## PREPOSITIONAL USAGE IN ARCADO-CYPRIOT AND MYCENAEAN: A BRONZE AGE ISOGLOSS? ${ }^{1}$

Whereas the other classical dialects use the genitive to continue the IE ablative after prepositions such as $\dot{\alpha} \pi o ́$ and $\dot{\epsilon} \xi$, Arcado-Cypriot construes these prepositions with the dative. Debrunner, ${ }^{2}$ López Eire ${ }^{3}$ and Kuryłowicz ${ }^{4}$ explained this phenomenon as a syncretism of the dative and ablative, caused originally by a similarity of the plural morphs and then extended analogically into the singular.

Householder ${ }^{5}$ posited a syncretism of instrumental and ablative as an archaic 'Achaean' feature which was already present in Mycenaean, so that when the dative and instrumental also fell together the result was a total dative-locative-ablative-instrumental syncretism.
'We are strongly inclined to the supposition that the ablative had not syncretised with the genitive at all in proto-Arcado-Cypriote, but either with the dative or some other case which later syncretised with the dative, at least in part... To explain these facts by assuming that Arcado-Cypriote once used the genitive with all ablatival prepositions is much more difficult and requires some theory explaining how they knew which genitives were ablatival.' ${ }^{6}$
Householder was followed by Ilievski ${ }^{7}$ who saw in Arcadian $\dot{\epsilon} \pi t \dot{\epsilon} F \hat{\epsilon} \rho \gamma \bar{o}^{8}$ an old instrumental form with ablatival force.

1 Throughout this paper Arcadian inscriptions are cited with reference either to F. Hiller, IG v/2, Inscriptiones Arcadiae, Berlin 1913 [= IG v], or to L. Dubois, Recherches sur le dialecte arcadien, Vol. II, Corpus dialectal, Louvain-la-Neuve, Cabay, 1986 [= Dubois]. Cypriot inscriptions are cited with reference to O. Masson, Les inscriptions chypriotes syllabiques (second edition), Paris, Boccard, 1983 [ $=$ LCS $^{2}$ ]; T. B. Mitford, The inscriptions of Kourion, Philadelphia $1971[=I K]$; Cl. Traunecker, F. Le Salout, O. Masson, La Chapelle d' Achôris à Karnak, Paris, Centre Franco-Egyptienne d'Étude des Temples de Karnak, 1981 [= Karnak]; T. B. Mitford, The Nymphaeum of Kafizin. The inscribed pottery, Berlin / New York 1980 (= Kadmos, Suppl. II) [= NK]; T. B. Mitford, O. Masson, The syllabic inscriptions of Rantidi-Paphos, Konstanz $1983[=$ RP]. Mycenological colloquia are abbreviated in the standard way.
2 E. Schwyzer, A Debrunner, Griechische Grammatik, München 1934-1953 (repr. 1959-1960) [= Gr.Gr.], II, pp. 447-8.
3 A. López Eire, Simposio de colonizaciones, Barcelona-Ampurias 1971 (1974), pp. 274-277.
4 J. Kuryłowicz, Problèmes de linguistique indo-européene, Cracovie 1977, pp. 148f.
5 F. Householder, «pa-ro and Mycenaean cases», Glotta 38, 1959, pp. 1-10.
6 Ibidem, p. 5.
7 P. H. Ilievski, The ablative, instrumental and locative in the oldest Greek texts, Skopje 1961 [=Ablativot $]$, pp. 118f.
8 Dubois Phé. 1.3.

An entirely different line of explanation was offered by Delbrück, ${ }^{9}$ Günther, ${ }^{10}$ Buck, ${ }^{11}$ Humbert ${ }^{12}$ and Ruijgh, ${ }^{13}$ all of whom saw the influence of the 'opposite' preposition $i \nu+$ dat. causing a replacement of the ablatival case by the locatival case where the ablatival context was already unambiguously marked by the preposition. Brugmann ${ }^{14}$ compared a similar but opposite replacement of locatival datives by partitive genitives with locatival function in Attic ( $\epsilon v$ A ${ }^{\prime} \delta o s /-o v, \dot{\epsilon} \mu \pi o \delta \dot{\omega} \nu, \dot{\epsilon} \nu+$ gen. pl. of a demotic) and Doric (eg. from Laconia, $I G \mathrm{~V} / 1213$ passim $\dot{\epsilon} v$ ГalaFó $\chi \overline{\bar{o}}$ ) which he does not consider elliptical (eg. sc. o"k $\kappa \omega t$ ).

Morpurgo Davies ${ }^{15}$ has observed that no Arcado-Cypriot preposition is attested as governing all three local cases (viz. gen., acc., dat.): whereas $\in \pi^{\prime} \dot{\prime}$, mapá, $\pi \rho o ́ s, ~ i m o ́ ~ a n d ~ \mu \epsilon \tau \alpha ́ ~ s h o w ~ t h r e e-c a s e ~ g o v e r n m e n t ~ i n ~ H o m e r, ~ n o n e ~ o f ~ t h e i r ~$ Arcadian or Cypriot counterparts governs the genitive; in contexts where other dialects construe them with a genitive, even a partitive, in Arcado-Cypriot they govern a dative. She sees this as part of a wider Greek tendency toward the simplification of the construction of three-case prepositions: Attic shows twocase government of $\dot{\alpha} \nu \alpha ́, \mu \in \tau \alpha ́$ and later $\pi \epsilon \rho \dot{\prime}$, and almost all dialects neutralise the distinction between $\dot{\epsilon} \pi i+$ dat. and gen. ${ }^{16}$ Arcado-Cypriot differs from, say, Attic in the choice of case which has been eliminated from prepositional constructions, the degree to which it has been achieved, the early date of the change, and in levelling it also to ablatival one-case prepositions.

Each of these explanations will cause a different distribution of the data. If the 'syncretism' theory is correct we should see the dative used in all ablatival contexts, both with and without preposition. We would also not expect to see datives used after prepositions which ordinarily govern non-ablatival (eg. partitive) genitives. If, on the other hand, the 'prepositional' theory is correct, we might expect to see traces of genitives used in non-prepositional ablatival contexts, although it is possible that the action of levelling might cause these too to be replaced by datives; and we would expect non-ablatival genitives with prepositions to be replaced also.

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## II．Prepositional usage in Arcado－Cypriot

The Arcado－Cypriot prepositions are summarized in Table 1.

|  | CYPRIOT | Arcadian |
| :---: | :---: | :---: |
| I．With genitive <br> （a）adnominal <br> （b）after an adverb | aneu，anti | $\stackrel{\rightharpoonup}{\epsilon} \nu] \in \kappa \alpha, \dot{\alpha} \nu \tau i$ <br>  $\mu \in \sigma \alpha \kappa ⿱ ㇒ 日 勺 \theta \epsilon \nu$ |
| II．With accusative | pos | Siá（temporal），катú／кá （possibly also with gen．？） |
| III．With accusative and dative |  |  |
| （a）dat．used locativally | in／en | $i \nu / \epsilon \in \nu, \pi o ́ s, \pi \in(\delta a ́)$ |
| （b）misc．dat．functions | epi，peri |  |
| （c）dat．used locativally and ablativally |  | máp／$\pi \alpha \rho a ́$ |
| IV．With dative |  |  |
| （a）locatival | sun，pro（？） | $\sigma u ́ v$ |
| （b）ablatival | ари／apo， |  |

Table 1：Arcado－Cypriot prepositions and their cases
Prepositions governing a Dative with Ablatival sense

The Arcadian prepositions which govern an ablatival dative are as follows：

Dubois O． 1 （passim）
$I G$ v 262.22
$I G$ v 343．67－9

I．v．Magn． 38.23

Dubois Té． 4.29
Dubois Té． 4.60
（a）$\dot{d} \pi \dot{u}$

In a border decree with sense＇from here＇，follow－ ed by an expression meaning＇towards．．．＇

 both with sense＇away from＇；for the latter cf．



＇．．．［coming］from Meander＇．The form of the preposition has been Ionicised by the engraver， but the syntax remains Arcadian．
ảmù Tãı äv ả $\mu \epsilon ́ p a \imath$
àm̀̀ тãı á $\mu \epsilon ́ \rho \alpha \iota$
with temporal sense＇since＇（ie．＇from the day when＇）

| $I G \vee 6.4$ |  ríntol <br> temporal sense 'in the three days after that on which ...' |
| :---: | :---: |
| $I G \vee 6.94$ |  |
| $I G \vee 6.116$ |  eponymic formula, 'since the year when S. was magistrate' |
|  | (b) $\epsilon_{S}\left(=\dot{\epsilon}^{\prime} K\right)$ |
| Dubois Té. 4.55-6 |  |
|  | 'those born from her' |
| $I G \vee 6.99$ |  temporal 'since the year when D . was magistrate' |
| $I G$ v. 6.49 |  <br>  local sense, 'that the judges be empowered to expel the contractor from the site' |
| Dubois Té. 4.5 | Tòs фuүádas tòs катєvӨóvtas Tà <br>  'that the exiles who have returned recover their ancestral possessions from which they were exiled' |
| Dubois Té. 4.45 |  ablative of means, 'that he pay off the debt by means of that half'; cf. Isocrates $14.152, \epsilon^{\prime} \kappa$ T $\tilde{\nu} \nu$ i $\delta i ́ \omega \nu \quad \tau \rho \in ́ \phi \in เ \nu$ |
| Dubois Té. 4.19 | És toĩ vóhol |
| Dubois Thé. 3.9 |  'in accordance with the law', 'specified by the <br>  xpóvos |
|  | (c) $\epsilon$ 'T'́S |

This is evidently a compound of $\dot{\epsilon} \pi i$ and $\bar{\epsilon} S$ with a meaning akin to 'concerning matters arising from' vel sim.

Dubois Té. 4.9-10

Dubois Té. 4.21-22
 'as to the houses, that each should have one'
 matol oi $\phi u \gamma \alpha ́ \delta \epsilon S$

Dubois Té. 4.37

Dubois Té. 4.26-7
$I G \vee 6.54$
'as to the panagoriae which the exiles missed'

'as to the sacred money'
 $\pi \alpha ́ \mu \alpha \sigma \iota$
'that they not be allowed to bring a case concerning their goods'
 б]ụ $\dot{\gamma} \gamma \rho a ́ l \phi o l$
'... concerning the work ...'
(d) ÚTó
I. v. Magn. 38.5 ó $\chi \rho \eta \sigma \mu o ̀ s ~ o ́ ~ \gamma є \gamma o v \grave{s ~ i ́ m o ̀ ~ т o u ̃ ' A \pi o ́ \lambda \lambda \omega \nu \iota ~}$



For Debrunner ${ }^{17}$ this dative continues an IE instrumental whereas the other dialects have a genitive continuing the ablative of source of action. However, we cannot rule out that the Arcadian dative is standing in this same ablatival function.

$$
\text { (e) } \pi \alpha \rho \alpha ́
$$

Dubois Thé. 3.1-2
$\dot{\epsilon} \pi \epsilon \iota \delta \eta ̀ ~ \pi \alpha \rho a \gamma \epsilon \nu o ́ \mu \epsilon \nu 0<\imath>\pi \grave{a} \rho<\tau>\tilde{a} \iota$ Tó $\lambda \iota$

The inscription of the Aegeiratae on the same stele has ma[p]a $\gamma \in \nu 0[\mu] \in \mathcal{\nu} \omega \nu$
 suggested for the Arcadian version by the presence of the allatival mós phrase which follows it: a locatival interpretation of the $\pi \alpha \dot{\rho}$ phrase would not make sense. Hence 'Having come to the city of the Thelphusians from the city of the Coans.'
I. v. Magn. 38.9 кäà єîXov tàs ìvtohàs mapà Tãı ííaı mólı

The Epidamian, Ithacan and Corcyran versions of the inscription have mapá + dat. in locatival function: I. v. Magn. 46.14-15, mapà taĩs móN $\epsilon] \sigma \iota v$; ibidem 36.9, тард̀ тaĩs mo入íoıs; ibidem 44.15-16, тapà тaĩs mó $\lambda \epsilon \sigma \sigma \iota \nu$. It is therefore probable that the sense in Arcadian is also locatival. However, the Messenian version has ablatival mapà tãs iठías mó入 $\epsilon \omega$ (ibidem 43.10-12), a use which is common after verbs of receiving but which is normally used of persons. ${ }^{18}$ Hence probably 'since they received their instructions in their own city.'

[^1][For $\dot{\alpha} \pi^{\prime}$ and $\dot{\epsilon} \pi \epsilon^{\prime} S$ governing a genitive in ablatival function, see below, pp. 404f. For $\dot{u} \pi \epsilon ́ \rho, \dot{\epsilon} \pi i$ and $\pi \epsilon \rho \dot{l}$ governing a dative where other dialects have a genitive, see below, pp. 406ff.]

