

**WHAT THE BUTLER SAW:
SOME THOUGHTS ON THE MYCENAEAN *o-* ~ *jo-*
PARTICLE¹**

Many sentences on the Mycenaean tablets contain a particle spelt *o-* or *jo-*, which in the vast majority of cases appears in sentence-initial position, and usually draws the verb into second position ('verb second' or V2 order). It is written contiguously with the following word, regardless of whether that is the verb or not. PY Ta 711.1 is typical:

- (1) *o-wi-de pu₂-ke-qi-ri o-te wa-na-ka te-ke au-ke-wa da-mo-ko-ro*
 ... wide Phugeg^wrins hote wanaks t^hēke Augēwān dāmokoron
 ... saw P.-NOM when king-NOM appointed A.-ACC. d.-ACC
 ' ... Phugeg^wrins saw when the king appointed Augēwās as dāmokoros'

This acts as the heading for a set of tablets listing items of furniture and other banqueting equipment which were the subject of an audit by a man named Phugeg^wrins before a feast on the occasion of the appointment of a man named Augēwās to the office of *dāmokoros*. This use as a tablet or set heading is typical.

According to Gallavotti (1956, pp. 5-10) these are pronouns; *o-* is the demonstrative /ho/ < *so (= Greek ὁ), while *jo-* is the relative /hos/ < *yos (= Greek ὅς). The starting point of his argument is that in PY Aq 64 (the text of which is printed below, p. 332, where I discuss it more fully) *o-u-qe* in lines 3-4 is not the negative /ouk^we/ but a demonstrative pronoun /ho-u-k^we/ formed from the pronominal *so, with the addition of a 'particella dittica' /-u-/ (seen in *o-ū-τος*) and the /k^we/ (-τε) formant; it stands as the subject of the verb *a-ke-re-se*. *o-a-ke-re-se* in lines 2, 5-7, 13-16 then contains just the /ho/ pronoun unaugmented by *-u-* or *-k^we*; and *o-a-ke-re-se* and *o-u-qe*, *a-ke-re-se* are identical in sense. There are few people, I think, who would accept that *o-u-qe* is /houk^we/ rather than the negative /ouk^we/; and Gallavotti misses the point that the entries with *o-u-qe* and those with *o-* are significantly different: the former lack the phrase *to-to*

¹ I am indebted to Prof. G. C. Horrocks and Prof. J. T. Killen for their comments on the syntactic and Mycenological portions of this paper respectively. I am also grateful to Dr David Willis and Dr Victoria Coulson of Selwyn College, the one for planting in my head the crazy idea of doing something Minimalist on Mycenaean, the other for a lunchtime conversation during the course of which the pieces of the puzzle (mostly) fell into place. The following bibliographical abbreviations are used throughout:

D.Mic. = Aura Jorro, Francisco. *Diccionario Micénico*. 2 vols. Diccionario Griego-Español, Anejos 1 and 2. Madrid: Consejo Superior de Investigaciones Científicas. 1985-1993.

DELG = Chantraine, P. *Dictionnaire étymologique de la langue grecque*. Paris: Klincksieck. 1968-1980.

, *we-to* and a *171 entry. It seems, as I argue below, that the distinction is between individuals who do/have/will *a-ke-re-se* and those who do/have/will not.

Gallavotti presents this as the central plank of his argument, and I think it must be abandoned. Nevertheless, it remains to be shown that *o-* cannot be (or is unlikely to be) the demonstrative pronoun.

A demonstrative /ho/ (masc. nom. sg.) will work in PY Aq 64 if the names at the start of each entry are nominatives of rubric standing outside the syntax of the sentence, allowing /ho/ to be the subject of the verb, as in example (2) (= Aq 64.13). But it is unclear why the scribe should feel the need to write an overt subject pronoun when the verb is positive, but not when it is negative, as in example (3) (= Aq 64.3).

(2) <i>e-ta-wo-ne-u</i>	<i>to-to-</i>	<i>we-to</i>	<i>o-</i>	<i>a-ke-re-se</i>
Etawoneus	tōto	wetos	ho	agrēse(i)
E.-NOM	this	year	he-NOM	?contribute

‘Etawoneus: this year he does/has/will ?contribute’

(3) <i>ka-do-wo</i>	<i>mo-ro-qa</i>	<i>o-u-qe</i>	<i>a-ke-re-se</i>
Kadwos	moirokk ^{wh} ās	ou-k ^{we}	agrēse(i)
K.-NOM	?allotment-holder-NOM	not-and	?contribute

‘Kadwos the ?allotment-holder: this year [he] does/has/will not ?contribute’

In more normal cases, where *o-* appears in a heading which has no other overtly expressed subject, it could again be nom. sg. /ho/ or pl. /hoi/. But in very many cases —and Ta 711, example (1), is typical— there is a subject overtly expressed elsewhere. Here the /ho/ could not be a definite article with /Phugeg^wrins/ because of the position of the verb; and such a use of /ho/ would, in any case, be anachronistic. We might instead choose to interpret /ho/ as the real subject pronoun, with /Phugeg^wrins/ as some sort of adjunct, translating ‘He saw (that’s to say Phugeg^wrins) when the king appointed ...’. There is a possible Homeric parallel for this syntax, as examples (4)-(6) show. (The pronouns and their corresponding noun phrases are underlined.)

(4) *Il.* 4.20: ὤς ἔφαθ', αἱ δ' ἐπέμυξαν Ἐθναίη τε καὶ Ἥρη·
‘So he spoke, but they murmured, did Athene and Hera.’

(5) *Il.* 4.501: τόν ρ' Ὀδυσσεὺς ἐτάριοι χολωσάμενος βάλε δουρί | κόρσην·
ἦ δ' ἐτέρωιο διὰ κροτάφοιο πέρησεν | αἰχμὴ χαλκείη·
‘Angry at his comrade’s death, Odysseus struck his temple with his spear. And the bronze point came out of the other temple.’

(6) *Il.* 1.408: αἶ κέν πως ἐθέλησιν ἐπὶ Τρώεσσιν ἀρῆξαι | τοὺς δὲ κατὰ
πρύμνας τε καὶ ἀμφ' ἄλα ἔλσαι Ἀχαιῶν | κτεινομένους, ἵνα ...
‘...if he is willing to bring aid to the Trojans, and to pen the Achaeans by the sea under their prows to be killed, so that ...’

But in the Homeric syntax the fronting of the pronoun serves to contrast one noun phrase with another preceding (rarely following) one —for example to mark a change of subject in (4) and (5), or of object in (6), and is thus pragmatically motivated. No such motivation can be adduced in the Mycenaean examples. (Note that in Ta 711.1, example (1), it does not mark a change of subject between the verbs /wide/, ‘saw’, and /t^hēke/, ‘appointed’; the latter occurs in a subordinate temporal clause, whereas the Homeric construction contrasts corresponding noun phrases in conjunct clauses.) Further, the Homeric syntax resembles some sort of rightwards adjunction to the highest syntactic projection (IP? VP?), and hence the full NP appears on the right periphery of the clause. In the Mycenaean examples, however, the full NP can appear to the left of other non-adjoined constituents² —in PY Un 267.1 two arguments of the verb appear to the right of the full NP:

(7) <i>o-</i>	<i>do-ke</i>	<i>a-ko-so-ta</i>	<i>tu-we-ta</i>	<i>tu-we-a</i>
ho	dōke	Alksoitās	T ^h uwestāi	t ^h uweha
he-NOM	gave	A.-NOM	T ^h .-DAT	aromatics-ACC

‘He (Alksoitās) gave aromatics to Thuwestās.’

Thus the identification of *o-* with the demonstrative pronouns /ho/ and /hoi/ entails awkward doubling of subject NPs for which the Homeric examples do not provide a parallel. Moreover, although the same scribe may use both *o-* and *jo-* forms (e.g. Pylian hand 2 has *o-wi-de* in Ta 711 alongside *jo-do-so-si* in Jn 829), there does not seem to be any obvious functional difference between them. Indeed, the contexts in which they are found, and their syntactic properties, are identical.

