

THE MEANING OF QE-TE-O IN LINEAR B ¹

The terms *qe-te-o*, *qe-te-jo*, *qe-te-a* and *qe-te-a₂* appear frequently in discussions of the economic vocabulary of the Linear B tablets, and at least in recent years there has been little debate about their basic meaning ². As early as 1955, Mühlestein suggest-

¹ I would like to thank Professor T. G. Palaima, who first suggested this topic to me in his graduate seminar in Mycenaean Scripts at the University of Texas at Austin and who read and proofread various drafts. My thanks also to Professor J. L. Melena, F. Schwink and M. T. Jones, each of whom read earlier versions of this paper and offered invaluable assistance and advice.

The bibliographical abbreviations in this article follow those set down in J. T. Killen, J. L. Melena and J.-P. Olivier eds., *Studies in Mycenaean and Classical Greek Presented to John Chadwick*, *Minos* 20-22, Salamanca 1987, pp. 621-625, particularly:

- CoMIK* = J. Chadwick, L. Godart, J. T. Killen, J.-P. Olivier, A. Sacconi and I. A. Sakellarakis, *Corpus of Mycenaean Inscriptions from Knossos*, Rome-Cambridge 1987 (I), 1991 (II).
- Dictionnaire* = P. Chantraine, *Dictionnaire étymologique de la langue grecque*, Paris 1968-1980.
- Documents*² = M. Ventris and J. Chadwick, *Documents in Mycenaean Greek*, 2nd edition, Cambridge 1973.
- KT*⁵ = J. T. Killen and J.-P. Olivier, *The Knossos Tablets V*, Salamanca 1989.
- Lexicon* = A. Morpurgo, *Mycenaeae Graecitatis Lexicon*, Rome 1963.
- PTT* = E. L. Bennett, Jr. and J.-P. Olivier, eds., *The Pylos Tablets Transcribed I-II*, Rome 1973-1976.

I make subsequent reference to all articles in note 2 by name of author only.

² The most complete studies are by M. Lejeune, «Sur quelques termes du vocabulaire économique mycénien», *Mémoires de philologie mycénienne* II, Rome 1971 (= *Mémoires* II), pp. 301-306; and Y. Duhoux, *Aspects du vocabulaire économique mycénien*, Amsterdam 1976, pp. 139-146. Other discussions include A. Furumark, «Ägäische Texte in griechischer Sprache», *Eranos* 52, 1954, p. 42; H. Mühlestein, «Zur mykenischen Schrift», *Museum Helveticum* 12, 1955, p. 131, n. 60; *Documents*², pp. 220-221, 577; E. L. Bennett, Jr., *Olive Oil Tablets of Pylos*, Salamanca 1958, p. 45; L. R. Palmer, *The Interpretation of Mycenaean Greek Texts*, 2nd edition, Oxford 1969 (= *Interpretation*), pp. 260-261; L. Deroy and M. Gérard, *Le cadastre mycénien de Pylos*, Rome 1965, pp. 25-27; C. J. Ruijgh, *Études sur la grammaire et le vocabulaire du grec mycénien*, Amsterdam 1976, p. 267 and n. 161; F. Bader, «Neutres grecs in -ti; absolutifs et privatifs verbaux», *BSL* 65, 1970, pp. 120-122; E. Risch, «Die Stoffad-

ed the meaning *zu zahlen*, construing the terms as forms of a verbal adjective in -τέον from the root of the alphabetic Greek τίνω³. This interpretation was later supported by Lejeune, who corroborated it with a comprehensive linguistic and contextual analysis of the words in all of the occurrences known at the time⁴. Following Lejeune, most scholars who have dealt with these terms seem agreed on the following points:

- 1) Each of the four terms represents the singular (-o, -jo) or plural (-a, -a₂) form of the same word.
- 2) This word is derived from the root **k^w(e)i-*, which is reflected in alphabetic Greek by τίνω ('pay') and related words.
- 3) The word is a verbal adjective of obligation (with the ending -τέον / -τέα) formed from this root, and hence,
- 4) the meaning is, approximately, 'due to be paid'.