The Cypriot evidence has been greatly expanded by the publication of the new joins and fragments from the Nymphaeum at Kafizin, although this has also added an element of confusion in that apo once and es uniformly are attested as governing an ablatival genitive. The range of prepositions is less broad:

## (a) $a p u / a p o$

ICS 2 217.8, 17 a-pu-ta-i, za?-i = /apu tāi gāi/ 'from the land'

ICS 220.3-4 to-a-po-lo-ni, ...a-po-i-wo-i, ta-se , e-u-ko-la-se \[e]-pe-tu-ke

'for Apollo, from whom Baalrom obtained the fulfilment of his prayers'
ICS ${ }^{2} 352.3$ a-po-na-me-no-i $?=$ /ap' Onamenōi/
ICS 352.4 a-pa-ri-so-to-ke-le-we-i ?= lap' Aristokleuei/
NK 266(b) a[po tō tritōi? kas eikos]tōi uetei apo tōi prosu $\left\langle\right.$ pa> $r^{h}$ onti deka[ti]smōi apo tai(s) ap ${ }^{h}$ aire(s)i tōn linōn kas tō spermatos tai(s) en A(n)droklō uoikōi
This exemplifies a large number of dedications at Kafizin, with apo governing the dative in both temporal and local ablatival senses. The formula is standard and allows quite extensive restorations to be made in more fragmentary texts.

NK 118(b).1-2 apo tōi tetartō kas (e)ikos[tōi uetei
ibidem . 2 to $a[n a] t^{h}$ ema (?) $a[p o]$ tō moi
NK 217.b apo tāi $[$ Androklō koinōniiāa $i$
NK 218.b a[po tōi Androklō ko]inōniìō
NK 252 apo [tōi ...] ka(s) eikostōi uetei
NK 275(b) a[po tō]i pros[upark $\left.{ }^{h} o(n) t i ? d e k a t i s m \bar{o}\right] i$
NK 136 apo tō [deuterō ue]teos ... a[po tō de]kadi? ueteos
This is a curious fragment in which the first apo is seemingly construed with a genitive and the second with a dative. The genitive with the first apo is discussed below, p. 406]
(b) es / ex

ICS 217.5 e-xe-to-i , wo-i-ko-i = leks tōi uoikōi/
ibidem. $6 \quad e$-xe-ta-i-po-to-li-wi $=$ leks tāi ptoliui/
ibidem . $11 \quad e$-xe-to- $i, k o-r o-i$, to-i-te $=$ leks tōi $k^{h} \bar{o} r o ̄ i ~ t o ̄ i d e / ~$
ibidem . $24 \quad e$-xe-ta-i,za?-i=leks tāi $g \bar{a} i /$
At Kafizin and Karnak es / ex is construed with a genitive, for which see below, pp. 405 f. For peri with a dative see below, p. 407.

## Non-Prepositional usages

There is a small but compelling amount of evidence that in non-prepositional constructions Arcadian used a genitive to continue the IE ablative. There is no evidence for Cypriot.
$I G$ v 3.16: п入òs ả á́pau кaì vuктós
'more than a day and night': This is evidently a genitive continuing an ablative of comparison. The inscription is early fourth century, and the Arcadian genitive form in $-a v$ tells against koine influence. Householder's ${ }^{19}$ suggestion that the genitive is by analogy with the partitive after superlatives is surely not plausible, nor is Chadwick's emendation of $\pi \lambda$ ós to $\epsilon i \mu \eta$ with da $\mu$ '́pau kai $\nu \cup \kappa$ Tós as a genitive of time. ${ }^{20}$

'if the garden is further than a plethron away': Again, an ablative of comparison. For Buck ${ }^{21}$ the form $\pi \lambda \epsilon$ '́ov suggests koine influence; and indeed $\gamma \epsilon \in \gamma \rho a \pi \tau \alpha$ in .15 shows the koine form 'imputable au graveur delphien'. ${ }^{22}$ Yet as Dubois (ad loc.) comments, the possibility cannot be ruled out that Arcadian also knew the form $\pi \lambda \epsilon \in \circ \nu$, and the text clearly shows dialectal rather than koine features in, for example, the demonstrative Tथ̃v in .14, and the $o$-stem gen. sg. in $-\omega$ rather than koine $-o v$.
$I G \vee 16.6: \alpha \nu \kappa \alpha \rho u ́ \xi \alpha \iota$ aủtòs $\dot{\alpha} \nu \delta \rho a \gamma \alpha \theta i ́ \alpha u$
$c a .218 \mathrm{Bc}$. Dubois ad loc. sees a genitive continuing an ablative of cause,
 Nachmanson ${ }^{23}$ however has claimed that this is the first example of such a dedication which omits $\notin \nu \in \kappa \alpha$, so we are bound to wonder whether this is not so much an archaic use of an ablatival genitive as an innovatory (falsely archaising?) suppression of the preposition.

## $I G$ v 6.14: $\dot{\alpha} \phi \epsilon \omega \dot{\omega} \sigma \theta \omega \tau \tilde{\omega} \nLeftarrow \rho \gamma \omega$

A genitive continuing an ablative of separation. It is from the second half of the fourth century, but shows koine influence only in the gen. sg. in -ov in .11, whereas here the dialectal $-\omega$ has been used. Householder's suggestion that the genitive is by analogy with the partitive after verbs meaning 'lay hold of' ${ }^{24}$ not only seems implausible, but is in any case disproved for Arcadian by the occurrence of $\grave{\epsilon} \pi[\lfloor\theta] l \gamma \alpha \dot{v} \epsilon+$ (locatival) dative in $I G \vee 429.5$.

Morpurgo Davies sees in ő $\sigma \omega$ an ablatival genitive with a verb of lacking. 25

19 Householder, 1959, p. 6.
20 Apud Ilievski, Ablativot, p. 37 n.1.
21 Buck, Dialects, p. 208.
22 Dubois, ad loc.
3 Eranos 9, 1909, p. 32, 38.
24 Householder, 1959, p. 6.
25 Morpurgo Davies, 1966, p. 195.

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Again $T \tilde{\omega}$ is an ablatival genitive with a verb of lacking，while the antecedent $\tau \tilde{T}$ Ta $\alpha \alpha \dot{\alpha} \nu \tau \omega$ seems to have been attracted into the same case by attractio inversa．${ }^{26}$
$I G$ v 282：【 】＇Amól入ōvı каі̀ $\sigma \nu \nu \mu \alpha ́ \chi \omega \nu$ ठєко́та $\nu$
 $\pi o l \lambda \epsilon \mu i \bar{o} \nu$
Dubois on Ca .1 ad loc．comments＇le génitif－ablatif sans préposition est un trait bien archaïque et bien attesté．＇While this may be true，it is not clear that this is what we have here．Morpurgo Davies，for example，has argued that they are adnominals dependent on $\delta \epsilon \kappa$ ó $\tau \alpha \nu$ and $\delta \epsilon \kappa \alpha ́ \tau\left[\alpha \nu,{ }^{27}\right.$ which seems equally plausible．While it is true that the earliest forms of the formula do not contain
 examples may mean＇ X ［dedicates the spoils］of Y ＇rather than＇ X ［takes the spoils］from Y ＇．Versions of the formula which have been extended with ámó（eg．
 necessarily preserve the exact semantics of the original form．Thus while it is possible that this formula contains an ablatival genitive，it could also be possessive or adnominal．

Thus far the data support the hypothesis that Arcadian has a syncretism of ablative and genitive in the manner of the other dialects rather than one of ablative and dative；and that after prepositions the dative has replaced the genitive in the same way that the genitive replaced the dative after certain prepositions in Attic．There are examples of genitives used ablativally in non－ prepositional constructions，but there are by contrast no examples of datives used ablativally without prepositions．There are two instances which are sometimes quoted，${ }^{28}$ but they may be quickly dismissed．
$I G$ v 429．5－6：$\epsilon \mathfrak{l}$ ठ́́ TlS $\dot{\epsilon} \pi[1 \theta]$ h $\gamma \dot{v} \nu \bar{\epsilon}$ Toútols
The other dialects construe $\dot{\epsilon} \pi \iota \theta \iota \gamma \gamma \alpha{ }^{\prime} \omega \omega$ with a genitive；but it is a partitive one，not an ablatival（＇lay hold of，lay hold of a part of＇）．The dative in Arcadian may instead be of locatival force（＇lay hands upon＇）．

The first Toĩs is the definite article in the dative as expected after the ablatival preposition $\grave{\epsilon} \pi \dot{\epsilon} s$ ．The second is the relative pronoun which has been attracted from the accusative into the case of its antecedent．${ }^{29}$

[^2]
## Prepositions governing a Genitive

The genitives after prepositions listed under (Ia) in Table 1 above are a heterogeneous group, some of which appear to be adnominal; this is fairly clearly the case for $\ddot{\epsilon} \nu \in K a$; and $\dot{\alpha} \nu T i ́$, anti could well represent the loc. sg. of a noun followed by an adnominal gen., especially in view of Hittite hant- 'face'. ${ }^{30}$

Humbert, ${ }^{31}$ Schwyzer-Debrunner ${ }^{32}$ and Günther ${ }^{33}$ agreě in calling the gen. after aneu an original ablative, and that would fit the sense. Morpurgo Davies ${ }^{34}$ has argued that the occurrence of $\alpha \ddot{\alpha} \nu \cup \rho$ governing the acc. $\beta \bar{o} \lambda \alpha \dot{\alpha} \nu$ in Elean ${ }^{35}$ might indicate that the gen. cannot be adnominal; but it is equally difficult to explain the replacement of an ablative by an accusative as that of an adnominal. Perhaps one should rather see an accusative of respect in the Elean example, a sense which is fairly close to the adnominal.

The genitives listed under (Ib) could also plausibly be adnominal, ${ }^{36}$ although Dubois ${ }^{37}$ considers them to be ablatives of reference defining adverbs, rather than genitives after prepositions proper; and in non-prepositional constructions Arcadian uses the genitive, not the dative, to continue the ablative.

The genitives after $\delta \mathrm{l} \alpha{ }^{\prime}$ and $\kappa \alpha(\tau \dot{\prime})$ in Arcadian are uncertain. The instances are as follows:

Dubois ad loc. sees $\mu \dot{\eta}$... $\delta \iota^{\prime} \quad \alpha \nu a \gamma \kappa \alpha s$ as equivalent to $\dot{\epsilon} \kappa \delta \nu \tau \epsilon S$. The genitive presumably stands in causal ablatival function, but the form in -as rather than $-\alpha v$ casts doubt on its authenticity. ${ }^{38}$ Morpurgo Davies ${ }^{39}$ calls it 'nonepichoric', while Dubois ad loc. wonders if it might be 'une delphisme'. Even if it is a genuine Arcadian construction, it might have been influenced by the construction of $\notin \nu \in \kappa \alpha$ with a genitive.

 каті̀ тãs módıos

Dubois translates 'Que les stratèges introduisent (les entrepreneurs lésés devant les Trois Cents) s'il leurs semble que c'est la guerre qui a empêché ou endommagé les travaux au cas où se produirait une vente de butin aux dépens de

[^3]la cité.' The generals are to admit the builders to a sale of booty katù тãs mó $\lambda l o s$, but it is not completely clear what that phrase signifies. Dubois ad loc.
 tãs módıos oũגov äpalıs (Lesbos) and Milet Delphinion 148.48, toĩs סè
 the expense of the city'. Whatever the precise significance, a meaning similar to 'concerning, in relation of' 40 and governing an adnominal or objective genitive would be reasonable. ${ }^{41}$ The koine genitive in -ov is suspicious, for elsewhere this inscription uses dialectal - $\omega$.

The reading is extremely difficult. Hiller's $\epsilon i \quad \delta^{\prime} \quad \dot{\alpha} \lambda \lambda \alpha \quad$ ul $[v]$ is rejected by
 who prints the text as above, seeing $\delta a \lambda$ as an assimilated form of the modal
 land' or 'lot'. He accordingly translates 'Si en revanche un allotissement concernant ces individus est un jour autorisé, ceci fera un objet d'un blâme divin.' It would be difficult to make кà T $\omega \nu \nu[v]$ mean 'in contravention of the preceding rules', $=\pi \alpha \rho \alpha ́+$ acc., but a sense 'concerning the aforementioned people' with an adnominal ('in the case of') would make sense. For the glyph $n$ $=/ \mathrm{ks} /$, see Dubois, Grammaire, §§24, 26.

The examples of ablatival prepositions governing a genitive in Arcadian are as follows:

From the early part of the fifth century, so koine influence is unlikely. Richter ${ }^{44}$ and Morpurgo Davies ${ }^{45}$ see early Achaean influence as explaining the unexpected use of the genitive. This seems more likely than the explanation of Dubois: ${ }^{46}$ for him the simplest form of dedicatory formula of this type consists of the name of the conqueror in the nominative followed by the name of the conquered in the genitive-ablative (eg. Lazzarini, Formule, p. 957, $\Theta \in \beta \alpha$ ĩo tõ $\left.H v \in \tau^{\prime} \bar{O} v\right)$. This is then sometimes expanded by the addition of $\lambda a \beta o ́ v \tau \epsilon S$ or $\dot{\epsilon} \lambda o ́ \nu \tau \epsilon S$, and sometimes by the addition of $\delta \epsilon \kappa \alpha ́ \tau \alpha \nu$, as in Dubois Ca. 1 and $I G$ v 282. Very early in the dialects, he suggests, the bare gen.-abl. is remarked as ablative by the addition of the preposition ámó, hence such forms as M $\in \theta \dot{\alpha} v t o t$
 plus élémentaire du renouvellement de la forme archaïque et le vestige d'une

[^4]phase syntaxique antérieure à la constitution du datif-locatif en cas prépositionel.'