Watkins (1963, pp. 13-21) proposes an ingenious solution. He notes the existence of a set of sentence-initial connective particles in Hittite, *nu*, *tu*, *šū*, paralleled in Old Irish by *no*, *to*, *so*, originating in bare stems of the deictic pronouns *(e)*no-*, **so-* and **to-*. He also points out the Vedic use of *sá* (PIE **so*) in sentence-initial position as an invariant connective particle: ‘Appearing in initial position in the protasis of a diptych, *sá* means simply ‘and’ or else has no lexical content, and has no grammatical link with the rest of the sentence.... This usage is common in the Brahmanas, such that we may speak of subordinating conjunctions *sá yádi*, *sá yátra*, *sá céd* ... etc. which have been formed by the combination of a sentence connective particle and a subordinating conjunction or particle’ (Watkins 1963, p. 18).

² In Ta 711 the /hote/ clause is some sort of adjunct, I assume to the highest syntactic projection, which I further assume to be VP (or VIP), following Kiparsky (1996, p. 172) and Condoravdi and Kiparsky (2001, pp. 31-32); see also note 14. I take it that in example (6) the *iva* clause is also an adjunct to the highest syntactic projection. If the full NP is ‘displaced’ by adjunction to VP, I see no reason why other adjoined constituents should not appear to its right; but it should appear to the right of all non-adjoined constituents, especially arguments of the verb.

Watkins argues that Myc. *o-* ~ *jo-* is a relic of this archaic sentence-connective **so-*, phonetically in Myc. /ho/. He explains both the movement of the verb to sentence-second position, and its univerbation with *o-* ~ *jo-* as consequences of the prosodic requirements of the connective particle: it requires an enclitic form following, and accordingly the verb appears atonically in Wackernagel's Law position. He sees further evidence in the alternation in PY Aq 64 between negated verbal forms *o-u-qe*, *a-ke-re-se* and positive *o-a-ke-re-se*, where the *-qe*, /k^we/, 'and' and *o-*, /ho/ are in parallel function.

A first objection is that the spelling alternation *o-* ~ *jo-* is unexplained, but this could easily be countered by claiming that *jo-* is the stem of the relative pronoun standing in similar function.³ A more serious, and I think insuperable, difficulty is that in the majority of cases which we possess, Myc. *o-* ~ *jo-* is not a sentence connective: it introduces the first sentence of a tablet or set of tablets, and does not connect to a previous sentence —indeed, it cannot, because there is no previous sentence. This is in marked contrast to Watkins' Hittite *nu* connective particle which 'is essentially obligatory, in every sentence *but the first*, of a narrative passage' (Watkins 1963, p. 13, my emphasis). In fact, only in PY Aq 64 could *o-* be thought to act as a sentence-connective. As to the Vedic use of *sá* as a connective, this seems to be restricted to the Brahmanas; in fact, all of the examples cited by Watkins (1963) and Macdonell (1916) are from the Śatapatha Brahmana. Macdonell (1916, p. 249) suggests that the construction is a development internal to the Brahmanas, arising out of the pleonastic use of *sá* before the relative pronoun.

Ventris and Chadwick (1956, p. 91) saw an adverb /hō/:

- (7) *o-*, *jo-* = /hō/ (= ὦς) attested as Doric by grammarians, and found in the compounds Attic ὦ-δε, Alcman ὦ-τ'.

Given the lack of accentuation on ὦς they must intend this to be the relative adverb built to the stem **yo-*; but Attic ὦδε, like the pronoun ὅδε ἦδε τόδε, is surely built to the demonstrative **so-* ~ **to-* stem, and contains the demonstrative adverbial element seen in (accented) ὦ-ς.⁴ The etymology as a relative is necessary to explain the spelling *jo-*.⁵ Their subsequent translation (and rendition into Greek) fluctuates: for KN Fp(1) 14.1b they have ὦς (accented, so demonstrative) at p. 307 and 'thus' at p. 409; for PY Cn 608.1 'how' at p. 205 but 'thus' at p. 389; for PY Jn 829.1 'thus' at p. 307, 390; for PY Cn 3.1 'how' at

³ For example, Watkins (1963, p. 16) sees Luvian enclitic *-ya* as the relative pronominal stem **yo-* with this same sentence-connective function.

⁴ *DELG*, s.v. 2 ὦς. It is, perhaps, surprising that demonstrative ὦς and ὦδε are built to the stem **so-*, which is restricted in the pronoun to the masc. and fem. nom. sg. and pl.: we might expect an adverb to be formed instead from an instrumental, built to the oblique **to-* stem, perhaps **/tō/ vel sim.* Latin *sīc*, however, provides a parallel, as I am grateful to Prof. Horrocks for pointing out.

⁵ Although they later state (Ventris and Chadwick 1956, p. 206) that the spelling with *j-* 'is hardly to be regarded as due to the preservation of the initial *j-* of Indo-European; it alternates with simple *o-*' but do not comment further.

p. 207 but 'thus' at p. 394; for MY Ge 602.1 'how' or 'thus' at p. 228 but 'thus' at p. 401; and so forth. By the second edition of *Documents*, Chadwick had settled on a demonstrative:

- (9) Prefix, also spelt *jo-*, usually attached to verbs and standing in initial position: *hō*, 'thus'. [Cf. $\hat{\omega}$ -δε, Alcman $\hat{\omega}$ -τε.] (Ventris and Chadwick 1972, p. 563, s.v. *o-*.)

The combination of relative etymology and demonstrative sense sits awkwardly; it even looks a little like a sleight of hand to explain the spelling of the *jo-* variant. But this is the interpretation which has been generally, if tacitly, accepted: compare, for example, *D.Mic.*, s.v. *JO-*: 'una partícula de enumeración con función deíctica que etimológicamente tiene su origen en el tema del pronombre relativo *yo'.

Despite its general acceptance, this interpretation is far ideal. In addition to the uneasy relative/demonstrative confusion, a number of problems remain. Hooker (1968, p. 74) objects that although Homeric $\hat{\omega}$ ς can mean 'thus', its force is anaphoric, while *o-* ~ *jo-* is necessarily cataphoric; it is Hom. $\hat{\omega}$ δε which is cataphoric:

- (10) *Od.* 2. 110-111: $\hat{\omega}$ ς τὸ μὲν ἐξετέλεσσε καὶ οὐκ ἐθέλους' ὑπ' ἀνάγκης·
| σοὶ δ' $\hat{\omega}$ δε μνηστῆρες ὑποκρίνονται...

'So in that way she was compelled against her will to finish it.

Now, this is how the suitors answer you...'

To the extent that we can trust the accentuation, however, this $\hat{\omega}$ ς, being tonic, looks like a formation from the demonstrative stem; that it is anaphoric, while Myc. /*hō*/ is cataphoric, is not necessarily therefore a problem. Nevertheless, we are still left with what ought to be a relative stem forming what looks like a cataphoric demonstrative adverb. In addition, there is no explanation of why the Mycenaean particle prefers sentence-initial position, nor why it seems to trigger movement of the verb to sentence-second position.

Hooker (1968, p. 77) considered the syntactic properties of *o-* ~ *jo-* to be so peculiar as to be unparalleled by any later Greek particle. He saw the very alternation of spelling as suggestive of 'a scribal feature ... inherited from an earlier stage of Cretan writing, and ... a feature of a non-Greek language', and compared it to the Linear A alternation *a-ta-no* ~ *ja-ta-no*, *a-sa-sa-ra* ~ *ja-sa-sa-ra*. This seems to me to be an entirely specious comparison; it is not a serious attempt to explain a Mycenaean phenomenon, but, by invoking an unexplained alternation in an undeciphered language, a total abdication of explanatory responsibility.