I believe that all four of these assertions, particularly the last two, are highly questionable, and in order to demonstrate this, I present here a reexamination of the entire *qe-te-o* dossier and a reconsideration of the linguistic and contextual evidence for the meaning of the terms. Such a study is all the more timely in light of the publication by Piteros, Olivier and Melena of the inscribed sealings discovered in Thebes in 1982⁵. The inscriptions on these sealings include several new attestations of *qe-te-o* and *qe-te-a₂* in unprecedented contexts. Further impetus for a reconsideration comes from the recent work of William Gallagher, who has offered

jektive auf -ejos in Mykenischen», *Studies in Greek, Italic and Indo-European Linguistics Offered to Leonard R. Palmer*, edd. A. Morpurgo-Davies and W. Meid, Innsbruck 1976, p. 316; A. Heubeck, «Weiteres zur Datierung der Knossos-Tafeln», *ibidem*, pp. 99-100; J. T. Killen, «The Knossos Ld(I) Tablets», *Colloquium Mycenaeanum*, Neuchâtel 1979, pp. 169-170; J. Hooker, *Linear B: An Introduction*, Bristol 1980, pp. 65-66; E. Hamp, «KN L 693 QE-TE-O and MANTIS», *Minos* 19, 1985, pp. 51-53.

³ Mühlestein (*supra* n. 2). In fact, Mühlestein first proposes the interpretation *einzuschätzen* and only presents *zu zahlen* as a possible alternative; but it is this alternative that has won out in subsequent scholarship.

⁴ Lejeune (*supra* n. 2).

⁵ C. Piteros, J.-P. Olivier and J. L. Melena, «Les inscriptions en linéaire B des nodules de Thebes (1982): La fouille, les documents, les possibilités d'interprétation», *BCH* 114, 1990, pp. 103-184 (referred to hereafter as Piteros *et al.*).

a strong challenge to the accepted translation of the word *o-no*⁶, a word which occurs with *qe-te-o* on KN Fh 348, and which has often been cited in attempts to define *qe-te-o* by context. The doubts raised by Gallagher about the common interpretation of *o-no* as 'payment' have the further effect of undermining the standard translation of *qe-te-o* as 'due to be paid'.

I regret that I am unable to offer any new interpretation of *qe-te-o* and its relatives that rivals the simplicity and convenience of 'due to be paid', but I do hope that a reexamination of the evidence will clear the way for new paths of interpretation. After presenting the complete dossier of attestations, I shall deal first with contextual evidence, then with linguistic arguments for the meaning of the terms. Briefly, my conclusions will be as follows: While all four terms may be related, they need not be mere declensional variants of a single word. They are possibly reflexes of **kw(e)i-*, but it is considerably less likely that they are verbal adjectives of the *-τέον* type. Hence, even if they denote something relating to the idea of 'payment', there is insufficient evidence to determine the exact nature and status of this 'payment'.

I. THE *qe-te-o* DOSSIER⁷:

For the purposes of this section, I shall present the attestations of *qe-te-o*, *qe-te-a*, *qe-te-jo* and *qe-te-a₂* all together. As was mentioned above, the assumption that they are all forms of the same word will eventually be called into question. Beginning with the Knossos material, we find the largest uniform group of *qe-te-o* tablets is a set of five cloth records written by a single hand (Hand 209):

A) L(5) 513

.a	qe-te-o	TELA ² [
.b	po-po	TELA ² 4 [

B) L(5) 5092

.a	]	qe-te[-o
.b	]so	TELA ¹ [

⁶ W. R. Gallagher, «A Reconsideration of *o-no* in Mycenaean Greek», *Minos* 25, 1988, pp. 85-106.

⁷ Unless otherwise noted, the transcriptions reproduced in this section come from *KT⁵* for the Knossos tablets, *PTT* for the Pylos tablets, and Piteros *et al.* for the Theban sealings.