The communis opinio is to take $\epsilon \in \pi \dot{\epsilon}$ as the preposition $\epsilon \in \pi \epsilon$, with the final /s/ assimilated to the following/u/ with subsequent phonetic or graphic simplification. The interpretation of $F \hat{\epsilon} \rho \gamma \bar{o}$, however, is disputed. For Householder ${ }^{47}$ and Ilievski48 it is an old instr.-abl. sg. For Dubois ${ }^{49}$ it is a dat.sg. in /-oi/ whose final $<l>$ has been suppressed through lack of space, for which he finds parallels in other neatly graven archaic inscriptions in which word division is not marked (cf. IG V/1 213.2, d̉vé $\theta \bar{\epsilon} \kappa \epsilon$ ' A $\theta a v a i ́ \alpha<\iota \alpha>; ~ I . v . ~ O l . ~ 266.3, ~ e ́ v ~$
 Morpurgo Davies ${ }^{50}$ in seeing very early Achaean influence.
I. v. Magn. 38 has been copied from an Arcadian original by an Ionian copyist who has 'Ionicised' it in a number of places: $\pi \epsilon \rho \mathrm{i}$ T $\check{\nu}$ रoım $\check{\nu} \nu$ má $\nu \sigma \iota$

 Ionic form of the preposition with Ionic government; èk T(้̄v vó $\mu \omega \nu$ likewise in .57. àтò Maıáv $\delta \rho o l$ in .23 shows Arcadian government.
 in which $\alpha \pi$ ofo|riov could represent d dó + gen. pl.; but the sign $F$ is totally opaque. The earliest editors understood it as a form of $\beta$ and saw the word $\dot{\alpha} \pi \circ \beta \omega \mu \iota \circ v$, but this was rejected in $I G$ v/2 by Hiller, who doubts the inscription's authenticity. ${ }^{51}$

There are, then, two isolated examples of Arcadian ablatival prepositions governing a genitive. The so-called examples in I. v. Magn. 33 are imputable to the Ionian copyist, and $\alpha \pi \sigma$ Foutol' is intractable. The two 'genuine' examples are probably to be attributed to external influence. Cypriot presents a more complex picture. At Idalion ex governs a dative, but at other sites it appears to govern a genitive:

Karnak 49 (= ICS ${ }^{2}$ 449): ni-ka-se .? e-xe-te-u-a-se | ta-se .? po-se-ke-ti-o = /Nikās ex... tās pos Ketiō/

This extremely difficult graffito from the temple of Achoris at Karnak appears to show ex governing an $a$-stem genitive in $-\bar{a} s$. Masson suggested doubtfully in $I C S^{2}$, ad loc., that it is a toponym, commenting 'on attenderait le datif.' In Karnak, ad loc., he calls it a genitive toponym after ex.

At Kafizin Mitford claims that es uniformly governs a genitive in the dedicatory formula:

[^5]NK 266
NK 218(b)
NK 267
NK 288
es tô hāni pe(m)ptō ka]s eikostō uneteos
es to aopodo[thentos dekatismō
es tō hāni pe(m)p[tō kas eikos]tō ue [teos
es tō e<pi>geno[me]nō?li[nō

In fact only in $N K 266$ is the genitive guaranteed by ueteos, and here the preposition es is missing in the lacuna, while elsewhere the forms in $-\bar{o}$ are compatible with being datives with the $i$-mutum omitted in writing. However, given that the dedicatory formula is reasonably standard in these inscriptions, it is probable that the ueteos of $N K 266$ implies a genitive also in $N K 267$.

If this is so, it is noticeable that (i) at Kafizin apo governs a dative even when it stands in exactly the same function as es + gen.: NK 266, a[po tō tritō kas eikos]tōi uetei; (ii) these inscriptions are all very late, ca. 220Bc. The Idalion inscription, $I C S^{2} 217$, is much earlier ( $478-470 \mathrm{BC}$ ) and shows ex governing a dative, while the Kafizin inscriptions show koine vocabulary items alongside dialectal ones (de]kas $\sim$ dekatsimos, de]kakios $\sim$ dekatophoros). ${ }^{52}$ We might therefore legitimately wonder whether at Kafizin apo shows the genuine Cypriot pattern of government, as do both $a p u$ and $e x$ in the earlier Idalion inscription, but that es has acquired koine syntax. That this might be the case is demonstrated also by the attestation of apo + gen. in NK 136 possibly alongside apo + dat. later in the same inscription: apo tō[ deuterō ue]teos ... a[po tō de]kadi? ueteos; this sort of variation may suggest a change in the pattern of government which is currently under way.

The Karnak graffito must date from the first quarter of the fourth century since Achoris was Pharaoh 390-378вс and hired Greek mercenaries ca. 385вс. ${ }^{53}$ This is a little too early for koine influence on Cyprus itself, but it is feasible that the speech of Cypriots who had left the island was open to contamination from other dialects.

It is therefore probable that in no certain case can an ablatival preposition be shown to govern a genitive in Arcadian. In Cypriot the evidence also suggests that the authentic case construed with ablatival prepositions was the dative, whilst very late inscriptions fom Kafizin show a genitive with es and once with apo, probably under koine influence, and an inscription from Egypt shows a genitive with $e x$, again perhaps under external influence.

## Further possible Genitive $\rightarrow$ Dative substitutions

The preposition $\dot{u} \pi \epsilon \rho$ governs an adnominal genitive ('on behalf of, for the

 eg. Od. 17.471, $\pi \epsilon \rho i$ oí $\sigma \iota ~ \mu a \chi \epsilon i ́ \mu \epsilon \nu O S ~ \kappa т \epsilon \alpha ́ т \epsilon \sigma \sigma \iota$, and suggests that $\mu \alpha ́ \chi о \mu a \iota /$

[^6]$\mu \alpha \chi \epsilon ́ \sigma \mu \alpha$ is followed by a locative of the 'stakes', expressing either the concrete location or metaphorically the abstract concept over which the combatants are fighting. He suggests that the addition of the adverbials $\pi \epsilon \rho^{\prime}$ and $\dot{v} \pi \epsilon \in \rho$ is a remarking of the bare locative, and accordingly sees an archaism rather than an Arcadian innovation. This is ultimately unverifiable, but it would be more convincing if the same adverbial had been added in both Arcadian and Homeric. As it is, Homeric $\pi \epsilon \rho^{\prime}+$ dat. in locatival sense is a perfectly normal construction, whereas Arcadian $\dot{i} \pi \epsilon^{\prime} \rho$ + dative in this function is not. The fact is that Arcadian has a dative where the other dialects have an adnominal genitive, and we must therefore wonder whether this is actually another example of a dative having replaced a genitive in a prepositional phrase, even where the genitive was not originally ablatival.

In I. v. Magn. $38.8 \pi \epsilon \rho$ í governs a dative in the sense 'concerning': is oi
 erroneously carved $\pi \epsilon \rho \mathrm{l}$ т $\tilde{\nu} \nu \lambda o \iota \pi \tilde{v} \nu \quad \delta \iota \alpha \lambda \epsilon \chi \theta \epsilon ́ \sigma \sigma \iota$ for $\pi \epsilon \rho \mathrm{l}$ 入olmo兀̃s $\pi \alpha ́ v \sigma \iota$ $\delta t a \lambda \in \chi \theta \epsilon \nu \tau \omega \nu$. In this same sense the other dialects have a partitive genitive. ${ }^{55}$ Dubois sees an old metaphorical locatival use, but it is also possible that a genitive has been replaced by a dative.

This same construction with the dative is also attested in Cypriot: ICS $^{2}$ 181.2-3, -e-u-ka-sa-me-no-se-pe-ri-pa-l-i-ti = /euksamenos peri paidi/'having prayed about a child'.

The standard eponymic formula in Arcadian is $\dot{\epsilon} \pi i$ + dat. where the other dialects have $\epsilon \in \pi^{\prime} t$ + (real) genitive, 'in the year of ...'; eg. $I G$ v $6.59,72, \epsilon_{\epsilon} \pi$ ' $i \in \rho \dot{l}$ Saitíol (but very frequent -see Dubois, Grammaire, §123a for more examples). This could be a temporal locatival use, corresponding to Myc. /muiomenōi epi uanaktei/ 'on the initiation of the uanaks' (PY Un 2.1) or it could be a case of genitives having been replaced by datives.

## Analysis

The data would seem to support the 'prepositional' rather than the 'syncretism' theory. The genitive is used, at least in Arcadian, to continue the ablative in non-prepositional constructions, which implies that there was prehistorically a general genitive-ablative syncretism; but the genitive has been severely marginalised in prepositional usages.

The hypothesis of Delbrück, Günther, Buck and Humbert however -viz. that prepositional phrases headed by $\dot{\alpha} \pi u ́$ and $\dot{\epsilon} S$ were already marked for ablativity and thus the case following them underwent 'neutralisation' with the locativeis not quite enough to explain the distribution which we observe. If it were simply a case of removing 'redundancy' by using an 'unmarked' local case after

[^7]'unambiguous' prepositions, we would not expect 'ambiguous' prepositions, ie. original three-case prepositions such as $\pi \alpha \rho \alpha ́$, to undergo the same process, for in these prepositions the use of an 'unmarked' local case creates ambiguity rather than removing redundancy. Nor would we expect non-local genitives to undergo the substitution.

I prefer to see, with Morpurgo Davies, a process of simplification of the construction of three-case prepositions, perhaps motivated by a desire to reduce the syntactic load on the genitive. This process may have affected one-case ablatival prepositions such as $\dot{\alpha} \pi v ́$ at the same time; alternatively it might have originally affected only the three-case prepositions, in which case the datives after $\dot{\alpha} \pi \dot{v}$ and $\dot{\epsilon} \varsigma$ must be explained by the levelling of the construction of ablatival prepositions, perhaps motivated by collocations of the type *Tap⿳亠 $\Sigma \omega ́ \kappa \rho \alpha \tau \iota \dot{\epsilon}_{S}$ oíк $\omega$ in which the former three-case preposition governs an ablatival dative while the one-case preposition continues to govern an unsubstituted ablatival genitive. There is perhaps some evidence that this was indeed the case since after three-case prepositions all genitives are replaced, whereas after one-case prepositions, only ablatival genitives are replaced, while the partitives and adnominals after $\dot{\alpha} \nu T i ́$ etc. are left untouched. If the genitive after aneu is an ablatival one, it may be that only local ablatival genitives are subject to the substitution, and again, this would fit with the hypothesis that the extension to one-case prepositions was motivated by levelling in collocations of two ablatival prepositions.

While there are no examples of non-prepositional ablatival constructions in Cypriot to attest directly to a prehistoric genitive-ablative syncretism, the fact that the adnominal genitive after peri appears to have been replaced by a dative suggests that in Cypriot, too, the process was one of replacement of genitives wholesale by datives. Furthermore, since it is genitives, even non-ablatival ones, which are subject to this substitution, it must have been genitive morphs rather than ablative morphs which were replaced; and this testifies indirectly to the existence of a genitive-ablative syncretism which must have been in place before the genitive $\rightarrow$ dative substitutions occurred. To start with a dat.-loc.-abl. syncretism, on the other hand, faces the difficulty of explaining how original ablatival datives were replaced by genitives in non-prepositional constructions, while simultaneously maintaining that the genitive did not carry ablatival function.

## III. Prepositional usage in Mycenaean

The Mycenaean prepositions, adverbials and preverbs are listed in Table 2.

| I. With Genitive | heneka |
| :--- | :--- |
| II. With Accusative | peda |
| III. With Dative | amphi |
|  | epi/opi (also with instr. in -pi) |


| III. With Dative | ksun <br> meta <br> paro |
| :--- | :--- |
| IV. As preverbs only | apu- (and apes-?) <br> en- <br> peri- <br> pro- |
| V. Adverbial uses only | posi <br> hupo |

Table 2 : Mycenaean prepositions, preverbs and adverbials
The purely ablatival prepositions of other dialects are either found only in composition (eg. apu-) or are missing altogether (eg $\grave{\epsilon} K$ and its equivalents, unless $a$-pe-do-ke $=/$ ap-es-dōke/ in PY Fr 1184.1). It is nonetheless striking that the only preposition which governs a genitive, heneka, governs an adnominal -a situation which is reminiscent of that in Arcado-Cypriot.

Although the syllabic script obscures case forms to a large degree, there appear to be no prepositions which givern three or even two cases. Where later dialects have, for example, either $\mu \in T \alpha \dot{\alpha}$ or $\pi \epsilon \delta \alpha \dot{\alpha}$ construed with both genitive and dative, Mycenaean has meta + dat. and peda + acc. Householder ${ }^{56}$ has observed that it is possible that paro governs two cases, a dative locativally and an instrumental ablativally, with the spelling rules obscuring the difference. However I have argued elsewhere ${ }^{57}$ that in the plural at least (which is the only form, in -pi, in which the instrumental is uniquely identifiable) the instrumental is used locally only with locatival function and that an instrumental-dative syncretism looks more likely than an instrumental-ablative one.