The remainder of this paper is a complete re-examination of the data for the *o-* ~ *jo-* particle, paying particular attention to its syntactic properties. The analysis is conducted broadly within a version of the Universal Grammar (UG) framework which approaches that of Chomsky's Minimalist Program (Chomsky

1993). Any theory which makes any claim to explanatory adequacy must be able to give account of the following facts:

- (i) the spelling alternates *o-* ~ *jo-*, even within the same hand, but there seems to be no distinction of function or context;
- (ii) there is a strong preference for a sentence-initial position;
- (iii) the particle is most frequently found in sentences which act as tablet or set 'headings';
- (iv) presence of the particle very frequently triggers movement of the main verb to sentence-second position.

The sentences which contain *o-* ~ *jo-* are listed in the following tables, which deliberately avoid rendering the particle into either a phonemic transcription or an English translation.

Sentences with *jo-*

Knossos	Og(2) <4467>.1		<i>jo-a-mi-ni-so-de</i> , <i>di-do-</i> [<i>si</i> ... <i>Amnisonde didonsi</i> : '... they contribute to Amnisos' followed by list of anthroponyms and quantities measured in M-units
	Gv 863.1		<i>]qa-ra</i> , / <i>jo-e-ke-to-qo</i> , <i>wo-na-si</i> , <i>si</i> [... <i>ek^hei tork^woi woinasi</i> : '... he has in the vineyards for the winepress' ⁶
	Fp(1) 14.1	ms 138	<i>a-ma-ko-to</i> , <i>me-no</i> / <i>jo-te-re-pa-to</i> , OLE // <i>e-ke-se-si</i> v 1 <i>amaktos mēnnos</i> : ... <i>t—$a(n)to$</i> : 'month of A.: ... they offered oil to the E.' ⁷
Pylos	Cn 608.1	S608-H1	<i>jo-a-se-so-si</i> , <i>si-a₂-ro</i> | <i>o-pi-da-mi-jo</i> ... <i>asēsonsi sihalons opidāmioi</i> : '... the inhabitants are to fatten hogs'
	Jn829.1ff.	S310-H2	<i>jo-do-so-si</i> , <i>ko-re-te-re</i> , <i>du-ma-te-qe</i>, | <i>po-ro-ko-re-te-re-qe</i> , <i>ka-ra-wi-po-ro-qe</i> , <i>o-pi-su-ko-qe</i> , <i>o-pi-ka-pe-e-we-qe</i>, | <i>ka-ko</i> , <i>na-wi-jo</i> , <i>pa-ta-jo-i-qe</i> , <i>e-ke-si-qe</i> , <i>a₃-ka-sa-ma</i> ... <i>dōsonsi koretēres</i> etc. <i>k^halkon nawwion paltaioihik^{we} enk^hesik^{we} aiksmans</i> : '... the koretēres etc. will contribute temple bronze

⁶ Not an entirely satisfactory interpretation. *to- qo* is scarcely /tok^wos/ = τόπος if Chadwick (1996, p. 280) is correct in seeing τόπος as a late back-formation based on (περὶ) τὸ ποῦ. /tork^woi/ 'for the press' is the suggestion of Milani (1965, p. 137). Lejeune (1976, p. 200, n. 29) has suggested that it might be an anthroponym as the subject of /ek^hei/. For *wo-na-si* = /woinasi/, 'vineyards', see Ventris and Chadwick 1952, p. 273, 412; 1972, p. 592; and cf. Hsch. οἰνάδες· ἀμπελώδεις τόποι.

⁷ The context is reasonably clearly one of offerings of oil, but *-te-re-pa-to*, seemingly a 3rd person verbal form, is opaque.

			for the points ⁸ for javelins and spears’
Cn 3.1		S608-H1	<i>jo-i-je-si, me-za-na, | e-re-u-te-re, di-wi-je-we, qo-o</i> ... <i>hiensi m.? ereutērei Diwiēwei g^wōns</i> : ‘... they send oxen to the inspector Diwieus’
Mycenae	Ge 602.1	ms 57	<i>jo-o-po-ro, a-ro-mo[do-]ši-mi-jo</i> ... <i>op^hlon arom-</i> : ‘... they owed ...’
	Ue 661.1		<i>jo-po-ro-te-ke *190 100 *155^{VAS}+NI 15</i> ... <i>prothēke</i> : ‘... he set out’
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Sentences with o-			
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Knossos	Le 641.1	ms 103	<i>o-a-po-te, de-ka-sa-to, a-re-i-jo</i> probably ... <i>apō^hen deksato Areios</i> : ‘... Areios received from outside’ ⁹
	Wb 8711.1		] <i>o-a-pu-</i> [possibly] <i>o-a-pu-do</i> [perhaps ... <i>apudōke?</i> : ‘... he contributed’
<hr/>			
Pylos	Aq 64.2.5.6.7a .13.14.15.16	S64-H21	<i>o-a-ke-re-se ZE 1 *171 n</i> (n a multiple of 3) ... <i>agrēsei</i> : verbal form, 3rd sg., perhaps indicating contributions of pairs of animals and quantities of *171.
	Wa 917.1	S106-H1	] <i>o-da-sa-to, a-ko-so[-ta</i> ... <i>das(s)ato Alksoitās</i> : ‘... A. distributed’
	Pn 30.1	H2	<i>o-de-ka-sa-to, a-ko-so-ta</i> ... <i>deksato Alksoitās</i> : ‘... A. received’
	Vn 10.1	H3	<i>o-di-do-si, du-ru-to-mo | a-mo-te-jo-na-de, e-pi-[•]-ta 50 | a-ko-so-ne-qe 50</i> ... <i>didonsi drutomoi (h)armoteiōnade epi[]ta 50 aksonesk^we 50</i> : ‘... the woodcutters contribute to the workshop 50 ... and 50 ...’
	Un 267.1	S2-H1	<i>o-do-ke, a-ko-so-ta | tu-we-ta, a-re-pa-zo-o | tu-we-a, a-re-pa-te | ze-so-me-no</i> ... <i>dōke Alksoitās Th^uwestāi aleip^hazohōi i^huweha aleip^hatei zes(s)omenōi</i> : ‘... A. gave aromatics to Th. the unguent-boiler for an unguent which was to be boiled’
	Nn 228.1	S106-H1	<i>o-o-pe-ro-si, ri-no, o-pe-ro</i> ... <i>op^hellonsi linon op^helos</i> : ‘... they owe a deficit, flax’

⁸ Acc. with final function.

⁹ Pace the *communis opinio* that *a-po-te* is an anthroponym, the subject of /*deksato*/. If it is, it is very difficult to suggest what *a-re-i-jo*, which looks like it ought to be an anthroponym, might be. The sense of /*apō^hen*/, if that is correct, is difficult to ascertain. For discussion, see p. 330.

An 657.1	S657-H1	<i>o-u-ru-to</i> , <i>o-pi-a₂-ra</i> , <i>e-pi-ko-wo</i> ... <i>wruntoi opihala epikowoi</i> : '... the guardians guard the shores'
Eq 213.1	S74-H1	<i>o-wi-de</i> , <i>a-ko-so-ta</i> , <i>to-ro-qe-jo-me-no</i> , <i>a-ro-u-ra</i> ... <i>wide Alksoitās trok^weyomenos arourāns</i> : '... A. saw when he went on a tour of the arable lands'
Ta 711.1	S641-H2	<i>o-wi-de</i> , <i>pu₂-ke-qi-ri</i> , <i>o-te</i> , <i>wa-na-ka</i> , <i>te-ke</i> , <i>au-ke-wa</i> , <i>da-mo-ko-ro</i> ... <i>wide Ph. hote wanaks thēke A. dāmokoron</i> : '... P. saw when the king made A. dāmokoros'
An 37.1	H1	<i>o-za-mi</i> [] <i>e-ne-ka</i> , | <i>pa-ra-we-wo</i> perhaps <i>o</i> + <i>zāmiōntoi</i> : '... they are levied, conscripted'? ¹⁰
Vn 130.1	H1	<i>o-ze-to</i> , <i>ke-sa-do-ro</i> , * <i>34-to-pi</i> , | <i>a-ke-a₂</i> <i>o</i> + 3 sg. verbal form, interpretation unclear beyond a transaction involving <i>ke-sa-do-ro</i> and some vessels, / <i>angeha</i> /. ¹¹

1. Morphology and phonology

The spelling *jo-* suggests that we are dealing with a form built to the pronominal stem **yo-*, which gives rise to the relative pronoun ὅς in classical Greek, *yás yā yād* in Sanskrit, as well as a range of relative adverbial particles, such as the temporal ὅτε, Myc. *o-te*. The idea that the *jo-* forms represent something built to the relative stem **yo* while the *o-* forms are built to the demonstrative stem **so-* (Greek ὁ, ἡ, τό) can be rejected since the two are found in absolutely identical contexts, and with absolutely identical function.