C) L(5) 7380 + 7500

.a]	qe-te-o	TELA ¹ 2[
.b]-ra/	TELA ^x 4	po TELA ^x [

D) L(5) 7834

.a	]qe-te-o	[
.b	] TELA ^x 10	[

E) L(5) 8441

.a]	qe-te-o	[
.b]-u	TELA 2	[

These five tablets follow the same format: *qe-te-o* indented on the first line followed by an ideogram and a quantity of cloth. The second line begins with a word followed by another quantity of cloth. The right edge of each tablet has been broken off, but in C, where it is best preserved, there is yet another cloth entry on the second line, this one prefixed with the abbreviation *po* (= *po-ki-ro-nu-ka?*). The most recent editors of the Knossos tablets also report traces of what might be *po* on the right edge of the second line of E, so it is possible that each of the five tablets originally contained an entry for *po*-cloth on the second line⁸.

The first word of the second line is completely preserved only in A: *po-po*, a word which has been interpreted as an anthroponym on the basis of several occurrences elsewhere⁹. It is possible that the corresponding words on the other tablets are anthroponyms as well. If we assume the *]-u* in E is the ending of a masculine singular anthroponym in -ευς, then it would have to be in the nominative case, and we might extrapolate that the rest of these supposed anthroponyms are also nominative.

The fact that *]-ra* is written in majuscule on C further suggests that it and the other supposed anthroponyms may apply to both lines on the rest of their respective tablets. If that is the case then one could argue that *qe-te-o* applies only to the entry on the first line of each tablet, since in A the only distinction between the two entries of *TELA*² is the fact that the first is preceded by *qe-te-o* and the second by *po-po*. If *po-po* pertains to both lines, then it is

⁸ I am indebted to Professor Melena for this suggestion.

⁹ KN L 567, 648; Ln 1586.2, Od 689, Xe 524. See Duhoux, p. 139 and n. 363; also *Lexicon*, s.v. *po-po*.

reasonable to conclude that *qe-te-o* somehow distinguishes the first entry from the second.

Killen has proposed that the L(5) tablets record cloth that is scheduled for disbursement from the palace to fabric workers. Since his arguments depend on his interpretation of *qe-te-o*, discussion of this theory will be reserved for the next section¹⁰. On the basis of this hypothesis, however, he proposes the restoration of *qe-te-o* on a further tablet recording the activities of Knossos' textile industry:

F) M 683

.1a	]	a-ze-ti-ri-ja	
.1b	qe-]te-o	o-nu-ke	LANA 9 M 2
.2	]	ti-mu-nu-we	*146 30

It is generally agreed that *a-ze-ti-ri-ja* refers to workers engaged in the finishing of cloth, a fact which ties in well with Killen's hypothesis regarding the L(5) tablets. Otherwise there is no more to recommend this restoration than there is in a number of other texts where fragments of what could be *qe-te-o* appear¹¹.

There is one further Knossian cloth tablet containing *qe-te-o*. This one, written by the same scribe (103) as M 683 (F), is peculiar in that it records both cloth products and quantities of bronze:

G) L 693

.1	ri-no , / re-po-to , 'qe-te-o' ki-to ,	AES M 1 [
.2	sa-pa P 2 Q 1 e-pi-ki-to-ni-ja	AES M 1 [

This curious tablet has been interpreted both as an evaluation of linen garments in terms of bronze¹² and as a record of metal used to transform the garments listed into plated armor¹³. Regardless of the relationship between the clothing and the ideograms, the position of *qe-te-o* on this tablet is somewhat unusual: it is written in small signs elevated well above the line with nothing

¹⁰ Killen, pp. 165-166, 169.

¹¹ E.g. KN C 917.1 and PY Xn 1342.1, both of which have *qe-]* following a form of *to-so* (*to-sa* and *to-so* respectively). Compare PY Fr 1206 (J below) where *qe-te-jo* appears after *to-so*. There is also PY An 724.8 which ends with *]**qe-]**jo* VIR 1. This tablet contains other bureaucratic terms: *o-pe-ro* (line 11), *o-no* (line 9). However, we have no way of knowing if *]**qe-* is the beginning of a new word, and even if it is, an anthroponym like *qe-ra-jo* or *qe-re-jo* would fit, and might conform better to the pattern of the tablet.

¹² Duhoux, p. 141.