## Uses of the preposition pa-Ro /paro/

Perhaps the most interesting Mycenaean preposition is pa-ro /paro/, which corresponds to classical mapá. Opinion is divided as to whether its function is locatival or ablatival, and it frequently seems that selecting one or the other will require extremely complicated explanations of some texts. In this section I shall examine the uses of paro not with the aim of identifying one single sense which can be applied to all instances, but treating separately each usage, or group of similar usages, comparing them not with every other example, but only those in documents which are related by form. The following criteria are applied:
A. Presence of other expressions in parallel with paro. If forms which are evidently locatival appear in parallel with paro, it may be assumed that paro too is locatival. I treat the -pi case form as locatival.

56 Householder (1959), p. 9.
57 R. J. E. Thompson, «Instrumentals, datives, locatives and ablatives: the $-\phi \mathrm{l}$ case form in Mycenaean and Homer», PCPS 44, 1998, pp. 219-250, esp. pp. 226-238.
B. Presence of other expressions in series with paro. If an item is said to be at a place X paro a person Y , it is probable that paro is locatival. On the other hand, if an item is said to be going to a place or person X paro a person Y , it is more likely that paro is ablatival.
C. Context. It is rare that the sense can be deduced solely from the context, but where possible, this sense is preferred.
D. Economy. If either a locative or ablative sense is possible, but one or the other requires more effort to understand, the simpler of the two is preferred. 'Strained' interpretations are rejected in favour of more 'economical' ones.
E. Sense in similar documents. Primarily, if one sense or the other can be established in one document of a set using the above criteria, the same sense can be postulated for other documents in the same set. With greater caution this may be applied to documents of different sets which share formal similarity.

## 1. Personnel records

KN Ai(1) 115 pa-ro, u-wa-si-jo, ko-wo [
(' 124 'b)
The Ai series at Knossos records groups of women and children, with a toponym (eg. Ai 739), an anthroponym ( $\mathrm{Ai}(1) 63$, $\mathrm{Ai}(3)$ 824) or, in $\mathrm{Ai}(1)$ 115, a paro formula. They are comparable to the Ak series, also at Knossos, and to the Aa and Ab series at Pylos. In PY Aa 76 the toponym is po-to-ro-wa-pi, an instrumental with probably locatival function.

```
KN Ai(1) 63
.a pe-se-ro-jo, e-e-si
.b MUL 1 ko-wa 1 ko-wo 1
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$\mathrm{KN} \operatorname{Ai}(3) 824$
. 1 a-pi-qo-ta / do-e-ra MUL 32 ko-wa, me-zo-e 5 , ko-wa me-wi-jo-e 15
. 2 ko-wo me-wi-jo-e 4
KN Ai 739
. 1 ra-su-to, 'a-ke-ti-ri-ja' mUL 2 ko-wa 1 ko-wo 1 KN Ak(1) 612
.A TA 1 'DA 1' mUL 9
.B ko-wa, /me-zo 1 ko-wa / me-wi-jo 1
.C da-te-wi-ja / ko-wo / me-zo 1 【 kọ-wọ mẹ- 』
PY Aa 76
(S640-H4)
po-to-ro-wa-pi mUL 4 ko-wa 4 ko-wo 3 DA 1 TA 1
I have argued elsewhere ${ }^{58}$ that the Pylos Aa and Ab documents record a census of work groups and their current locations (where no location is given on an Aa text, an implicit pu-ro is to be understood; and where an Ab text records
the same work group as an Aa text, the Ab text includes pu-ro where the Aa version leaves it implicit, as in Aa 313 and the corresponding Ab 417, where we can be reasonably certain, from the numbers recorded, that the same work group is involved in both documents).

PY Aa 313 o-ti-ri-ja mUL 21 ko-wa 12 ko-wo 8 DA 1 TA 1
PY Ab 417
$\begin{array}{ll}\text {.A } & \text { GRA 6[ } \\ \text {.B } & \text { pu-ro, o-ti-ra } \\ 2\end{array}$
The Ab series appears to record the rations, in terms of figs, NI, and grain, GRA, needed to sustain the groups already recorded on the Aa series. While it is just conceivable that the Aa series might record a movement of workers from one location to another (the toponym, where recorded, being the point of origin, and therefore ablatival), albeit on a scale which is difficult to credit, comparison with the Ab series makes this unlikely. For here the palace surely needs to record the place to which to send the rations, that is to say the current location of the women; but where the same work-group is recorded in both series, the same toponym is given in both series (unless the Aa series leaves pu-ro as implicit), so no movement appears to have taken place between the writing of the Aa and Ab series. There would seem to be little alternative but to see the toponyms on both the Aa and Ab series as locatival.

Since the structure and function of the $\mathrm{Aa} / \mathrm{Ab}$ series at Pylos and the Ai series at Knossos are (probably) the same, we can invoke criterion E and suggest that the toponyms on the Ai series, e.g. ra-su-to on Ai 739, are also locatival. Where an anthroponym stands in this position, eg. pe-se-ro-jo on $\mathrm{Ai}(1) 63$ or a-pi-qo-ta on $\operatorname{Ai}(3) 824$, it seems likely that these too function locativally -that is to say that the workers are located in P.'s or A.'s workshops, vel sim. Similarly then in $\operatorname{Ai}(1) 115$ pa-ro , u-wa-si-jo is most likely to mean 'in U.'s workshop' with locatival force.

KN V(3) 655
. 1 e-re-dwo-e[ ] vac. [ / ]i-[ // ]sa-ma-ru[
. 2 pe-ri-to-wo / da-wo $1 / /$ ne-o[ ] vest. [ ] 1 ja-ma-ta-ro[

KN As(1) 604
.1 e-re-dwo-e, ka-ta $a_{2}$-ro 'si-rạ-so' VIR 1 e-ri-ta-qi-jo, / ka-mo 'VIR 1 '
. 2 ]ra-su-to vIR 1 ta-de-so ra-su-to[ VIR ]1 a-u-ri-jo 'wi-na-to' VIR 1
.3 ]te-so 'wi-na-to' VIR 1 te-naa-ja-so[ VIR ]l qa-qa-ro 'pu-so' VIR 1
.4 ]to,/u-ta[-no ] vestigia?
KN V(3) 655 contains the sequence pa-ro $a$-[. Although the tablet contains many lacunae, comparison with $\mathrm{As}(1) 604$ suggests that the structure may be <anthroponym> <toponym> (VIR) 1, where a paro + anthroponym formula has
replaced the toponym in .4. The term e-re-dwo-e is evidently a designation of the men recorded, but its precise significance is not clear. ${ }^{59}$

There is no internal evidence for the function of the toponyms, and hence of the paro formula -as for all of the toponyms in the $\mathrm{As}(1)$ and $\mathrm{V}(3)$ sets the case forms are obscured by the script. However, the sense may be locatival, since (i) an ablatival sense in the personnel records implies a movement of the workforce on an unimaginable scale; and (ii) if the toponyms are ablatival, since there is then no explicit mention of the current location of the workers, we must probably assume an implicit ko-no-so; but then the presence of an explicit ko-no-so on As 40 makes no sense. Thus possibly the sense of the toponyms on $\mathrm{V}(3) 655$ is locatival, and since paro is in parallel with them, it, too, may be locatival. But the evidence for the interpretation of this tablet is weak.

| PY An 129 |  |
| :---: | :---: |
| . 1 | ]pa-rọ, ti-ki-jo |
| . 2 | a-ta-ro-we VIR |
| . 3 | pe-re-wa-ta VIR 1 |
| . 4 | za-mi-ro, pu-ro-jo VIR 10 |
| . 5 | to-ro-wo , ri-na-ko-ro VIR 1 |
| . 6 | ku-nu-ta-jo, a-so-na VIR 1 |
| . 7 | pa-ro, ka-ke-u-si |
| . 8 | we-ro-ta VIR |
| PY An 340 |  |
| . 1 | pa-ro, a-ta-o $\operatorname{VIR}$ ¢6[ |
| . 2 | a-ta-o, ka-wa-ti-ro VIR 1 |
| . 3 | a-ta-o, wi-ri-wo[ ] VIR 1 |
| . 4 | a-ta-ọ[ ]te-u VIR[ 1 |
| . 5 | $\mathrm{a}[$-ta-o ]-ja-do-ro VIR 1 |
| . 6 | a-ta-o], [ ]-te-u VIR 1 |
| . 7 | a-ta-o, pu[ ]-a ${ }_{2}$-ko VIR 1 |
| . 8 | a-ta-o, wo-ti-jo VIR 1 |
| . 9 | a-ta-o, te-pe-u VIR 1 |
| . 10 | a-ta-o, pu-ti-ja VIR 1 |
| . 11 | a-ta-o, a-re-[] VIR 1 |
| . 12 | a-ta-o, a-no-ra-ta VIR 1 |
| . 13 | a-ta-o, a-wa-ta VIR [1 |
| . 14 | a-ta-o, ka-u-ti-ta |
| . 15 | ] vacat [ |
| . 16 | ] vacat [ |

(S129-H22)

PY An 129 and An 340 are similar in structure and share the same hand and stylus. An 129 refers to smiths ( $k a-k e-u-s i / k^{h}$ alkeusi), and there is some evidence to suggest that a number of the men in An 340 are also smiths: an $a$-ta$o$ is listed among a group of $a[-t a$ - $] r a-s i-j o, ~ k a-k e-w e ~ i n ~ J n ~ 431 ; ~ w o-t i-j o ~ a n d ~ a-~$ no-ra-ta are listed among two different groups of a-ta-ra-si-jo, ka-ke-we in Jn
832. An 340 could plausibly be understood as a list of smiths working under, and hence with, $a-t a-o$, but this is not certain.

It is possible that An 129 contains a number of toponyms. Whatever the significance of za-mi-jo in .4, pu-ro-jo probably represents the gen. sg. of the toponym Pylos ${ }^{60}$. The collocation za-mi-jo pu-ro-jo could easily then mean ' $z$.'s of (ie. from) Pylos', especially if za-mi-jo indicates persons conscripted into the workforce as a penalty, 'bondsmen' vel sim..$^{61}$ a-so-na in .6 , in the same position as pu-ro-jo, may be the nom. sg. of an appellativum describing ka-nu-ta-jo or it may be a toponym. ${ }^{62}$ Similarly ri-na-ko-ro in the same position in the preceding line, possibly /lināgoros/ 'collector of flax', ${ }^{63}$ or a toponym /Linagroi/ vel sim. ${ }^{64}$ If toponyms, they cannot be destinations to which the men are being sent by (ie. from) ti-ki-jo because there are no parallel toponyms in the other lines. There cannot be an implicit pu-ro in the lines without toponyms, because then pu-ro-jo in .4 would not make sense. Even if $a$-so-na and ri-na-ko-ro are not toponyms, the same considerations apply. Thus although the evidence is circumstantial, it seems quite likely that the paro expressions in this tablet are locatival, and it too is part of a survey of the workforce.

## 2. Commodities for a state banquet: PY Un, TH Wu, KN C(2)

In their editio princeps ${ }^{65}$ of the inscribed sealings from Thebes, Piteros, Olivier and Melena have observed the similarity between the numbers of animals and other commodities listed therein and on tablets such as PY Un 138 and Un

60 V. Georgiev, Lexique des inscriptions créto-mycéniennes, Sofia, Izd. Bolg. Akad. Nauk, 1955 [= Lexique], s.v.; M. Ventris, J Chadwick, Documents in Mycenaean Greek, Cambridge 1956 [= Documents], p. 149; idem, second edition, Cambridge 1973 [= Documents ${ }^{2}$ ], p. 575; A. Morpurgo Davies, Mycenaeae graecitatis lexicon $[=$ MGL], s.v.; L. R. Palmer, The interpretation of Mycenaean Greek texts, Oxford 1963 [= Interpretation], p. 449; Mühlestein MH 22, 1956, p. 156; Ruijgh, Ét., p. 59 and Lingua 42, 1977, p. 256.
61 It is, probably, the nom. pl. of an appellativum denoting the persons listed, possibly = /zāmioi/, cf. ఢŋnia: Meriggi, Athenaeum 33, 1955, p. 67; Documents, p. 412; Chadwick, Ét. Myc. 87; MGL, s.v.; Palmer, Interpretation, p. 465 ('forced levies'); Ruijgh, Ét. 105 ('s'agit-il d'hommes punis, de ferçats?'). The suggestions /sarmioi/ 'sweepers' (Mühlestein, MH 12, 1955, p. 128) and /dāmioi/, being an official title (Luria, VDI 1955, p. 3, 17) both suffer from problems of spelling, and would probably rule out a connection with the bronze industry.
62 Documents ${ }^{2}$, p. 535 offers both interpretations.
63 Lejeune, Mém. I, p. 133 n. 21; Heubeck IF 64, 1959, pp. 129f; MGL, s.v.; Georgiev, Cambridge Colloquium, p. 118; Bader Acta Myc. II, pp. 156f.; Documents ${ }^{2}$, p. 580 (or toponym); M. Lindgren, The people of Pylos, Upsala 1973, [= People] II, p. 137; Ilievski, Tractata Myc., p. 156.
64 Georgiev, Lexique, s.v.; Palmer, Gnomon 34, 1962, p. 710; idem, Interpretation, p. 370, 453; Documents ${ }^{2}$, p. 580 (or appellativum); Sainer, SMEA 17, 1976, p. 55.
65 Chr. Piteros, J.-P. Olivier, J. L. Melena, «Les inscriptions en Linéaire B des nodules de Thèbes: la fouille, les documents, les possibilités d'interpretation», BCH 114 (1990), pp. 103-185 [= POM].

2,66 and conclude that the sealings are records of contributions of foodstuffs for consumption at a state banquet. ${ }^{67}$ Three of the sealings, TH Wu 47, 59 and 60 contain paro formulae; their texts are printed below, along with those of PY Un 2 and 138, which also contains a paro formula.