It would be semantically convenient if we were dealing in both cases with a form built from the demonstrative stem **so-*. However, it is unlikely that *j-* series signs can represent /h/ generally. The only other example of *j-* standing for /h/ is *ja-ke-te-re* (PY Mn 11.2), seemingly alternating with *a₂-ke-te-re* (KN V 118), plausibly representing /hakestēres/, 'menders', from a root **yeH₂k-*;¹² thus this too represents /h/ < *y.

One solution to the *j-* spelling of /h/ < *s might be that the *jo-* variant is in fact a false archaism following the conflation of the original **so-* and **yo-* stems;

10 Palmer 1963, p. 440; cf. Ventris and Chadwick 1956, p. 174, 403. *-za-mi*[is presumably not to be identified with the appellativum *za-mi-jo* (KN As 1517v.2, PY An 129.4), since if it is, there will be no verbal form in the 'heading'.

11 *D.Mic.*, s.v. *ze-to* and **34-to-pi*.

12 Ruijgh 1967, p. 55 n. 40, 'avec l'aspiration attestée dans phoc. ἐφακῆσθαι ... l'attaque ayant peut-être emprunté ἀκεῖσθαι à une dialecte comme l'ionien, où la psilose est régulière'; cf. *DELG* s.v. ἄκος, from a root **yēk-*, **yək-*, comparing O.Ír. *hīcc* 'cure', Gaulish *iach*, and again seeing a borrowing from a psilotic variety in the case of the Attic form.

yet I am chary of appealing to what amounts to scribal error except as a last resort; and in any case, it is not clear that the two stems really did conflate, given the differences of accentuation and inflection (later Greek \acute{o} vs $\acute{\omicron}\varsigma$, $\tau\acute{o}\nu$ vs $\acute{\omicron}\nu$, $\acute{\omega}\varsigma$ vs $\acute{\omega}\varsigma$ etc.).

The simplest solution, then, is to see forms built to the relative stem $*yo-$. If this is correct, the $o-$ variant is the expected, contemporary Mycenaean form with the regular sound change $/y/ > /h/$, and initial $/h/$ not represented in the script. The $jo-$ variant, like the form *ja-ke-te-re*, will then be an historical spelling. If so, it is interesting that at Pylos, in the documents which we possess, these historical spellings are restricted to hands 1 and 2, which Thompson (1996-1997, pp. 327-29) suggests are linguistically conservative in their use of the old ending $-e = /-ei/$ as the dat. sg. of C-stem nouns, never $-i = /-i/$, the loc. sg. which came to replace it. Although these scribes also use the contemporary spelling $o-$, is their use of the historical spelling another manifestation of their linguistic conservatism?

As to the precise formation, it seems much more likely to be an adverb $/h\bar{o}/$ *vel sim.* than a case-form of the relative pronoun proper. If it were a pronoun, in PY Ta 711.1, for example, we might expect neut. pl. $/ha/$ for ‘what things P. saw’; it can scarcely be masc. nom. sg. in agreement with *pu₂-ke-qi-ri* (‘Which; Phugeg^wrins; saw ...’) for reasons of sense.

2. Semantics and syntax in the ‘regular’ usage

There seem to be two distinct patterns of use of the particle, since PY Aq 64 is greatly different to all other cases. With the exception of Aq 64, most occurrences of $o-$ ~ $jo-$ are tablet initial; and all are, I believe, sentence initial. The two apparent exceptions are illusory.

KN Fp(1) 14 (138)

- .1a me-no OLE
 .1b a-ma-ko-to , / jo-te-re-pa-to , // e-ke-se-si v 1
 .2 qe-ra-si-ja s 1 a-mi-ni-so-de , / pa-si-te-o-i s 2 a-re v[

KN Fp(1) 14 records offerings of oil, and begins with a heading *a-ma-ko-to* , *me-no*, the name of the month in which the offerings were made, followed by $/m\bar{e}n\bar{n}os/$ ‘month’ in the genitive case. The *jo-te-re-pa-to* clause which follows, in which the verb is unclear, is written in characters which have switched to minuscule. I believe it is quite likely that the change of script size indicates that *a-ma-ko-to* , *me-no* stands as a separate heading, as it does in other Fp(1) records, and that *jo-te-re-pa-to* begins a new sentence.

KN Gv 863 (—)

- .1]qa-ra , / jo-e-ke-to-qo , wo-na-si , si[
 .2] we-je-we *174 420 su ARB 104[

The precise details of this record are obscure (see note 6), beyond that it seems to involve a number of fig trees (*su* ARB) and vine shoots (*we-je-we*, $/wey\bar{e}wes/$). The *jo-e-ke-to-qo* phrase is preceded by *]qa-ra*, possibly the

toponym *qa-ra*, and, if so, given once again the change in script size before the *jo-* phrase, quite possibly standing as a separate heading.

In this construction, which I will call the *introductory construction*, the particle stands first word in a sentence which acts as an introductory ‘heading’ for a tablet or a set of tablets, the rest of the tablet or set filling in details of what was seen, contributed, received etc. In Knossian usage, at least, a separate, short heading can precede the *o-* ~ *jo-* heading, specifying the temporal or geographical locus of the record.

It is curious that a relative adverb should stand first-word, introducing what appears to be a main clause; but English has a comparable construction with just that syntactic property, and which also functions primarily in ‘headings’ contexts: it is the construction seen in, for example, *What the Butler saw*, or *How to kill a dragon*. I argue that the Mycenaean construction is exactly the same: the relative adverb /hō/ is standing in what amounts to an indirect question clause. One might object that the construction works in English because there the relative (*how*) and interrogative (*how?*) operators are identical, but not in Greek, where one might expect interrogative πῶς or ὅπως etc. in place of relative ὡς. There are, however, significant areas of semantic overlap between relative and indirect question clauses which make it not unreasonable that the same operators should be used for both; and, crucially, there are parallels in Homer:¹³

- (11) *Il.* 2.365: γνώσῃ ἔπειθ' ὅς θ' ἡγεμόνων κακός, ὅς τέ νυ λαῶν
| ἦδ' ὅς κ' ἐσθλός ἔησι
‘You will recognise which of the leaders will be weak, and which of the people; and again which of them will be brave.’
- (12) *Il.* 2.409: ἦιδεε γὰρ κατὰ θυμὸν ἀδελφείον ὡς ἐπονείτο
‘He knew his brother in his heart, how he laboured.’, i.e. ‘He knew in his heart how his brother laboured.’
- (13) *Il.* 24.418: θηοῖό κεν αὐτὸς ἐπελθὼν | οἶον ἐερσήεις κεῖται
‘If you went yourself, you would be amazed, how fresh he is.’
- (14) *Od.* 7.327: εἰδήσεις δὲ καὶ αὐτὸς ἐνὶ φρεσὶν ὅσσοι ἀρισται
| νῆες ἐμαὶ καὶ κοῦροι ἀναρρίπτειν ἄλα πηδῶι
‘You will soon learn for yourself how good are my ships and how good are my young men at churning the sea with their oars.’