¹³ *Documents*², pp. 320-321; Killen, p. 173.

underneath, while the words on either side, *re-po-to* and *ki-to*, are set squarely on the line¹⁴. There is plenty of room for *qe-te-o* on the line below, so the elevation of this particular word was not dictated by lack of space. Several scholars have argued or assumed that this peculiar layout indicates that *qe-te-o* serves as a general heading referring to all the items on the tablet¹⁵. There are, however, several examples of this scribal idiosyncrasy among the tablets written by Hand 103, and in none of these cases is it likely that the scribe intended the elevated word to stand as a general heading. On the contrary, in most instances it is clear that the elevation of a word serves only to limit its influence to what comes immediately after it. An excellent example of this occurs in the tablet we have just considered, M 683 (F): here, it is not *qe-te-o*, but the occupational term *a-ze-ti-ri-ja* which appears above the line. Instead of understanding *a-ze-ti-ri-ja* as a heading for the entire tablet, it seems preferable to connect the elevated word only with the quantity of *o-nu-ke* listed on line 1, and to connect the entry of *146 in line 2 to *ti-mu-nu-we*, a possible anthroponym which also occurs on KN Od(1) 539. The elevated word thus refers only to what directly follows, and this seems to hold true for other tablets where Hand 103 employs this particular format. For instance, in Ap 618, the scribe elevates the ethnic *do-ti-ja* and the toponym *56-*ko-we* immediately before ideograms for women, obviously in order to identify the women more specifically. Similarly, in various documents of the Lc(1) series, Hand 103 elevates such terms as *wa-na-ka-te-ra*, *pe-ko-to* and *pa-we-a* before the ideograms for cloth, while cloth of a different sort is listed on a second line¹⁶.

Hand 103 seems to use elevation to add information about an entry where further specification is desirable, much as a modern writer would use a footnote or parenthesis marks. If one considers the layout of *G* in this light, there is no reason to assume that *qe-te-o* refers to anything but the *ki-to* which immediately follows it. Consequently, this tablet can be compared to those of the L(5) series (A-E), where I have argued that *qe-te-o* pertains only to the first cloth entry on each tablet.

¹⁴ This is illustrated clearly by the photograph and drawing of this tablet in *CoMIK*.

¹⁵ Lejeune, p. 302; Duhoux, p. 141; Hooker, pp. 98-99; Hamp, p. 51.

¹⁶ E.g., Lc(1) 526, 527, 528, 531, 532, 540, 551.

The two remaining Knossos documents place *qe-te-o* and *qe-te-a* in the context of olive oil accounts. The first is considerably more complex than the cloth tablets we have just examined:

H) Fp(2) 363

.1	qe-te-a , te-re-no	OLE	[
.2	da-*83-ja-de / i-je-ro	s 2	ki-ri-te-wi-ja, [
.3	di-wo-pu-ka-ta	s 2	[
.4	]	<i>vacat</i>	[

The Fp(2) series from Knossos consists of this tablet and three other oil tablets which are tentatively assigned to the same hand (222). In other tablets of this series, we find a possible allative in Fp(2) 5504 (*a-ka-ta-ra-te-so-de*). Also, Fp(2) 5742 + 5476 + *frr.* contains what may be the vestiges of another allative in line 3, and in line 1 *su-ko-ne*, which is probably the dative form of the anthroponym *su-ko*, attested in KN V(3) 479.1. In *H*, the combination of the allative *da-*83-ja-de* with *i-je-ro* in line 2 suggests that we are dealing with a disbursement of oil for religious purposes. Like *su-ko-ne*, *i-je-ro* can be interpreted as a dative, as can *ki-ri-te-wi-ja* and the hapax *di-wo-pu-ka-ta*, both of which have been interpreted plausibly as religious titles¹⁷. Since *da-*83-ja-de* is in majuscule, it is possible that *i-je-ro*, *ki-ri-te-wi-ja* and *di-wo-pu-ka-ta* all designate specific destinations or recipients of the oil within *da-*83-ja. te-re-no*, the word which shares the heading with *qe-te-o*, is a hapax of obscure meaning and morphology, although Lejeune has suggested that it represents a descriptive genitive of τέρην, yielding the meaning «[oil] of fine [quality]»¹⁸.