```
PY Un 2
    (S2-H1)
.1 pa-ki-ja-si, mu-jo-me-no, e-pi, wa-na-ka-te,
. 2 a-pi-e-ke, o-pi-te-ke-e-u
. }3\mathrm{ HORD 16 T 4 CYP+PA T 1 v 3OV5
.4 FAR 1 t 2 OLIV 3 t 2 *132 s 2 ME s 1
. 5 NI 1 BOS 1 OVISm 26 OVISf 6 CAPm 2 CAPf 2
. }6\mathrm{ SUS+SI 1 Susf 6 vin 20 s 1 *1462
PY Un }13
(S138-H42)
.1 pu-ro,qe-te-a 2, pa-ro, du-ni-jo
. }2\mathrm{ HORD 18 т 5 po-qa OLIV 4 т 3 v 5
. }3\mathrm{ VIN 13 OVISm}15 WE 8 ovisf 1 CAPm 13 sus 12
.4 SUS+SI 1 BOSf}1\mathrm{ вOSm }
.5 me-za-wo-ni HORD 4 т }8\mathrm{ v 1 ka-pa OLIv 7
TH Wu 47
.a SuSm
.\beta pa-ro te-qa-jo
.\gamma ro-we-wi-ja
TH Wu 59
.aa *17136 supra sigillum J [2]
.ab []susx
.\beta pa-ro, sa-me-
.\gammaa -we
.\gammab ro-we-wi-ja
TH Wu 60
(\zeta??)
.a SUUSTm supra sigillum J [2]
.\beta pa-rọ, sa-me-we
.\gamma vacat
```

Given the sealings' function as 'certifying' animals and other commodities sent into the central palace from outlying districts one would expect the men named in the paro formulae to be the contributors, and that the formulae would then mean 'from Sameus' etc. However, since the sealings were written in the field, it is possible that the scribe wrote 'chez Sameus', because that was where

66 POM, pp. 172ff.
67 Cf. J. T. Killen, «Observations on the Thebes sealings», Mykenaïka, pp. 365-380 [= Killen, 1992]; idem, «Thebes sealings, Knossos tablets and Mycenaean state banquets», BICS 1994, pp. 67-84 [= Killen, 1994].
the animal was at the time. Yet this locatival interpretation is more 'strained' than the ablatival interpretation, and thus less preferred under criterion D. Killen has furthermore suggested that $\mathrm{KN} \mathrm{C}(2) 908$ and 913 represent the next stage in the bureaucratic process when the contributions and their sealings have arrived at the centre: the sealings are transcribed onto tablets from which documents like Un 138 can subsequently be compiled: 68

KN C(2) 908
KN C(2) 913
]pa-ro, /de-ki-si-wo CAPf
$\begin{array}{ll}.1 & \text { pa-ro, e-te-wa-no, } a_{3} \text { CAPm }^{2} 1[ \\ .2 & \text { pa-ro ko-ma-we-te } \mathrm{CAP}^{\mathrm{m}} 1 \text { pa[ }\end{array}$
If this interpretation is correct, paro on $\mathrm{KN} \mathrm{C}(2) 908,913$ can scarcely be locatival, since the animals are no longer chez their herdsmen, they are at the central palace. For pa-ro, de-ki-si-wo to be taken locativally, the scribe must have blindly copied the sealing with no thought to what he was writing. ${ }^{69}$

The sense of pa-ro, du-ni-jo on PY Un 138 is hard to establish. The variety and quantities of commodities listed are similar to those on the Thebes sealings, and the term qe-te- $a_{2}$, whatever its significance, also provides a connection (cf. Wu 51, 65, 96: <animal> te-qa-de qe-te-a ${ }_{2}$, Wu 49, 50, 53, 63: <animal> qe-te-o $a-k o-r a) .{ }^{70}$ It is possible that $d u$-ni-jo is a du-ma, and if so Hutton ${ }^{71}$ has suggested that he might be responsible for the disbursement of these goods from the central authority, in which case pa-ro, du-ni-jo could be either locatival (since they are currently in his keeping awaiting disbursement) or ablatival (since they are to be sent out from him). Yet no destination is recorded: me-za-wo-ni in .5 could formally be a recipient, but surely only of the commodities listed in .5 ; it is perhaps better taken in parallel with pa-ro, du-ni-jo, perhaps with paro to be understood. It is easier then to see du-ni-jo (and, perhaps, also me-za-wo) as responsible for sending these goods to the central authority, as Hutton has also

[^8]suggested. pu-ro could then be dative of recipient, or, more likely, nom. of rubric, and pa-ro, du-ni-jo again either locatival (of current location) or ablatival. If the system of contributions was the same at Pylos as at Thebes, and there is no reason to believe otherwise, then du-ni-jo is probably not the ultimate source, but rather acting as a middle-man: that such a situation is possible is demonstrated by Jn 829, jo-do-so-si, ko-re-te-re, du-ma-te-qe.

If Un 2 has a similar function and o-pi-te-ke-u is doing a similar job to $d u-n i$ $j o$, and if $p a-k i-j a-s i$ is where he is doing it, then we might prefer the locative interpretation of pa-ro, du-ni-jo, since pa-ki-ja-si is a locative plural and therefore $a$-pi-e-ke cannot mean 'sent': /amp ${ }^{h_{i-e k}}{ }^{h} e i /$ 'pens in, keeps' 72 would make sense, as might $/ a(m) p^{h_{i}(h) \bar{e} k e / ~ ' s a c r i f i c e d ' ~}{ }^{73}$. If the functions of Un 2 and Un 138 are the same, 'pens in' in the former would require paro in the latter to be locatival. On the other hand, it is equally plausible that pa-ki-ja-si refers not to the verb $a$-pi-e-ke but rather to the prepositional phrase mu-jo-me-no, e-pi, wa-na-ka-te in which case it tells us nothing about the sense of paro.

Killen has suggested that PY Cn 418 has a similar function:
PY Cn 418
. 1 pa-ro, we-u-da-ne-we
.2 re-u-ko , a-ko-ro-we-e BOS+SI 2
.3 re[-u-]ko, ma-ra-pi, pe-ko, a-ko-ro-we BOS+SI 1
$.4 \quad$ ovis ${ }^{\mathrm{m}}$ ? $] 3$ capm 3 WE 3 CAP $+E 3$
. 5
.6
. 7 re-u-ko[ ]ma-ra-[pi ]pe-ko, a-ko-ro-we[ BOS+SI qs
$.8 \quad \mathrm{OVIS}^{\mathrm{m}} 1 \mathrm{CAPm} 1 \mathrm{WE}\left[\mathrm{CAP}+E[] \mathrm{SU} \mathrm{S}_{\mathrm{s}} \mathrm{x}[\right.$
.9 vacat
infra mutila
Only a small number of animals of multiple species are recorded, several of which are described as re-u-ko /leukos/ and a-ko-ro-we, possibly /hak ${ }^{h}$ rōuess/ 'uniform in colour'. It is possible, therefore, that these are animals destined for sacrifical slaughter and subsequent consumption. pa-ro, we-u-da-ne-we could then have the same force as pa-ro, du-ni-jo, especially since we-u-da-ne-u, if a spelling variant of we-da-ne-u, is certainly a 'collector' (known from the An, Cn, Es, Na and Un series), and possibly also the lāu $\bar{a} g e t \bar{a} .{ }^{74}$

To summarise, in the sealings and in $\mathrm{KN} \mathrm{C}(2) 908,913$ the most plausible interpretation of paro is ablatival; in PY Un 138 and Cn 418 either a locatival or an ablatival interpretation is plausible.

72 Documents, p. 221, 388.
73 Palmer, Interpretation, p. 259, 408.
74 Lindgren, People II, pp. 134ff.
3. Other KN C(2) tablets: records of sacrifices?

KN C(2) 914
.A pa-ra-ti-jo ovism 50
.B a-ka-wi-ja-de / pa-ro , CAPm 50
In view of the number of animals involved, this tablet would seem to be a record of the despatch of a hecatomb to a festival of/in $a$-ka-wi-ja (a-ka-wi-ja-de $?=/ A k^{h}$ aiuiān-de/). In the context of such an allative form, paro can scarcely be locatival, unless the tablet records not the actual despatch of the animals but rather a group of animals 'due to be sent to $A$., currently located chez $P$.'

KN C(2) 915

$$
\begin{array}{ll}
\text {.A } & \text { ovisf }^{f} 10  \tag{112}\\
\text { B } & \text { ] pa-ro }, \text { a-pi-qo-ta } / \text { pa-ro do-e-ro CAPf }
\end{array} 10
$$

KN C(2) 941
.A ovis ${ }^{m} 8$
.B pa-ro / a-pi-qo-ta, sa-pa-ka-te-ri-ja ovisf 10
Despite the obvious spelling anomalies, sa-pa-ka-te-ri-ja is perhaps best taken as $/ s^{h}$ aktērial 'sacrificial victims', ${ }^{75}$ so these tablets may record the contribution of animals for sacrifice (and subsequent consumption?). If so, the easiest sense of paro is probably ablatival. A locatival sense may be possible if the animals are temporarily being stored by a-pi-qo-ta and do-e-ro (whether that is an anthroponym or denotes A.'s slave), but if so, it is unclear why the two groups of animals on $\mathrm{C}(2) 915$ are stored by different individuals when the two groups on C(2) 941 are both stored by a-pi-qo-ta; is the species distinction significant, perhaps?

## 4. Flock records at Pylos: PY Cn, Cc 660

Tablets PY Cn 40, 599, 45, 254, 600, 962, 938, 131 and 453 provide many examples of paro followed by a herdsman's name in the dative. The opening few lines of Cn 40 will exemplify the general structure:

PY Cn 40
(S4-H21)
. 1 wa-no-jo, wo-wo, pa-ro, ne-ti-ja-no-re, pa-ra-jo ovism 140
.2 wa-no-jo, wo-wo, pa-ro, po-so-pe-re-i, wo-ne-we ovism 75
. 3 wa-no-jo, wo-wo, pa-ro, zo-wi-jo, a-ko-so-ta-o ovism 70
.4 wa-no-jo, wo-wo , pa-ro, po-ru-qo-ta, we-da-ne-wo ovis ${ }^{m} 60$
.5 e-ko-me-no , pa-ro, pa-ta, pa-ra-jo ovis ${ }^{m} 80$
.6 e-ko-me-no, pa-ro, ,[•]ma-te-we , a-ko-so-ta-o ovism 83
.9 ma-ro-pi , pa-ro , ka-da-ro , we-da-ne-wo ovism 85
etc.
75 Suggestion by Lejeune, Mémoires de Philologie Mycénienne (I: Paris 1958; II: Rome 1971; III Rome, 1972) [= Mém.] II, p. 203 n.18. Cf. Killen, 1994, p. 75. Cluster-initial $/ s /$ is not normally written, and /akte/ has been rendered $-a$-ka-te- rather than $-a$-ke-te-. Neither is without parallel: for the former, cf. e-sa-pa-ke-me[-na lespargmena/, KN L 7375 (Documents ${ }^{2}$, p. 546); for the latter, cf. wa-na-ka-te-ro /uanaktero- $/$

Entries start with a toponym, which is followed by the name of a herdsman in the dative after paro (on Cn 655 the shepherd appears in the nom. of rubric or in the gen.). The final entry is an animal ideogram followed by a numeral. Between the herdsman's name and the ideogram may come (i) nothing; (ii) a 'collector' name in the genitive; (iii) pa-ra-jo /palaioi/ 'old'; (iv) wo-ne-we /uorneues/ 'lambs'.

The pattern of entries is similar to that found on the KN $\mathrm{Da}-\mathrm{Dg}$ series (see examples below), where flocks are listed in connection with a toponym, a herdsman and a 'collector', and which Killen ${ }^{76}$ has shown are records of standing flocks charged with wool and lamb production; and the similarity of structure suggests that these Cn tablets too are records of flocks and herds, their herdsmen, their 'collectors' and their current location.

KN Da 1078 e-ki-no / a-ka ovis ${ }^{\mathrm{m}} 200 \quad$ (shepherd + toponym)
KN Da 1127

| .a | u-ta-jo |
| :---: | :---: |
| .b | mi-ru-ro $/$ da- $* 22-$ to , ovis ${ }^{m} 100$ | | (shepherd + toponym, |
| :---: |

The most natural interpretation of both the toponym and the paro formula is thus locatival; and this is confirmed by the use of the instr.-loc. ma-ro-pi in Cn 40.8,9.77

PY Cn 131 has a slightly different, but clearly related, structure; again, a few lines will be sufficient to exemplify it:


Cn 131 shares a large number of anthroponyms with Cn 655, 719 (whose structure is similar to Cn 40 above, except the herdsmen's names are given in the nom. of rubric or gen.), though the numbers of animals, and in some cases the species, are different. The heading in .1, pi-*82, we-re-ke probably denotes the /ureges/ 'enclosures' at the toponym /Pisuā/ vel sim.; ma-ro-pi in . 6 is probably to be taken as a subsequent heading, with we-re-ke understood, denoting the 'enclosures' at another location.

It seems reasonably certain that Cn 131 does not represent either a summary of the flocks recorded in $\mathrm{Cn} 655,719$ or a different stage of the husbanding cycle

[^9]of those same flocks (for example, the return of flocks let out to shepherds on short-term herding contracts ready for redistribution, as suggested by Godart and Killen ${ }^{78}$ ) since while some names are shared between the two sets of documents, the majority are different, and furthermore the species is occasionally different (eg. pu-wi-no has CAPf 55 on Cn 131.14 , but ovis ${ }^{\mathrm{m}} 190$ on Cn 655.5 ). It is probably easier to see Cn 131 as a record of different flocks, perhaps of a different status to those of $\mathrm{Cn} 655,719$-notice the absence of any references to 'collectors'.

Where names are shared between the two sets of documents, they are generally recorded as being at the same place; thus $o-k u-k a$ and $k u$-pi-ri-jo are at pi-*82 in Cn 131 and 719, while those names which occur on or below 6 on Cn 131, after the second heading ma-ro-pi, if they occur also on Cn 655 , are found in connection with ma-ro-pi there also. a-ka-ma-wo and ko-ru-no are found at pi*82 on Cn 131.3,4 but at wi-ja-we-ra $a_{2}$ on $\mathrm{Cn} 719.11,9$, but wi-ja-we-ra $a_{2}$ may simply be a sub-district of pi-*82. po-ko-ro is found on Cn 131.9, and hence in connection with ma-ro-pi and ovism 100 , but on Cn 45.7 as a herdsman at $u$-po$r a-k i-r i-j a$ with CAPf 20 ; it is not certain that this is the same individual. Thus there is no evidence that the herdsmen have sent animals to the 'enclosures' at, say, two redistribution centres - since the locations of the 'enclosures' and the herdsmen are, so far as we can see, generally the same, the 'enclosures' might be the herdsmen's own, in which case the paro formulae will be locatival; but it is equally plausible that herdsman have sent animals to local centres for processing, in which case the paro formulae could be ablatival.

| PY Cc 660 | (S4-H21) |
| :---: | :---: |
| .a | a-ke-o, a-ke-re |
| .b | me-ta-pa , pa-ro, ka-ra-su-no CAPm 30 |

The tablets Cn $655,719,643$, in that order, probably form a continuous document whose format is similar to Cn 40 etc. above. Up to and including . 13 in Cn 655, where a 'collector's' name appears it is followed by the term a-ko-ra lagora/ 'flock(?)'; thereafter, and in Cn 719, 643 a-ko-ra is not written after a 'collector's' name. It seems likely that the scribe has simply stopped writing $a$ -ko-ra but intends it to be understood with the other 'collector' entries on this document; and the same is probably true of Cn 40 etc. Compare this <'collector' name-genitive> [a-ko-ra] formula with Cc 660 , above. ${ }^{79}$

78 L. Godart, «The grouping of the place-names in the Cn tablets», BICS 17,1970, pp. 159-161; J. T. Killen, «Records of sheep and goats at Mycenaean Knossos and Pylos», Domestic Animals of Mesopotamia: Bulletin on Sumerian Agriculture, Vol. VII, Cambridge 1993, pp. 209-218, esp. 215. For criticism, see Thompson (1998), pp. 233f.
79 L. Godart, in BICS 17, 1970, pp. 159-161, has argued that there is a distinction between $a-k o-r a$ and non- $a-k o-r a$ animals, and that the omission of $a-k o-r a$ is significant; I have argued against this interpretation at Thompson (1998), p. 233.

The communis opinio is to see in a-ke-re a verbal form /ageirei/ or /agērei/ corresponding to classical $\dot{\alpha} \gamma \epsilon i \rho \in \iota$ 'collect', ${ }^{80}$ and it might be tempting to see $m e-t a-p a, p a-r o, k a-r a-s u-n o$ as the place and person whence $a$-ke-o collects the animals. Yet $\dot{\alpha} \gamma \epsilon \dot{\rho} \rho \omega$ is only rarely used with such a sense - $L S J^{9}$ (s.v. $\dot{\alpha} \gamma \epsilon \dot{\rho} \rho \omega$ II.2) lists only three instances where it takes an ablative of the contributor ( Od . 17.362; Herodotus 1.61; Demosthenes 8.26), and in all three cases it has the special sense 'collect by begging', which will not do here. Given the similarity with the paro entries on the Cn series, it is perhaps better to translate as 'A. amasses a flock under the care of K. at M.' with a locatival sense for paro.

| KN Dk(1) 945 |  | (120) |
| :---: | :---: | :---: |
| . 1 | ]-we-to |  |
| . 2 | ] vest. / ku-mo-no pa-ro ovis ${ }^{\text {m }} 110$ LaNA 8 | $o$ LANA 9 |
| KN Dk(1) 920 |  | (120) |
| .a | ] ko-ma-we-to |  |
| . ${ }^{\text {b }}$ | ]ni-ja-so / da-*22-to ovism 60 LaNA 8 o L | ana 7 |

KN Dl 47 le-ke e-u-da-i-ta ovisf $39 ?[$
.1 Je-ke, e-u-da-i-ta ovis 39 ?
. 2 ]ki-u-ro, su-ki-ri-ta-pi oki ovis ${ }^{\mathrm{m}} 15$ [

Killen has demonstrated that the D - series at Knossos probably represent a census of standing flocks producing wool for the textile industry. The Dk series records rams, the Dl series ewes which are required to produce both wool and lambs ( $k i$ ovis ${ }^{\text {m }}$ ). ${ }^{81}$
$\mathrm{Dk}(1) 945$ has a paro formula in the lower register. Comparison with less fragmentary texts, such as $\operatorname{Dk}(1) 920$, also printed above, suggests that if the upper register reads ]-we-to rather than ]-we-ro it is probably the end of the 'collector's' name ko-ma-we-to. The traces at the left of the lower register are probably the name of the shepherd. In that case, ku-mo-no pa-ro is standing in parallel with the toponyms of the other tablets. From sense alone, the toponyms could be either locatival (since that is where the sheep are) or ablatival (since that is where the wool is collected from). The topic of the tablets is the wool, which might favour the ablatival interpretation, but this is hard to reconcile with the sheep and lambs also being recorded. A sense 'At X. $n$ sheep produced $y$ units of wool leaving a deficit of $z$ units' would suit the presence of both wool and sheep, and the presence of $s u-k i-r i-t a-p i$, an instr.-loc., as the toponym in Dl 47 would seem to confirm this.

80 So Documents, p. 200, 386; Documents ${ }^{2}$, p. 529; Ruijgh Mnemosyne 14, 1961, p. 209; MGL, s.v.; Palmer, Interpretation, p. 171, 404; J. Chadwick, L. Baumbach, «The Mycenaean Greek Vocabulary», Glotta 41, 1963 [= MGV I], p. 166 (s.v. aj $\gamma \in \mathrm{i} \rho \omega$ ); Ilievski, žA 15, 1965, p. 55; idem, Atti Roma, p. 618; Bartoněk, Atti Roma, p. 757; Chantraine, $D E L G, 9$ (s.v. d́ $\gamma \in i ́ p \omega$ ).
81 Killen (1964).