We need not be surprised by the use of the ὅς pronoun in an indirect question; even in classical Greek the indefinite relative ὅστις can be used in indirect questions, and Homeric can use the ὅς pronoun as an indefinite relative:

- (15) *Od.* 10.21: κείνον γὰρ ταμίην ἀνέμων ποίησε Κρονίων,
| ἡμὲν παυέμεναι ἦδ' ὀρνύμεν ὄν κ' ἐθέλησι
‘The son of Kronos had made him steward of the winds, to quell or stir forth whichever [wind] he wished’

13 Munro (1891, § 267.2.c, 267.3.b) instead treats these as cases of ellipsis of a correlative in the main clause, i.e. as headless relative clauses; but this just serves to show the degree of semantic overlap which exists.

In the previous examples the *wh*-clause has been embedded in the complement position of a verb which introduces an indirect question. There are other Homeric examples where the *wh*-clause appears to be the matrix clause:

(16) *Il.* 7.455: ὦ πόποι, Ἐννοσίγαι' εὐρυσθενές, οἷον ἔειπες
'Almighty Earthshaker, what a thing you have said!'

(17) *Od.* 1.32: ὦ πόποι, οἷον δὴ νῦ θεοὺς βροτοὶ αἰτιόωνται
'How men blame the gods!'

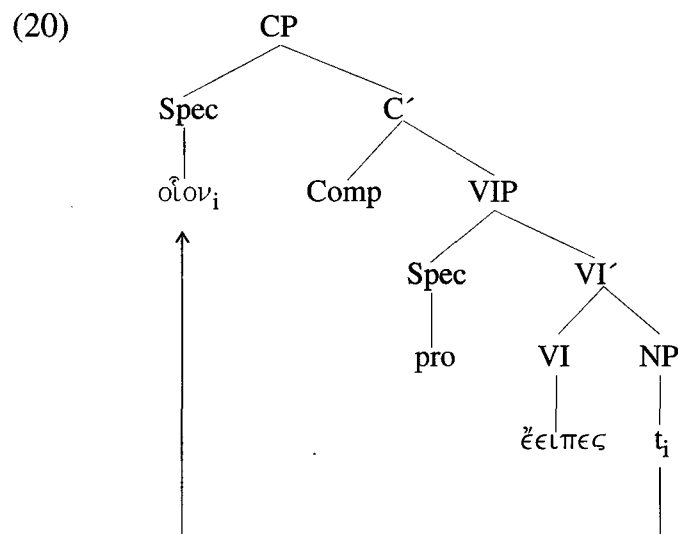
(18) *Il.* 5.601: ὦ φίλοι, οἷον δὴ θαυμάζομεν Ἐκτορα δῖον.
'My friends, how we marvelled at god-like Hector.'

Munro (1891, § 267.c) sees (16)–(18) as examples of an ellipsis which 'gives an expression of surprise: (*to think*) *what a thing you have said!*' etc. That is, he envisages a construction whereby an interrogative or *wh*-clause is the complement of an elided matrix clause verb, i.e. an indirect question clause. The 'expression of surprise' is surely a matter of illocutionary force —witness the IFID ὦ πόποι —and depends upon the elided matrix verb. It could be argued indeed that in (18), where there is no ὦ πόποι, the 'expression of surprise' is also lacking.

That the construction originates in subordinate clauses with matrix ellipsis is also suggested for English, at least, by the lack of AUX-inversion, i.e. the inversion of subject and auxiliary verb which characterises English matrix clause (direct) questions, but which is absent from subordinate clause (indirect) questions:

- (19) a. What did the Butler see?
b. [This is] what the Butler saw.

Formally, I argue that (16) is a *wh*-headed complementiser phrase (CP). Ignoring the IFID ὦ πόποι and the vocative noun phrase (NP) Ἐννοσίγαι' εὐρυσθενές, both of which I assume are CP- or VIP- adjuncts, the structure will be:

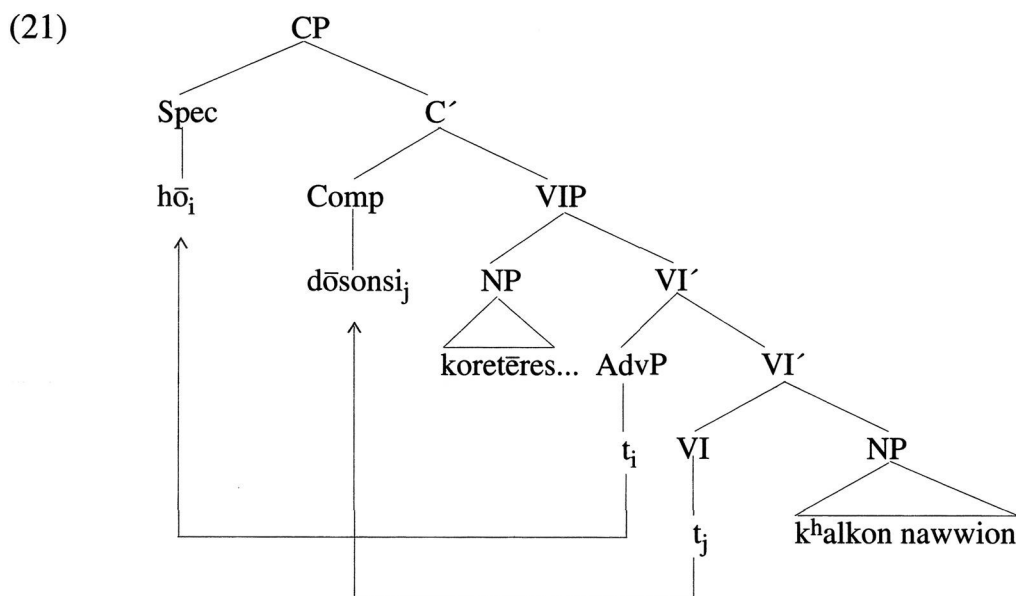


The derivation proceeds along standardly assumed lines as follows.¹⁴ The verb phrase is formed by merging the object noun phrase (NP) $\acute{\omicron}\iota\omicron\nu$ with the inflected verb (VI) $\xi\epsilon\iota\pi\epsilon\varsigma$ to form an intermediate projection, VI'. The subject is the phonetically null pronoun 'little-pro', which merges with VI' to form a verb phrase, VIP. To form a question, this VIP is merged with a complementiser (Comp). This is the standard analysis of both root and subordinate question clauses. This Comp causes the NP $\acute{\omicron}\iota\omicron\nu$ to move out of the argument position of VIP and into the specifier position of CP, [Spec, CP]. It is standardly assumed that Comp carries some feature, call it [+wh], which requires 'checking' against an element in [Spec, CP] which carries that same feature; and that interrogative and relative pronouns also carry the [+wh] feature. This movement leaves behind a trace, t, in the position formerly occupied by $\acute{\omicron}\iota\omicron\nu$; the arrow and co-indexing on $\acute{\omicron}\iota\omicron\nu$ and t indicate what has moved to where.

The movement of $\acute{\omicron}\iota\omicron\nu$ to [Spec, CP] happens overtly; that is to say, it happens prior to 'spellout', the point at which the phonetic form (PF) and logical form (LF) are said to diverge. A further movement is assumed to happen covertly, i.e. after spellout, at LF only. The verb $\xi\epsilon\iota\pi\epsilon\varsigma$ is assumed to raise to Comp at LF. In English subordinate clause questions the verb is also assumed to raise to Comp at LF, resulting in lack of AUX-inversion; but in English matrix clause questions the verb raises prior to spellout, resulting in overt AUX-inversion. It is sometimes stated that Comp in English matrix clause questions is 'strong', and requires V-movement prior to spellout, whereas subordinate clause Comp is 'weak', and thus V-movement to Comp can wait until LF, where it is assumed to be somehow 'cheaper'.