The final tablet to be considered from Knossos has figured more prominently in discussions of the meaning of *qe-te-o* than any other single tablet.

I) Fh 348

.1	o-no , i-su-ku-wo-do-to ,	OLE 1	s 1
.2	qe-te-o , [te-o]	OLE 1	

The main reason that this tablet has received so much attention is that *qe-te-o* appears here in a position that seems parallel to

¹⁷ Cf. Duhoux, p. 140, n. 365. The case is stronger for *ki-ri-te-wi-ja*, forms of which appear also in KN E 777.1; PY An 607.1, Eb 321.A, Ep 704.4.

¹⁸ Lejeune, p. 302.

o-no. As was mentioned above, the supposed connection between *o-no* and *qe-te-o* has often been cited in attempts to define the latter term by context. More will be said about this connection below in the section on contextual analysis.

Some scholars have attempted to argue that *I*, like *H*, deals with religious dedications, but there is little evidence to warrant this conclusion. For instance, it has been suggested that the word in the erasure in line 2 was originally *te-o-i* and that it was mistakenly erased. If this was so, the oil in line 2 was intended for dedication 'to the gods' ¹⁹. The most recent redaction of this tablet, however, shows traces of what might be a '*qe*' under the '*o*' in *qe-te-o* ²⁰. It is thus likely that the scribe first wrote *qe-te-o* in the middle of the line, then decided to erase it and start again at the left margin. Palmer has also proposed taking the word *i-su-ku-wo-do-to* in line 1 to be a religious title ²¹, but there is no compelling reason why this word should not be a simple anthroponym, as it is more frequently interpreted. Altogether, the alleged religious aspect of this tablet is highly suspect.

There are only three representatives of the *qe-te-o* family at Pylos, compared to at least eight from Knossos. Two of the Pylian tablets, both by Hand 2, deal with oil, and the first of these deals also with religious matters:

J) Fr 1206

po-ti-ni-ja , a-si-wi-ja , to-so , qe-te-jo OLE + PA 5 v 4

K) Fr 1241

.1	]qe-te-jo , jo[
.2	OLE]! s[

The Pylos Fr series has many examples of oil being connected with religious entities of one kind or another; for example, Fr 343: *po-]se-da-o-ne*; Fr 1230: *di-wi-jo-de*. Finding *qe-te-o* in such a context —here with *po-ti-ni-ja*— provides a parallel for the religious dedications in KN Fp 363 (*H*).

¹⁹ Duhoux, p. 140; cf. *KT*⁴.

²⁰ *CoMIK* and *KT*⁵.

²¹ Palmer, pp. 312-313, followed by Derooy and Gérard, pp. 24-25, and M. Gérard-Rousseau, *Les mentions religieuses dans les tablettes mycéniennes*, Rome 1968, pp. 196-197.

The remaining Pylos text is by far the most complex record in the dossier:

L) Un 138

- .1 pu-ro , qe-te-a₂ , pa-ro , du-ni-jo
- .2 HORD 18 T 5 po-qa OLIV 4 T 3 V 5
- .3 VIN 13 OVIS^m 15 WE 8 OVIS^f 1 CAP^m 13 SUS 12
- .4 SUS + SI 1 BOS^f 1 BOS^m 2
- .5 me-za-wo-ni HORD 4 T 8 V 1 ka-pa OLIV 7

As in Fp 363 (*H*), we have a listing of several lines' length, and *qe-te-a₂* appears in the heading of it (vs. *qe-te-a* in the Knossos text); but unlike Fp 363, and unlike all the other inscriptions in the dossier, this tablet deals with a wide variety of goods rather than a single commodity. Crucial to the understanding of the inscription is the phrase *pa-ro* , *du-ni-jo* in the heading. Some have taken this to mean that the items listed on lines 2-4 were to be furnished by (more literally 'from') the person called *du-ni-jo*, while those in line 5 were to come 'from' *me-za-wo* (assuming that the force of the preposition *pa-ro* carries through to *me-za-wo-ni* in line 5). Under this interpretation the goods would be furnished by these contributors to the palace (*pu-ro*, line 1)²². Duhoux and Killen, however, prefer to interpret *pa-ro*, *du-ni-jo* as 'chez' *du-ni-jo* and *me-za-wo-ni* as 'to' *me-za-wo*²³. Duhoux accordingly describes the contents of this tablet as «une attribution faite par le ville de Pylos».