```
KN Ld(1) 584
. 1
po-Jki-ro-nu-ka o-pi-qi-na TELA \({ }^{2}\)
.2 pa-]ro, e-ta-wo-ne-we 'o-nu-ka' TELA \({ }^{2} 5\)
lat. inf.
Jto-sa tela 15
```

KN L 871
pa-ro, re-wa-jo
. b
Jra , pe-ne-we-ta, $/$ e-qe-si-ja, te-tu-ko-wo-a tela 4
$\operatorname{Ld}(1) 584$ is the only relatively complete tablet from this set containing a paro formula. Two others, $\operatorname{Ld}(1) 5916$ and 5955 contain pa-ro, e-[, probably paro, e-[ta-wo-ne-we; the same may be true of X 8291 (ms. 103, scribe of the $\mathrm{Lc}(1)$ textile set).

Killen has argued convincingly that the cloths described as o-nu-ka rather than po-ki-ro-nu-ka or re-u-ko-nu-ka are still in the process of being finished (and hence it is not yet known whether they will be po-ki-ro- or re-u-ko-nu-ka), ${ }^{82}$ and consequently pa-ro e-ta-wo-ne-we means 'in the workshop of Etawoneus'.

Compare this to L 871. Here the cloths are described as te-tu-ko-wo-a /tetuk ${ }^{h}$ uoha/ 'finished'. It is unclear whether this is a record of cloths delivered to the central authority from $R$., or of cloths in $R$.'s workshop awaiting delivery.
6. Wool at Mycenae: MY Oe 111

MY Oe 111

| . 1 | pe-ru-si-nwa, o-u-ka[ <br> wo-ro-ne-ja, pa-we-si / [•]-me-'jo-i' LANA[ |  |
| :---: | :---: | :---: |
| . 2 |  |  |
| . 3 | ne-[wa ]o-u-ka | Lana[ |
| . 4 | ]-kị-ni-*56 | LANA $100{ }^{\text {a }}$ |
| . 5 | ] o-ta-pa-ro-te-wa-ro | LANA 200 [ |
| . 6 | vacat |  |

The division of .5 is unclear. Documents posits onta paro te-wa-ro, with the pres. ppl. neuter pl. of $\epsilon \hat{i} \mu \mathrm{l}$ sum. Yet it is now clear that there is a gap between the $\langle o\rangle$ and the lacuna, in which case the participial interpretation is difficult, since we would expect /eonta/, ővтa being the specifically Attic development.

If -pa-ro-te-wa-ro contains paro + anthroponym, it is difficult to establish whether it is locatival or ablatival. The dative pa-we-si could be final, 'for cloaks', but it is unclear whether the tablet records contributions of wool coming into the centre, in which case an ablatival sense is better, or assigments of wool to workshops, in which case te-wa-ro might be a textile worker with whom the wool has been deposited. If this a store record (as the absence of names in the other lines, the presence of the terms pe-ru-si-nwa and ne-wa, and the large numbers suggest), again an ablatival sense (contributor) or a locatival sense (of the individual currently in charge of the stocks) is possible. It must be stressed, however, that it is not certain that a paro formula is involved here.

## 7. Commodity * 146 at Pylos: PY Ma, Mb, Mn

The Ma series consists of nineteen tablets in $\mathrm{S} 90-\mathrm{H} 2$, seventeen of which have a similar structure and which refer to contributions of six commodities, denoted ${ }^{*} 146$ (a rudimentary form of textile) ${ }^{83}, R I$ (flax?), $K E,{ }^{*} 152, O$ and $M E$, the amounts of which stand in the ratio $7: 7: 2: 3: 1.5: 150$, rounded to the nearest whole number of units. Sixteen relate to the nine and seven 'towns' of the H.P. and F.P., while Ma 335 refers to the additional place of $a$-te-re-wi-ja. None of these tablets contains a paro expression, but they are important for an understanding of the Mb and Mn series, which do. There are four types of entry on the documents: (i) assessment entries, listing the six commodities in the standard order and ratios, without deficits; (ii) contribution entries, prefixed with a-pu-do-si /apudosis/, which may contain deficits prefixed with $o$; (iii) exemptions granted to various groups, prefixed by $o-d a-a_{2} \ldots o-u$-di-do-si 'thus they do not contribute'; and (iv) records of debts owed from last year, pe-ru-si-nu-wo o-pe-ro. Records of debts from last year and apudosis entries do not occur on the same tablet, but apart from this restriction various combinations are possible:


Killen has observed that a likely explanation for the distribution of entries is that early in the tax year assessments were drawn up, which may indicate shortfalls from last year, and that as payments were made, these assessment records were replaced by apudosis records. The lack of pe-ru-si-nu-wo o-pe-ro entries and apudosis entries on the same tablet indicates that debts from the previous year had to be cleared before payments could be made against this year's requirements. ${ }^{84}$

[^10]In view of this, Ma 221, which contains the toponym pa-ki-ja-pi, will be an assessment record made early in the year. Hajnal duly sees ablatival force since the tablet records payments due from Sphagianes, ${ }^{85}$ but this is not the only possibility: using the same reasoning as Hajnal we could state that the assessment is made for Sphagianes and 'prove' pure datival force; or translate '[due from the tax-officers] at Sphagianes' and 'prove' locatival force. Hajnal further comments that the syntax does not vary according to whether the tablet is an assessment or payment record, and that in, for example, Ma 346, ka-ra-do-ro ... a-pu-do-si must mean 'payment from $K$.' While that is true, it will be seen at once from the text of the tablets that the toponym is written in connection with the assessment entry; there is no need to see any syntactic relationship between the toponym and the payment entry. Since one of the toponyms is in the -pi case form, I prefer to see locatival force ('assessment at <toponym>: ...; payment:...').

| PY Mn 162 |  |
| :---: | :---: |
| . 0 | supra mutila |
| . 1 | ] 1464 |
| . 2 | ]ka-sa-ta *1464 |
| . 3 | pa-ro, ke-ku-ṛo *1464 |
| . 4 | a-sa-ti-ja *1464 |
| . 5 | vacat |
| . 6 | vacat [ |

PY Mn 1408
. 0 supra mutila
.1 ro-o-wa *146[
.2 po-ra-pi *1465
. 3 na-i-se-wi-jo *146 2[
.4 e-nạ[-po-ro *146

| PY Mn 1412 |  |
| :---: | :--- |
| .1 | pa-ro, ka-ra-[ |
| .2 | pa-qo-si-jo $[146$ |
| .3 | o-no-ka-ra[ $* 146$ |
| .4 | ma-to-pu-ro $* 146$ |
| .5 | da-nu-wa-a-ri[ ${ }^{*} 146$ |
| .6 | po-ro $[146$ |

(S90-H2)
.0
.1
.2
.3
.4

The Mn series is fragmentary, and the work of at least three hands, S1398-Cii, S1412-H14, and also S90-H2, the hand of the Ma series. The scribal connection, and also the heavy featuring of commodity $* 146$ (to a lesser extent also RI, ME, $O$ on Mn 11) indicate that the two series are somehow related. Yet there are differences: the Ma series is the work of one hand, the Mn of several; the quantities on the Mn series are much smaller than those of the Ma series; with the exception of Mn 11, only one commodity appears on any given tablet. A major difference is the presence of anthroponyms after paro (pa-ro ke-ku-ro in
I. Hajnal, Studien zum mykensichen Kasussystem (de Gruyter, 1995) [= Kasussystem], p. 173.

Mn 162.3 and pa-ro ka-ra-[ in Mn 1412.1) whereas the Ma series is concerned with places rather than individuals. We may justifiably conclude that the functions of the two series are related but different.

If, with Hajnal, ${ }^{86}$ we see the Mn series as records of the contibutors, whether 'districts' of the nine and seven 'towns', or workgroups, of the commodities which appear on the Ma series, then an ablatival sense is possible ('contributions from X.'), but so also is a locatival one ('at X. they contribute'). There is in any case no evidence to compel such an interpretation. Three of the places appearing in the Ma series appear also in Mn records: ro-u-so (Ma 365, Mn 456.7, 1370.1), si-re-wa (Ma 126.1, Mn 456.4) and $a-[\cdot]-$ ta $_{2}$ (Ma 397) if that equals $a$-sa-ti-ja (Mn 162.4). ${ }^{87}$ These can scarcely be subdivisions of the 'towns', but may indicate contributions from the 'town' itself as the regional centre. ${ }^{88}$ The problem remains that none of these 'towns' has an apudosis entry in its Ma tablet indicating that the payment has not actually been made, and while this could be explained away -are the Mn tablets actually left over from the previous year? was the palace destroyed before the corresponding Ma tablet was updated?- it seems like special pleading. Furthermore, I consider po-ra-pi on Mn 1408.2 to be an instr.-loc.

An alternative might be to see the Mn series as recording disbursements of the taxed commodities to various groups around the kingdom. A number of the toponyms look dat.-loc. (e-ri-no-wo-te, Mn 456.6,8, sa-ri-nu-wo-te, ibidem .9) or even like allatives in -de (e-re-de, Mn 1411.2, ma-se-de, ibidem .3, although these could also be datives of anthroponyms). Mn 11 has two forms which are probably datives of appellativa, ja-ke-te-re in $.2^{89}$ and ra-pa-i-pi-jo-i in .5,90 who may be the recipients of the commodities listed. The evidence of KN M(1) 683 suggests that commodity $* 146$ required finishing, and it is conceivable that this is what is being recorded on the Mn tablets, although the small number of units involved in each entry is possibly surprising. Might this indicate that the work is centred on small 'cottage' industries?

$$
\begin{array}{clc}
\mathrm{KN} \mathrm{M(1)} 683 & &  \tag{103}\\
.1 \mathrm{a} & \text { J a-ze-ti-ri-ja } & \\
.1 \mathrm{~b} & \text { Jte-o } & \text { o-nu-ke LANA 9 м } 2 \\
.2 & \text { Jti-mu-nu-we } & * 14630
\end{array}
$$

86 Hajnal, Kasussystem, pp. 174ff.
87 Both possibly spelling variants of $a$-si-ja-ti-ja, Documents, p. 147.
88 So, for example, Killen, BICS 41, 1996, p. 147.
89 Dat. sg. (MGL, s.v. -or nom. pl.? Lindgren, People II, p. 60 -or nom. pl.? Ruijgh, Ét., p. $55 \mathrm{n} .40,65$ ) of an agent noun in tēer, possibly $=a_{2}-k e-t e-r e<$ iakestér: Georgiev, Lexique, s.v.; Lejeune, Mém. II, p. 209; idem, Phonétique historique du mycénien et du grec ancien (Paris, Klincksieck, 1972) [= Phonétique], 168 n.; Ruijgh, Forum der Letteren 4, 1963, p. 243; idem, Ét., p. 55 n.40; Chantraine, DELG, s.v. äкоs.
90 Dat. pl. (MGL, s.v.; Documents ${ }^{2}$, p. 578), although meaning unknown.

The Mb series records small quantities, less than five units, of commodity * 146 in connection with toponyms of mostly indeterminate case or anthroponyms in the dative after paro.

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PY Mb 1379 pa-ro na-me[ *146
PY Mb 1401 pa-ro, ka-wa-ti-ro [ * 146
PY Mb 1377 wa-a -te-pi, ne[ \(* 146\)
PY Mb 1366 di-wi-jo *146 2
PY Mb 1366 di-wi-jo *146 2
```