I argue that the structure of the Mycenaean introductory construction is similar to that in (20). The *o-* ~ *jo-* particle is a *wh*-marked adverb, /*hō*/ *vel sim.*, 'how', which originates as an adjunct within VIP and moves into [Spec, CP] to check the [+wh] feature on Comp. The difference is then that Myc. Comp is 'strong', and causes the verb to move to Comp prior to spell-out. The combination of VSO and V2 word order strongly suggests that V-movement to Comp is taking place in this way. The structure is shown in (21); once more, the co-indexation and arrows show the movements which have taken place.

14 Here and elsewhere I follow the suggestion of Kiparsky (1996, p. 172) and Condoravdi and Kiparsky (2001, pp. 31-32) that Homeric Greek does not project a separate IP, but that the verb and its inflection merge in the lexicon to form a composite VI which does syntactically project. I assume a similar situation holds for Mycenaean Greek, primarily for the sake of simplicity, because it will not materially alter the derivations for the present purposes.



An obvious objection is that other forms of Greek—including Homeric—lack overt V-to-Comp movement in all interrogative clauses, both matrix and subordinate. This need not be problematic, however: the ‘strength’ of Comp can vary parametrically from one variety of a language to another. In standard varieties of English, for example, both British and American, matrix clause interrogatives have ‘strong’ Comp (i.e. overt V-to-Comp movement), and subordinate clause interrogatives have ‘weak’ Comp (i.e. movement at LF only); yet some varieties of Irish English have overt V-to-Comp movement even in subordinate clause interrogatives (Culicover 1997, p. 148).

Two sentences using the introductory construction of *o-* ~ *jo-* apparently do not exhibit V-movement in this way. If the preceding analysis of the syntax of the *o-* ~ *jo-* particle is correct, the question is not so much why the verb undergoes movement in the majority of examples, but why it fails to undergo movement, or at least appears to fail to do so, in these two anomalous cases.

KN Og(2) <4467>

(—)

- .1 jo-a-mi-ni-so-de , di-do-[si
- .2 ku-pe-se-ro M 30 me-to-re M [
- .3 ne-ri-wa-to M 15 pi-ri[

KN Og(2) <4467> is a record of contributions of some commodity measured in M-units which are being sent to Amnisos. The adverbial phrase *a-mi-ni-so-de*, /Amnison-de/, ‘to Amnisos’ adjoins to the *jo-* particle in its introductory construction.

KN Le 641

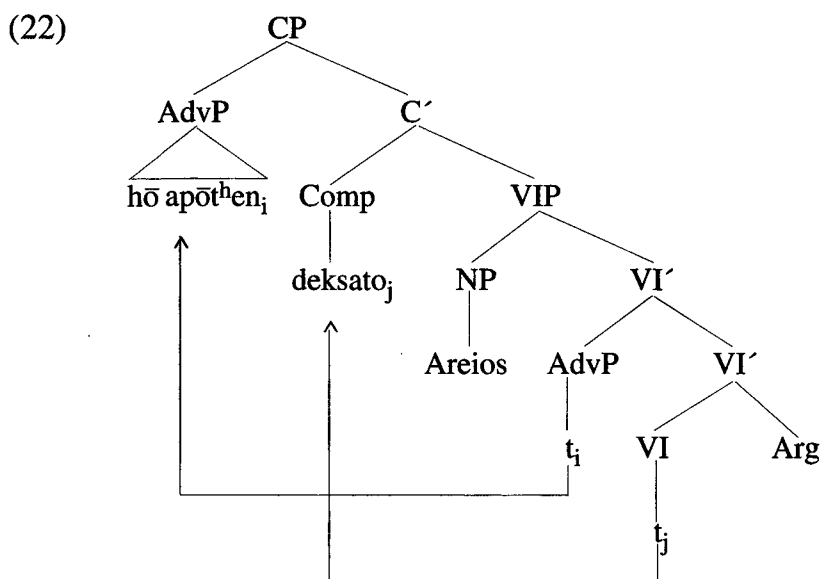
(103)

- .1 o-a-po-te , de-ka-sa-to , a-re-i-jo , o-u-qe-po[
- .2 pa-i-ti-ja , ‘pe’ TELA+TE 2 mi TELA¹+TE 14 da-wi-ja , pe TELA^x+TE 1[
- .3 do-ti-ja mi TELA+TE 6 qa-mi-ja TELA¹+TE 1[
- .4 ko-no-so , / te-pe-ja ‘mi’ TELA+TE 3 tu-ni-ja TELA¹+TE 1 [
- .5-6 vacant [] vacant

The verb *de-ka-sa-to*, /deksato/, ‘he received’, shows that this is a record of the receipt of quantities of cloth (TELA+TE, TELA¹+TE) from various groups of women. The introductory sentence contains two clauses, the first headed by the *o-* particle, the second beginning *o-u-qe*, /ouk^we/, ‘and not’. What is the subject of the verb /deksato/ in the first clause? Since John Killen (1966, p. 106) has shown that in wool record KN Od 562.3 (like this tablet, also in hand 103), *a-po-te* is very likely to be an anthroponym standing as subject of the verb *pe-re*, /p^herei/, ‘he brings’ (*vel sim.*), it has generally been accepted that in KN Le 641.1 *a-po-te* is also a man’s name, standing as the subject of /deksato/; indeed Killen (1966, p. 107) makes that suggestion himself. However, the same sign-group need not necessarily carry the same value, even in the same hand and similar contexts; and having *a-po-te* as subject leaves us at a loss as to the interpretation of *a-re-i-jo*. This seems to be a man’s name, based on a patronymic adjective, /Are(h)ios/ *vel sim.*; it is also attested at Pylos. If here it is a patronymic qualifying *a-po-te*, it is surprising, as Chadwick notes (Ventris and Chadwick 1972, p. 486), that it is separated from its head noun. Noting that Killen does not commit himself to the identification of *a-po-te* as an anthroponym in Le 641 (‘Who the recipient is is uncertain: either *a-po-te* ... or *a-re-i-jo*’), I cannot help but wonder whether the interpretation of Ventris and Chadwick (1956, p. 416) is actually correct, i.e. that *a-re-i-jo* is the subject of /deksato/ and *a-po-te* is an adverb /apōt^hen/ *vel sim.* Admittedly the sense of /apōt^hen/ is unclear —probably not that of classical ἀπὸθεν ‘from afar’, given the presence of *ko-no-so* in .4; perhaps ‘from outside the palace’?

Although the verb is in third position in both of these examples (V3 order), the fact that it precedes the subject (VS order) suggests that it has in fact moved —presumably to Comp —and that another factor has triggered V3 rather than V2 order. Since there is no obvious syntactic position between [Spec, CP] and Comp, I take it that either the adverb has joined /hō/ in [Spec, CP], or it has joined the verb in Comp.

Both of the examples of V3 in the introductory construction are from Knossos; and, if the interpretation of *a-po-te* as /apōt^hen/ is correct, both contain adverbs. I therefore wonder whether /hō/ + adverb forms a single adverbial phrase at the point where they are base-generated, and when /hō/ raises to [Spec, CP] it is the whole adverbial phrase which raises, as shown in (22), not just /hō/. The same does not happen in PY Vn 10, example (23), the only other introductory construction containing an adverb which we possess, where the adverbial *a-mo-te-jo-na-de*, /harmoteiōna-de/, ‘to the fitters’ workshop’, does not raise to [Spec, CP].