At issue here is the meaning of the Mycenaean preposition *pa-ro* when it is followed by the dative case. *me-za-wo-ni* is evidently dative, and while the case of *du-ni-jo* is ambiguous, it is certainly not the genitive one would expect in later Greek where *pa-ro* (= *παρά*) has an ablative connotation. Some have thought that in Mycenaean '*pa-ro* + dative' can sometimes be translated 'from'²⁴. Yet the meaning 'at' or 'chez' would suit most contexts and would be more in keeping with the use of the dative after *παρά* in later Greek. This would seem to favor the reading of Duhoux and Killen. As we shall see below, however, their interpretation entails certain difficulties of its own.

²² *Documents*², p. 220; Lejeune, p. 303.

²³ Duhoux, p. 142; Killen, p. 169.

²⁴ See F. Householder, «Pa-ro and Mycenaean Cases», *Glotta* 38, 1959, pp. 1-10.

Finally, there are the seven new attestations of *qe-te-o* and *qe-te-a₂* in inscriptions from the cache of more than fifty sealings found at Thebes. Naturally, these attestations were not available to those who previously examined the *qe-te-o* dossier²⁵:

- M) Wu 49
 .α OVIS^m *supra sigillum* E
 .β qe-te-o
 .γ a-ko-ra
- N) Wu 50
 .α CAP^f *supra sigillum* E
 .β qe-te-o
 .γ a-ko-ra
- O) Wu 63
 .α SUS^f *supra sigillum* E
 .β qe-te-o
 .γ a-ko-ra
- P) Wu 51
 .α SUS^m *supra sigillum* D
 .β te-qa-de
 .γ qe-te-a₂
- Q) Wu 65
 .α OVIS^f *supra sigillum* D
 .β te-qa-de
 .γ qe-te-a₂
- R) Wu 96
 .α SUS^f *supra sigillum* D
 .β te-qa-de
 .γ qe-te-a₂
- S) Wu 53
 .α BQS^m *supra sigillum* F
 .β qe-te-o
 .γ i-ri-ja

²⁵ Preliminary remarks on the Theban sealings, including transcriptions of some of the texts, were published by V. Aravantinos in several articles: «The Mycenaean Inscribed Sealings from Thebes: Problems of Content and Function», in T. G. Palaima, ed., *Aegean Seals, Sealings and Administration*, Liège 1990, pp. 149-174; «Mycenaean Place-Names from Thebes: The New Evidence», *Studies in Mycenaean and Classical Greek Presented to John Chadwick*, Salamanca 1987, pp. 33-39; «The Use of Sealings in the Administration of Mycenaean Palaces», in T. G. Palaima and C. W. Shelmerdine eds., *Pylos Comes Alive*, New York 1984, pp. 41-48.

Aside from the badly damaged Wu 53, where even the reading of *qe-te-o* is uncertain, these sealing inscriptions fall into two distinct groups. The first group (*M*, *N*, *O*) consists of inscriptions bearing the imprint of the seal 'E' on face α . Over this imprint is written the ideogram for an animal whose gender is specified. On face β we find *qe-te-o* and on face γ the term *a-ko-ra*. Elsewhere, *a-ko-ra* is found on two livestock tablets from Pylos (Cn 453 and 655) where it is always preceded by a genitive anthroponym and followed by a livestock ideogram and a numeral indicating a large number of animals. Accordingly *a-ko-ra* has generally been interpreted as some sort of 'herd', and the anthroponyms associated with it as the names of 'collectors', or persons responsible for the group of animals. In the Theban sealings, there is no anthroponym and hence no indication of whose 'herd' is being dealt with, unless, as the editors suggest, the impression on face α came from the seal of the 'collector' himself²⁶. The editors assert that seal 'E' came from a metal ring («sans doute en or»), and thus belonged to «un personnage de rang assez élevé»²⁷. One possible interpretation of these sealings, then, is that they record the delivery of livestock to the palace from the herds of the «collector» bearing seal 'E'. Without explicitly favoring this reading, the editors adduce a passage from the *Odyssey* where a pig is sent (putatively from the *a-ko-ra* of Eumaios) to the palace for the suitors' dinner (*Od.* 14.26-28)²⁸.