(S1412-H14)

Evidently these are connected with the Ma and Mn series. Accordingly, Hajnal ${ }^{91}$ interprets them as records of contributions of taxation made by various individuals and therefore sees ablatival sense in the toponyms and paro formulae. However, the Mb series seems more closely related to the Mn than to the Ma: the form corresponds more closely to the Mn entries, and a number of the anthroponyms and toponyms are the same (eg. ke-sa-da-ra Mb $1380 \sim \mathrm{Mn}$ 1368.2,3; e-na-po-ro Mb 1435 ~e-na[-po-ro Mn 1408.4 ). The functions are likely to be the same, and it is indeed tempting to wonder whether the Mb texts might not be the original records from which the Mn page tablets were subsequently compiled. As with the Mn series there is no reason to require an ablatival interpretation; rather, a locatival sense might be preferred, especially given what I consider to be an instr.-loc., wa- $a_{2}-t e-p i$, in Mb 1377.

## 8. Land tenure records at Pylos

The Pylos E- series present a large number of instances of paro used to denote the relationship between an individual who holds an o-na-to and the individual or the damos from whom, or on whose land the o-na-to is held. The records are highly formulaic; the following texts exemplify the series.

| PY Ea 800 | (S28-H43) |
| :---: | :---: |
|  | e-ke, o-na-to , pa-ro, mo-ro-qo-ro po-me-ne GRA 2 [ |
| PY Eb 369 | (S149-H41) |
| . A | -ta-ljo , e-ke-qe , o-na-to , ke-ke-me-na, ko-to-na |
| . B | pa-ro ]dạ-mo , ko-to-no-o-ko , to-so-de , pe-mo GRA T |

The basic formula for saying that A. holds a plot from B. or on B.'s land is $A$. $e k^{h} e i\left(k^{u} e\right)$ o-na-to paro B., but it is not possible to determine whether the sense is ablatival ('from B.') or locatival ('on B's estate'). Both are equally plausible, and both largely amount to the same thing.
9. PY Fr 1184
PY Fr 1184
.1
.2
.3
ko-ka-ro, a-pe-do-ke, e-ra3-wo , to-so e-u-me-de-i OLE+WE 18
. 3 pa-ro, i-pe-se-wa, ka-ra-re-we 38

The document consists of two entries, the first recording a consignment of olive oil sent by ko-ka-ro to Eumedes, the second a number of stirrup jars ( $k a-r a$ -re-we). ${ }^{92}$ If the form of $a$-pe-do-ke is slightly awkward, its sense 'gave' vel sim. is clear enough. ${ }^{33}$ Documents ${ }^{2}$ sees the record as a delivery to Eumedes of both the oil and the jars needed to contain it, and consequently sees an ablatival sense for paro. However, since both ko-ka-ro and Eumedes are perfumiers, ${ }^{94}$ this cannot be a taxation record (which may explain why the technical term apudōke is not used) and so the jars need not be part of the same transaction as the oil, in which case the entry in .3 may simply be a record of jars in I.'s workshop. Thus nothing can be concluded about the sense of paro in this tablet.
10. PYVn 130

| PY Vn 130 |  |
| :---: | :---: |
| . 1 | o-ze-to , ke-sa-do-ro , *34-to-pi , |
| .2a | pa-ro |
| . 2 | a-ke-a ${ }_{2}$, me-ta-pa, pe-ri-te 1 |
| . 3 | a-pi-no-e-wi-jo, pa-ro, e-ru-si-jo 1 |
| . 4 | a-pi-no-e-wi-jo, pa-ro, a3-ki-e-we 4 |
| . 5 | e-na-po-ro, pa-ro, wa-do-me-no 9 |
| . 6 | sa-ri-no-te, pa-ro, o-wo-to 5 |
| . 7 | pa-ki-ja-si, pa-ro, a-ta-no-re 4 |
| . 8 | ka-ra-do-ro, pa-ro, to-ro-wo 1 |
| . 9 | pa-ki-ja-si, pa-ro, e-ri-we-ro 3 |
| . 10 | e-wi-te-wi-jo , pa-ro, wi-sa-to 1 |
| . 11 | me-te-to , pa-ro , ko-do 3 |
| . 12 | ro-Ju-so 24 |
| . 13 | me-te-to , pa-ro, e-u-qo-ne 3 |

This is an extremely difficult text because two of the words, o-ze-to and *34-to-pi, are completely opaque. It appears to be a record of some sort of vessels, $a$ $k e-a_{2}$ langeha/ in connection with an individual $k e$-sa-do-ro and various other persons and places. The presence of the dat.-loc. pa-ki-ja-si in .7,9 requires a locatival sense in the toponyms, and suggests one for the paro formulae: 'at Sphagianes, apud Atanor: 4 vessels' etc.

Detailed interpretation of the tablet is hampered by o-ze-to and *34-to-pi. The former appears to be a $3^{\text {rd }} \mathrm{sg}$. verbal form prefixed by the $o$ - introductory particle.

[^11]Palmer has suggested $/ h \bar{o}$ gento/ with $k e$-sa-do-ro as subject, 'thus K. received'. ${ }^{95}$ Mühlestein has suggested /ho keitoi/ 'what belongs' with ke-sa-do-ro as a dative. ${ }^{96}$

Duhoux ${ }^{97}$ and Ruijgh ${ }^{98}$ have suggested a value $/ l u /$ for $* 34$, and Duhoux accordingly interprets /lutorp ${ }^{h / /}$ '[fitted] with sieves', describing the vessels. Hajnal ${ }^{99}$ objects that a word of this form should mean 'one who pollutes' rather than 'sieve', and prefers Ruijgh's derivation from a nomen agentis based on the verb $\lambda \hat{\prime} \omega$. He sees the /lutorp ${ }^{h}{ }^{i}$ as the persons from whom ke-sa-do-ro received the vessels. Yet both $/ \mathrm{gento}$ and $/ \mathrm{keitol} /$ are etymological interpretations of $o-z e-$ $t o$, neither of which is certain, and neither of which properly explains why the palatal $<z e>$ is used. A value of $/ l u /$ fits the available data fairly well, but is only a hypothesis.

## 11. Miscellaneous tablets

| PY Xa 176 |  |
| :---: | :--- |
| .1 | pe-re-wo-te, pa-ro, i[-]qa-ne[ |
| .2 | pe-re-wo-te, pa[-ro |

Although this tablet is too fragmentary to give any context, the presence of what looks like a dat.-loc. toponym in series with paro might suggest a locatival sense.

| PY Pa 49 | pa-ro , e-ri-ma-si-jọ | $D E * 169 \quad 10[$ | (S49-Ciii) |
| :--- | :--- | :--- | :--- |
| PY Pa 53 | pa-ro , re-u-ka-so | $D E * 1697[$ | (S49-Ciii) |

The meaning of these tablets is unclear. The meaning of ideogram *169 and the adjunct $D E$ are not known, although * 169 resembles an item of furniture such as a couch, and $D E$ could stand for /demnion/. If, as appears from Pa 53, the right-hand edge is blank, they resemble texts such as $\mathrm{KN} \mathrm{C}(2) 908$ and 913, and might record deliveries from the two men named, so that paro might be ablatival. This would fit with the scenario of $\operatorname{Pn} 30$, in which a 'collector' is taking delivery of a number of $* 169$ :

PY Pn 30

| .1 | o-de-ka-sa-to, a-ko-so-ta <br> .2 | si-ma-ko |
| :--- | :--- | :--- |
| .3 | ke-ka-to | $* 16923$ or $10[$ |
| .4 | ru-ko | $* 16913$ o9 |
|  |  |  |

[^12]Various other fragments whose meaning cannot be ascertained: PY Xa 1379 (by association with Xa 176 locatival?); PY Un 1320; KN X 793; KN X 8291 (unless, as noted above, p. 000 this is a textile finishing record, in which case it is probably locatival).