- (23)
- | | | | | |
|-------------------------------|-----------------|--------------------|-------------------------|-----------------------|
| <i>o-</i> | <i>do-so-si</i> | <i>du-ru-to-mo</i> | <i>a-mo-te-jo-na-de</i> | <i>e-pi-[•]-ta</i> 50 |
| <i>hō</i> | <i>dōsonsi</i> | <i>drutomoi</i> | <i>harmoteyōna-de</i> | <i>epi[]ta</i> 50 |
| how | give-3PL-FUT | wood-cutters | workshop-ACC-ALL | ?saplings 50 |
| <i>a-ko-so-ne-qe</i> | 50 | | | |
| <i>aksones-k^{We}</i> | 50 | | | |
| <i>axels-and</i> | 50 | | | |
- 'How the wood-cutters will contribute to the workshop: 50 ?saplings and 50 axels'

Either /harmoteyōnade/ was not isophrasal with /hō/ when base-generated (note that it occurs on a different line from the rest of the heading), and so did not raise to [Spec, CP] with it; or the two adverbs did form a single adverbial phrase, but when raised to [Spec, CP], /hō/ 'excorporated' out of the phrase containing /harmoteyōnade/. For the latter possibility, compare the fluctuation of strategies for raising to [Spec, CP] an English *wh*-pronoun which forms part of a prepositional phrase, (24). If this is the correct explanation, presumably the two alternatives (raise whole AdvP vs. excorporate) belong to different, synchronically competing grammars (as in English, where excorporation is deprecated by proscriptive grammarians); or to the grammars of two distinct regional dialects (Knossos has whole-phrase raising, Pylos has excorporation); or to different historical stages of the same grammar (whole-phrase raising being the earlier process, excorporation the later one) and we are witnessing a syntactic change in progress. Since the only examples of whole-phrase raising are from Knossos, and those are the only sentences at Knossos in which the introductory construction contains an adverb, all three possibilities are supported by the current data.

- (24) a. $[_{CP} [_{PP} \text{to whom}]_i [_{C'} \text{did you give it } t_i]]$ (raise whole PP)
 b. $[_{CP} \text{whom}_i [_{C'} \text{did you give it } [_{PP} \text{to } t_i]]]$ (excorporate)

3. PY Aq 64: a different construction?

I have so far avoided discussion of PY Aq 64, which presents a rather different pattern of use. The tablet forms a diptych with PY Aq 218; the text of both is reproduced below.

Aq 64		(S64 H 21)
.1	]-re-wi-jo-te	
.2	]-ja , mo-ro-qa , to-to , we-to , o-a-ke-re-se	ZE 1 *171 3
.3	ka-do-wo , mo-ro-qa , o-u-qe , a-ke-re-se	ZE 1
.4	ru-ro , mo-ro-qa , o-u-qe , a-ke-re-se	ZE 1
.5	ku-ru-me-no , mo-ro-qa , i-te-re-wa , ko-re-te , to-to , we-to , o-a-ke-re-se	*171 6
.6	pe-ri-mo , ti-mi-ti-ja , ko-re-te , to-to-we-to , o-a-ke-re-se	ZE 1 *171 3
.a		o-a-ke-re-se
.7	pe-ri-me-de-o , i-*65 , po-so-ri-jo-no , te-ra-ni-ja , a-ke-re-se , to-to-we-to ,	*171 12
.8	po-ki-ro-qo , e-qe-o , a-to-mo	ZE 1
.9-.11	<i>vacant</i>	
.12	o-da-a ₂ , ko-to-na e-ko-te	
.13	e-ta-wo-ne-u , to-to-we-to , o-a-ke-re-se	ZE 1 *171 6
.14	a-qi-zo-we , to-to , to-to , we-to , o-a-ke-re-se	ZE 1 [*171
.15	ne-qe-u , e-te-wo-ke-re-we-i-jo , to-to , we-to , o-a-ke-re-se	ZE 1 [*171
.16	me-wi , e-ru-ta-ra , me-ta-pa , ki-e-wo , to-to-we-to , o-a-ke-re-se	ZE 1 [*171
.17-.22	<i>vacant</i>	

Aq 218		(S64 H 21)
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recto

.1	o-da-a ₂ , a-na-ke-e , o-pe-ro-te[
.2	ri-so-wa , i-je-re-u[] <i>vest.</i> []	VIR 1
.3	ne-wo-ki-to , i-je[-re-]u , da-i-ja-ke-re-u	VIR 1
.4	ro-]u-ko , ku-sa-me-ni-jo , me-ta-pa	VIR 1
.5	a-e-ri-qo-ta[]jo ₂]o-wi-to-no	VIR 1
.6	a ₃ -ko-ta , a-da-ra-ti-jo	VIR 1
.7	<i>vacat</i>	
.8	<i>vacat</i>	
.9	o-da-a ₂ , e-ke-jo-to , a-ko-to-no	
.10	pa-ku-ro ₂ , de-wi-jo	ZE 1
.11	]-ka-re-u , e-ko-me-na-ta-o , *34-te	ZE 1
.12	], ke-ki-jo	ZE 1
.13	]-me-ta , po-ru-da-si-jo	ZE 1
.14	]-me-nu-a ₂	ZE 1
.15	]-ma-ra-te-u , a-pu-ka	ZE 1
.16	qo-te-wo , i-*65	ZE 1

verso

di-we si-po-ro ti-mi-to-qo-re

Discussing this pair of texts, Palmer (1963, p. 141) notes that Aq 218 is probably not the first part of a complete document, since its first line begins with the particle *o-da-a₂*, whose function is ‘to introduce paragraphs other than the first’;¹⁵ at the same time, the progression of commodities VIR, ZE, ZE + *171 makes it likely that the correct ordering of the extant tablets is Aq 218, 64, and that at least one further tablet originally preceded Aq 218. It seems reasonably likely that the document involves, in part at least, a record of obligations to provide goods and services. The first ‘paragraph’ of Aq 218, for example, records persons designated as *a-na-ke-e o-pe-ro-te*, /*anage(h)en op^hellontes*/, perhaps ‘who are obligated to perform military service’: cf. *Il.* 9.338, τί δὲ λαὸν ἀνήγαγεν ἐνθάδ’ ἀγείρας | Ἀτρεΐδης, ‘Why did the son of Atreus raise an army and lead it here?’ (although /*anage(h)en*/ could mean more-or-less anything). Further, there is evidence that the commodity denoted by ideogram *171 in Aq 64 is a cyperaceous substance which is regularly the subject of contributions to, rather than disbursements from, the central authority.¹⁶ It seems reasonable, therefore, to understand *a-ke-re-se* as a verb indicating some form of contribution. It is usually interpreted as the aorist /*agrēse*/ or, more likely, future /*agrēsei*/, of a verb corresponding to Aeolic ἀγρέω, although the translation ‘take’ (Ventriss and Chadwick 1956, p. 176, 386; Palmer 1963, p. 143) does not seem to fit the context unless it can mean ‘take [from someone and contribute]’: perhaps this is what underlies Palmer’s alternative translation ‘will contribute (levy)’, which fits the context quite well.

In the first ‘paragraph’ of Aq 64 there is a general correlation between the phrase *to-to-we-to*, /*tōto wetos*/, ‘this year’, the *o-* particle prefixing the verb *a-ke-re-se*, and a quantity of *171. In entries which lack a quantity of *171 the phrase *to-to-we-to* is absent, and the verb is not prefixed by *o-* but is preceded by *o-u-qe*, /*ouk^{We}*/, ‘and not’. Two lines, .5 and .7, lack a ZE 1 entry. On epigraphic grounds, however, I suspect that the scribe has omitted ZE 1 from these lines for reasons of lack of space, but intends ZE 1 (or more) to be understood in both of them. I assume that ZE denotes ‘a pair’ of something —and given the connection with *171, which in the Thebes Wu sealings accompanies animals, probably a pair of animals of some sort; beyond that, the document is opaque.