The second group of sealings (*O*, *P*, *Q*) likewise share a single seal impression ('D'), overwritten with a livestock ideogram on face α . Face β shows the word *te-qa-de*, and on face γ we find *qe-te-a₂*. As in *H*, we find *qe-te-a₂* (*qe-te-a* in *H*) accompanied by an allative. In these Theban examples, however, we are probably not dealing with a disbursement from the palace; instead the livestock is apparently coming 'to Thebes' (*te-qa-de* = **T^heg^wans-de*).

One of the most intriguing observations made by the editors of these sealings is of a striking correspondence between the number of animals registered in the entire cache of Theban sealings and those enumerated on Pylos tablet Un 138 (*L*)²⁹. To explain this correspondence they suggest that Un 138 records animals and other

²⁶ Piteros *et al.*, p. 148, n. 128; p. 176, n. 317.

²⁷ Piteros *et al.*, p. 148.

²⁸ Piteros *et al.*, p. 150.

²⁹ Piteros *et al.*, pp. 172-183.

commodities requisitioned for a religious sacrifice or banquet, while the Theban sealings represent an earlier stage in the bureaucratic procedure relating to the same sort of ceremony at Thebes. This theory may well be correct. Not only is the total number of animals similar in both sets of records, but the numbers of individual animals of each species and sex are also comparable. There can be few other reasons why two separate palace administrations would record such congruent collections of beasts.

Nevertheless, there are certain problems with this interpretation of the numbers of livestock. In particular it assumes that each sealing corresponds to one and only one animal, even though the editors themselves assert that the alternation between *qe-te-o* and *qe-te-a₂* represents the difference between singular and plural³⁰. Moreover, while all the commodities in *L* assumedly fall under the category of *qe-te-a₂*, only a handful of the sealings bear this term. Thus, for whatever reason these animal records were assembled, whether they included *qe-te-a₂* entries or not was apparently of incidental, not intrinsic, importance. So it is questionable whether the editors' theory is of much value in determining the meaning of *qe-te-a₂*.

II. CONTEXTUAL ANALYSIS:

In all, then, we have eighteen attestations of the *qe-te-o* family (nineteen if we count Killen's proposed restoration in *F*) occurring in seven different series of inscriptions. These inscriptions deal with various commodities: textiles (*A-E*, *F* [?], *G*), oil (*H-K*), livestock (*M-S*), and the diverse array of goods on *L*, which includes wine, grain and olives in addition to livestock. If we look for clues as to the function of these words, we note first of all that in Fr 1206 (*J*) *qe-te-jo* appears between *to-so* and the ideogram. This strongly suggests that *qe-te-jo* can serve to describe the commodity listed either as a noun in apposition or as a descriptive adjective. If this is true, the alternation between *-o/jo* and *-a/a₂* may represent a difference in gender or the distinction between neuter singular and neuter plural. It has been noted in support of the latter possibility

³⁰ Piteros *et al.*, p. 152, n. 166; they also interpret the alternation between *i-je-ro* and *i-je-ra* in the sealings as an alternation between singular and plural (p. 157).

that forms in *-o* and *-jo* occur with single entries of commodities measured by weight and volume, whereas *-a* and *-a₂* appear with multiple entries (*H*, *L*)³¹. The Theban sealings, moreover, provide definite evidence that the difference between *-o* and *-a₂* is not one of gender, since we find *qe-te-a₂* accompanying ideograms for male animals (*P*) and *qe-te-o* with ideograms for female animals (*N*, *O*).