## A Mycenaean postposition /apo/?

PY Ea 259
(S28-H43)
.a u-me-ta-qe, ạ-po,
.b o-ke-u, e-ke, o-na-to, pà-ro, da-mo GRA T 2
Ea 259 is a record of an o-na-to held by o-ke-u from the dāmos. The lower register is clear enough, and follows the formula of the other E-series documents already described. The upper register, however, contains the mysterious sequence $u$-me-ta-qe, a-po. Documents ${ }^{100}$ read [? u-]po, taken as adverbial 'O. has an o-na-to, and under him, U.', commenting, 'This unique variation in the formula suggests some form of subtenancy'. It is conceivable that apo might function in a similar way, 'and from him, U.'. Most scholars however interpret $a$-po as $/ a m p{ }^{h} \bar{o} /$, 'both O . and U . hold an o-na-to from the dāmos'. ${ }^{101}$

Since $e$-ke is a singular verbal form U. cannot be a co-holder of the plot, and hence co-subject, unless there is a failure of concord, perhaps because $u$-me-ta-qe , a-po was added later; given its position, this is certainly a possibility. Alternatively u-me-ta may be conjoined with the dāmos, 'O. holds an o-na-to from the dāmos and U. both', in which case both $u$-me-ta and $a$-po must surely
 more verbose than the customary language of the tablets: 'both' is surely redundant after $/-k_{l}^{u} e /$ whether it conjoins $u$-me-ta to $o-k e-u$ or to the dāmos.

If, contrary to the communis opinio, a-po represents a postposition /apo/ the sense might be ' O . holds a plot from the dāmos and from U.' The variation in preposition paro $\sim$ apo would perhaps be surprising, but could indicate a difference in the relationship between O . and the dämos and between O . and U.: perhaps 'on dāmos land, through U.' (ablative of cause?). If this is the case, then /apo/ would probably have to be governing a dative since $u$-me-ta, if masculine, cannot be a genitive; we would expect $u$-me-ta-o.

An obvious problem is that the regular form of the Mycenaean dimóequivalent is $a p u$, although this need not be insurmountable. $a p u$ cannot be the result of the raising of $/ o /$ to $/ u /$ since this is not a regular sound change in Mycenaean, which implies that common Greek had both *apo and *apu. (Arcado-Cypriot $\dot{\alpha} \pi u ́, a p u$, could be either inherited $* a p u$, or the result of raising $o>u /$ \# which is a regular phenomenon in those dialects).

100 Documents, p. 259
${ }^{101}$ Lejeune, Mém. II, p. 235, 273 n.23; MGL, s.v.; Milani, Aevum 39, 1965, p. 432; Ruijgh, Ét., p. 296 and n.31; Documents ${ }^{2}$, p. 449. D.Mic. comments that Gallavotti's apo (SIFC 20, 1958, p. 66) 'debe rechazarse'.

## Conclusion

The majority of the instances of paro in Mycenaean could equally well be taken locativally or ablativally. However, when the sense can be determined, there are cases where it is difficult to see anything other than locatival force (the An personnel records, Cn flock records, D- flock/wool records and L- clothfinishing records), and again others where an ablatival sense seems inescapable (the Thebes Wu sealings, Knossos C(2) animal records). Thus paro + dative appears to show precisely the same bivalence which $\pi \alpha \rho \alpha \dot{\alpha}+$ dative manifests in Arcadian. Furthermore, although the number of true Mycenaean prepositions is small, there are no instances of any preposition governing multiple cases (though this may be accidental), and no instances of a preposition governing a genitive which is anything other than adnominal. If $a$-po in PY Ea 59 is a postposition (although this interpretation is purely speculative), then it is governing a dative, not a genitive.

If this pattern of government is not caused by a syncretism of dative and ablative, and I do not believe that any such syncretism can be evidenced, ${ }^{102}$ then the Mycenaean prepositional system begins to look startlingly similar to the Arcado-Cypriot one. One might then envisage a situation where a group of second millennium Peloponnesian dialects underwent a simplification of the pattern of government of their three-case prepositions which resulted in their being unable to govern a genitive and which brought about an ablatival use of the dative in some prepositional constructions. One-case ablatival prepositions were subsequently brought into line by analogy with ablatival uses of former threecase prepositions, perhaps as a result of the levelling of collocations such as $\pi \alpha \rho \alpha ́$ <dat. of anthroponym> used with $\dot{\alpha} \pi \dot{\prime}$ <gen. of toponym>, while one-case prepositions governing an adnominal genitive were unaffected by this secondary, analogical shift.

If this is the case, then Arcado-Cypriot and Mycenaean share an isogloss which represents an innovation over common Greek, and which can be traced back to the Bronze Age. This has consequences not only for the relationship between the three dialects, but also for the relationship between them as a group and the other East Greek dialects, since it is clear that East Greek generally does not share this innovation. On the contrary, Homeric preserves three-case government of $\dot{\epsilon} \pi i ́, \pi \alpha \rho \alpha ́, \pi \rho o ́ s, ~ \grave{u t o ́}$ and $\mu \in \tau \alpha \dot{\prime}$; and while Attic has two-case government of $\alpha \nu \alpha ́, \mu \in T \alpha ́$, and later $\pi \in \rho^{\prime}$, this looks like a later development, and it is in any case the dative rather than the genitive which is suppressed.

Chadwick ${ }^{103}$ has observed that all of the divergences between Attic-Ionic and common East Greek are either demonstrably late (eg. the change of $\bar{\alpha}>\eta$ ) or shared with West Greek (eg. $\alpha \rho / \rho \alpha$ not $o \rho / \rho o$ as the reflex of the syllabic

[^13]liquids), and has thus proposed that Attic-Ionic was the result the contamination of a Mycenaean-like East Greek dialect by a West Greek dialect in the postMycenaean period. Yet if I am right in seeing an innovatory isogloss which Mycenaean does not share with Attic-Ionic, then Mycenaean must already have been distinct in the Bronze Age.


[^0]:    9 B. Delbrück, Vergleichende Syntax der indogermanischen Sprachen, Strassburg 1893-1900, [= Vergl. Syntax] I, pp. 668f.
    10 IF 20, 1906, pp. 73f.
    11 C. D. Buck, Introduction to the study of the Greek dialects (second edition), University of Chicago 1955, [= Dialects], p. 108.
    12 J. Humbert, Syntaxe grecque (third edition), Paris 1960, [= Syntaxe], p. 302, 307.
    13 C. J. Ruijgh, Études sur la grammaire et le vocabulaire du grec mycénien, Amsterdam, Hakkert, 1967, [=Et.], p. 95.
    14 K. Brugmann, Grundriss der vergleichenden Grammatik der idg. Sprachen (second edition), Strassburg 1897-1916, II/2, p. 610, 808, 826.
    15 A. Morpurgo Davies, «An instrumental-ablative in Mycenaean?», Cambridge Colloquium, 1966, p. 196.
    16 J. Wackernagel, Vorlesungen über Syntax, Basel 1920-1924, [= Syntax], II, pp. 207ff.

[^1]:    17 Gr. Gr. II, p. 526.
    18 H. G. Liddell, R. Scott, H. S. Jones, R. McKenzie, A Greek English Lexicon (9th edition, with supplement), Oxford 1968, $\left[=L S J^{9}\right]$, s.v. mapá A II 3.
    19 Householder, 1959, p. 6.

[^2]:    26 Morpurgo Davies，loc．cit．
    27 Morpurgo Davies，PdP 1964，pp．346－354．
    28 Eg．Ilievski，Ling．Balk．6，1963，p． 37.
    29 Morpurgo Davies，1966，p．195；Dubois，ad loc．

[^3]:    30 P. Chantraine, Grammaire Homérique, Paris, Klincksieck, 1942-1953, [= Gramm. Hom.], II, p. 92 sees a true adnominal. Schwyzer - Debrunner, Gr. Gr. II, p. 423, and Humbert, Syntaxe, pp. 301f., are uncertain.
    31 Humbert, Syntaxe, p. 323.
    32 Schwyzer-Debrunner, Gr. Gr. II, p. 535.
    33 IF 20, 1906/7, p. 69
    34 Morpurgo Davies, 1966, p. 193.
    35 DGE 410.8.
    36 So Morpurgo Davies, 1966, p. 195.
    37 L. Dubois, Recherches sur le dialecte arcadien, Vol. I, Grammaire, Louvain-laNeuve, Cabay, 1986 [= Grammaire], § 125.
    38 For the Arcadian $a$-stem genitive in -av see Dubois, Grammaire, $\S 55 \mathrm{~b}$.
    39 Morpurgo Davies, 1966, p. 195.

[^4]:    $40 \quad L S J^{9}$ s.v. катá A II 5,7.
    41 Cf. Chantraine, Dictionnaire Étymologique de la Langue Grecque, Paris, Klincksieck, 1968, [= DELG], p. 504, s.v. кaтá, for whom these are 'génitif[s] de but'.
    42 Annuario 1, 1914, pp. 1-17.
    43 DGE, p. 661, n.
    44 AJA 1949, pp. 194-201.
    45 PdP 19, 1964, pp. 352-3.
    46 Dubois, Grammaire, §125a.

[^5]:    47 Householder (1959), p. 5 n.2.
    48 Ilievski, Ling. Balk. 6, 1963, p. 38.
    49 Dubois, Grammaire, §125c.
    50 Morpurgo Davies, PdP 19, 1964, pp. 346-356.
    51 So also L.H. Jeffery, The local scripts of Archaic Greece, Oxford 1961 [= LSAG], no.13, pp. 215, 211 n.1.

[^6]:    52 Mitford, NK, p. 161.
    53 Diodorus 15.29
    54 Dubois, Grammaire, §123e.

[^7]:    55 Schwyzer, Gr. Gr. II, pp. 502f; Chantraine, Gramm. Hom., p. 128; Humbert, Syntaxe, 316. This is despite the comments of Ilievski, Ablativot, pp. 118-9, and Householder (1959), p. 5, that the ablatival sense is generally accepted.

[^8]:    68 Killen (1994), pp. 73ff.
    69 There is, admittedly, a possible parallel: on $\mathrm{KN} \mathrm{C}(1) 5753$ the allative ko-no-so-de is found, which would not be expected on a tablet which itself is from Knossos, but could be explained if it has been copied from a sealing. Cf. te-qa-de on TH Wu 96. See Killen, Atti Roma II, p. 79.
    70 The meaning of the term is opaque. The communis opinio is to see a verbal adjective in -teos derived from the verb $\tau \epsilon^{\prime} i \omega$, , but this suffers from a number of problems, not least the variation of the forms $-e-o \sim-e-j o \sim-e-a \sim-e-a_{2}$, which might suggest an $s$ stem. W. F. Hutton, Minos 25-26, 1990-91, pp. 105-131, has suggested that qe-te-a might be the pl. of an $s$-stem $/ \mathrm{k}^{k}$ etos/ 'fine' while the other forms are derived adjectives in -eio with the sense 'resulting from fines'. Killen's suggestion (Coll. Myc., pp. 169f.; also Y. Duhoux, Aspects du vocabulaire économique mycénien, Amsterdam, Hakkert, 1976 [= Aspects], p. 142) that qe-te-o means 'to be paid by the palace' as opposed to o-pe-ro 'to be paid to the palace' is surely disproved by te-qade qe-te- $a_{2}$ on the sealings.
    71 Hutton (1990-91), p. 119.

[^9]:    76 J. T. Killen, «The wool industry of Crete in the late Bronze Age», ABSA 59,1964, pp. 1-15.
    77 I have discussed the Cn series in detail at Thompson (1998), pp. 229-235.

[^10]:    83 Killen (1994), p. 67, 69.
    84 J.T. Killen, «Last year's debts on the Pylos Ma tablets», SMEA 25, 1984, pp. 173-188.

[^11]:    92 Cf. KN K 778.1: ]ka-ra-re-we *210vas. Possibly /khlarēues/. Householder, CJ 54, 1959, p. 379; Palmer, Interpretation, p. 270, 276, 425; Duhoux, Minos 9, 1968, p. 92 n. 102; idem, Aspects, p. 120 n.310; Documents ${ }^{2}$, p. 481, 494, 551; Chantraine, DELG, s.v. $\chi \lambda \alpha$ oóv.

    93 The normal form is /apudoke/ without augment; an alternative is to see /ap-es-dōke/ with compound preposition (Luria, $P d P 15,1960$, p. 258), but this is equally unparalleled. For Petruševski (žA 10, 1960, p. 324), /ape-/ is a 'weakened' form of ノари-/.
    94 Duhoux, Aspects, pp. 119ff.

[^12]:    95
    Apud Documents, p. 403, comparing Hom. $\gamma^{\prime} \nu$ то, eg. Il. 8.43, and Cypr. $\alpha$ आó $\gamma \epsilon \mu \epsilon \cdot$
    
    96 Apud Documents, p, 403.
    97 Y. Duhoux, «Les syllabogrammes 34 et 35 du linéaire B», Res Myc., pp. 112-125
    98 C. J. Ruijgh, «Le syllabogramme *34/35 du linéaire B: valeur possible $r u_{2}=l u »$, Studia Mediterranea II, pp. 555-572.

[^13]:    102 Thompson (1998), passim.
    103 J. Chadwick, «The Greek dialects and Greek prehistory», G\&R NS 3, 1956, pp. 38-50. 'as to the sacred money'.

