesis presented in this paper, *ka-ma* lands technically belonged to the *dāmos* but were worked primarily for the palace (and possibly also the sanctuary). Thus, the clear differentiation between landowner (*dāmos*) and leaseholder would have been blurred in the case of *ka-ma* lands, where the palace, at least, was intertwined as a major beneficiary. Perhaps the omission of the *pa-ro da-mo* formula hints at the heavy involvement of one or more

such parties, distinct from the *dāmos*, in the working of these plots.

Firm conclusions are not possible at present due to the nature of the available evidence. The above exploration into *ka-ma* plots nevertheless suggests an underlying dynamic and beneficial, even if potentially problematic, collaboration regarding land

between *dāmos*, palace, and sanctuary at Late Bronze Age Pylos. For both the institutions and the people associated with them, one suspects that working the *dāmos*'s *ka-ma* lands was as much an exercise in agricultural and economic management as one in socially expedient communal arrangements and profitable individual political alliances.

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