Palmer rejected the identification of this *o-* particle with the introductory *o- ~ jo-* particle on the grounds that the latter is ‘never found except to introduce a formula’; he went on to suggest that the correlation between the presence of *o-* and an ‘extra’ quantity of *171 implies that this *o-* means ‘in addition’. If so, however, we might reasonably expect the *o-* to come between the ZE and *171

15 Palmer 1963, p. 57.

16 KN Ga(3) 464 records deficits (*o-pe-ro*) of *171, which seems to be associated with the PYC (= CYP) ideogram. KN Ga(1) 519 has *ku-pa-ro* *171 in .1a and *a-pu-do-si* /*apudosis*/ ‘contribution’ in .1b. Four Thebes sealings, Wu 46, 56, 59, 76, record quantities of *171 being sent to the centre along with animals. MY Ge 606.7 has *171 in a list of assessments for contributions of various spices which are most plausibly intended as flavourings for food for human consumption (Killen 1964 and 1983).

entries; and in any case, such an interpretation ignores the presence of *o-u-qe* in lines which lack *171: entries with *171 and *o-* are not contrasted with those lacking *171 and *o-* in such a way that *o-* could mean ‘in addition’. Rather, the contrast is between those who *a-ke-re-se something* (ZE 1 and some *171), and those who *a-ke-re-se nothing, not even* a ZE 1. If the sense of *o-* can be deduced from its alternation with *o-u-qe*, since the two are in complementary distribution, it ought to mean ‘does’ in contrast with ‘does not’. Given the different semantics (‘does’ not ‘how’) and syntactic properties (seemingly not clause-initial, nor heading an indirect question clause), is this a different construction to the introductory one —perhaps to be called the *affirmatory construction*?

Could the affirmatory construction even involve a different particle from the introductory construction? It might be suggested, for example, that the affirmatory particle is a homophonous adverb /hō/ built to the demonstrative stem **so-*, with a basic sense ‘thus, in the manner specified’. It is unfortunate that Aq 64 provides the only examples of the affirmatory construction which we possess: is it purely by chance that the *o-* spelling is used, or does this reflect an etymology different from that of the introductory (**yo-*) particle?

It is possible, however, that the same particle, and in fact the same construction, actually underlies this apparently different use. First let us reject the idea that the ‘introductory’ use is one which must necessarily be used in ‘headings’: it is, rather, simply an indirect question whose matrix clause is null, and although, especially in English, it is given to appearing in headings and titles, it need not do so. Second, it may be noted that the presence of the clitic /-k^we/ in the negative particle /ou-k^we/ might suggest that each entry consists of two clauses, and that the second starts just before the verb *a-ke-re-se*. It is at least possible that the *o-* particle, like the negative particle /ou-k^we/ stands first in its clause.

What then of the /tōto wetos/ phrases which precede the *o-* + verb complex? These could be part of the preceding clause (‘X [is obligated]¹⁷ this year; how he will contribute: ZE 1, *171 3’). They could form an entirely separate preamble, as the pre-heading /Hamaktos mēnnos/ in KN Fp(1) 14.1 (‘X; this year; how he will contribute: ZE 1, *171 3’). They could even be part of the clause headed by the /hō/ particle, if pre-posed because topicalised. I assume that topicalisation is adjunction to CP.

Summary

Morphologically, the *o-* ~ *jo-* particle is best interpreted as an adverb built to the relative pronominal stem **yo-*, perhaps /hō/, ‘how’. Furthermore, an analysis of the introductory construction as a *wh*-headed CP with overt V-to-Comp movement derives all of the salient syntactic properties of the construction using no more than standard mechanisms which are assumed by the UG framework. Its

¹⁷ Perhaps the elided verb is supplied from the heading of the ‘paragraph’, or the initial preamble of the document on another tablet, now lost.

semantic properties, viz. its predominance in headings contexts, are also explained: it is the Mycenaean equivalent of the English construction 'What the Butler saw', or, better, of the schoolchild's 'How I spent my holidays'.

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REFERENCES

- Aura Jorro, Francisco. 1985-1993. *Diccionario Micénico*. 2 vols. Diccionario Griego-Español, Anejos 1 and 2. Madrid: Consejo Superior de Investigaciones Científicas.
- Chadwick, J. 1996. *Lexicographia Graeca*. Oxford: Oxford University Press.
- Chantraine, P. 1968-1980. *Dictionnaire étymologique de la langue grecque*. Paris: Klincksieck.
- Chomsky, Noam. 1993. «A Minimalist Program for Linguistic Theory». In Kenneth Hale and Samuel Jay Keyser, eds., *The View from Building 20: Essays in Honor of Sylvain Bromberger*. Cambridge, Mass.: MIT Press. pp. 1-52.
- Condoravdi, Cleo, and Paul Kiparsky. 2001. «Clitics and Clause Structure». *Journal of Greek Linguistics* 2: pp. 1-40.
- Culicover, Peter W. 1997. *Principles and Parameters. An introduction to syntactic theory*. Oxford: Oxford University Press.
- Doria, M. 1968. «Strumentali, ablativi e dativi plurali in miceneo. Alcuni percisazioni». *Atti e memorie del 1o Congresso Internazionale di Micenologia. Roma 27 settembre - 3 ottobre 1967*. Rome: Edizioni dell' Ateneo. pp. 764-780.
- Gallavotti, C. 1956. «Lettura di testi micenei». *PdP* 11: pp. 5-24.
- Hooker, J. T. 1968. «Non-Greek elements in the Linear B tablets». *IF* 73: pp. 67-86.
- Killen, J. T. 1964. «Review of *Mycenae Tablets III* by John Chadwick». *Classical Review new series* 14: pp. 171-173.
- . 1966. «The Knossos Lc (cloth) tablets». *BICS* 13: pp. 105-109.
- . 1979. «The Knossos Ld(1) tablets». In E. Risch and H. Mühlestein, eds., *Colloquium Mycenaenum. Actes du sixième Colloque International sur les textes mycéniennes et égéennes tenu à Chaumont sur Neuchâtel du 7 au 13 septembre 1975*. Neuchâtel-Genève: pp. 151-181.
- . 1983. «On the Mycenaean Ge Tablets». In A. Heubeck and G. Neumann, eds., *Res Mycenaee. Akten des VII. Internationalen Mykenologischen Colloquiums in Nürnberg von 6.-10. April 1981*. Göttingen: Vandenhoeck & Ruprecht. pp. 216-232.
- Kiparsky, Paul. 1996. «The shift to head-initial VP in Germanic». In Höskuldur Thráinsson, Samuel David Epstein and Steve Peter, eds., *Studies in Comparative Germanic Syntax. Vol 2. Studies in Natural Language & Linguistic Theory*, vol. 38. Dordrecht, Boston and London: Kluwer Academic Publishers. pp. 140-179.
- Lejeune, Michel. 1976. «Pré-Mycénien et Proto-Mycénien». *BSL* 71: pp. 193-206.

- Macdonell, A. A. 1916. *A Vedic grammar for students*. Oxford: Oxford University Press.
- Milani, Celestina. 1965. «Osservazioni su alcune locuzioni micenee». *Kadmos* 4: pp. 129-137.
- Munro, D. B. 1891. *A grammar of the Homeric dialect*. Oxford: Oxford University Press.
- Palmer, L. R. 1963. *The interpretation of Mycenaean Greek texts*. Oxford: Oxford University Press.
- Ruijgh, C. J. 1967. *Études sur la grammaire et le vocabulaire du grec mycénien*. Hakkert.
- Thompson, R. J. E. 1996-97. «Dialects in Mycenaean and Mycenaean among the dialects». *Minos* 31-32, 1996-1997 [1998]: 313-333.
- Ventris, M. and J. Chadwick. 1956. *Documents in Mycenaean Greek*. Cambridge: Cambridge University Press.
- . 1972. *Documents in Mycenaean Greek*. 2d ed. Cambridge: Cambridge University Press.
- Watkins, C. 1963. «Preliminaries to a historical and comparative analysis of the syntax of the Old Irish Verb». *Celtica* 6: pp. 1-49.