If we accept that *qe-te-o* is somehow descriptive of the commodities in question, we can venture to say that since the term appears with a wide variety of goods it probably does not describe any intrinsic quality of the commodities themselves, such as their color or what they are made of, but refers instead to their bureaucratic or economic status. In most of the tablets *qe-te-o* etc., seem to apply to only one of a number of recorded items (*A-E*, *G*, *I*). In only three tablets is it likely that *qe-te-o* etc. pertain to all the commodities enumerated (*H*, *L* and *J* which has only one entry)³². This may indicate that *qe-te-o* is used to denote goods which have a status that is somehow exceptional or abnormal. The way the word is written on some tablets reinforces this impression. For instance, on the L(5) tablets (*A-E*) *qe-te-o* and the ideogram accompanying it are written above what appears to be the main line of text, and on L 693 (*G*) the word is elevated above the line.

Some of our inscriptions indicate that *qe-te-o* has some pertinence to the transfer of goods from one person or place to another. This is almost certainly the case with Fp 363 (*H*), with its allative *da-^{*}83-ja-de*. In this tablet *i-je-ro* in line 2 and the more obscure *ki-ri-te-wi-ja* and *di-wo-pu-ka-ta* may be in the dative case, thus denoting more specifically the recipients of oil transferred or due to be transferred. PY Fr 1206 (*J*) probably records a similar transfer. The Fr series in general deals with disbursements of oil from the palace, thus the names that occur on tablets like *J* probably indicate the recipients, rather than the source of oil. In this case the recipient is a divinity: *po-ti-ni-ja*, *a-si-wi-ja*. The Theban sealings bearing the form *te-qa-de* (*P-R*) indicate that *qe-te-a₂* goods can move in the other direction as well —toward the palace rather than away from it.

³¹ Lejeune, p. 304; Duhoux, p. 142.

³² This statement does not take into account the sealings, which quite possibly would have provided the raw data for a tablet similar to Un 138 (*L*). A tablet based on the Theban sealings, however, would have only a few of its items listed as *qe-te-o/a₂*.

The status of the goods in the rest of the texts remains unclear. In most cases the notion that the tablets deal with some sort of transfer cannot be ruled out, but many of the inscriptions could just as easily be inventory accounts recording the location of goods. Even if a transfer of goods is involved, it is usually hard to tell whether the items are moving from the palace or to the palace. In Fh 348 (*I*), *i-su-ku-wo-do-to* may indicate a recipient of the oil, but it may also designate its source. L 693 (*G*) contains no personal names or place names. One might assume that the palace is to be understood as the place involved, but the palace could be either the recipient or the location of the goods. It is unlikely that the palace is the source of a transfer of goods in this case, since there is no indication of the destination of such a transfer.

The interpretation of the L(5) tablets (*A-E*) within this framework is also problematical. If *E* is any indication, the personal names in this series are nominative, and this might lead one to assume that the people named are the sources of the *qe-te-o* cloth. On the other hand, the names might be written in the nominative case as syntactical headings, and the fact that one of them is written in majuscule (L[5] 7830) supports this possibility. Thus the names in the L(5) tablets could reasonably be interpreted as indicating either the recipients or the source of the cloth³³.

The one tablet where reference to some sort of transfer is most dubious is Un 138 (*L*). As was mentioned above, the phrase *pa-ro, du-ni-jo ... me-za-wo-ni* can be interpreted as 'chez' *du-ni-jo* and *me-za-wo*. But if this is the case, then the tablet records the location of goods rather than their transfer. If, on the other hand, *pa-ro* means 'from', then we are dealing with a transfer, and it would almost certainly be a transfer from *du-ni-jo* and *me-za-wo* to the palace. Duhoux and Killen's attempt to interpret the tablet as recording a transfer of goods *from* the palace *to* the two men is hardly tenable³⁴: If one interprets *pa-ro* in this tablet as 'chez', as does Duhoux, then the tablet cannot record a transfer, and the only way the tablet can refer to a transfer *to* the two men would be if the *pa-ro* phrase here assumes the function of a simple dative

³³ On Killen's interpretation of the L(5) tablets as recording the recipients of fabric, see below.

³⁴ Duhoux, p. 142; Killen, p. 169.

such as the datives hypothesized in *H*, *I* and *J*. I am aware of no instance in Mycenaean where *pa-ro* performs such a function³⁵.

The fact that *du-ni-jo* is a well-known name at Pylos does not do much to resolve the problem of whether *pa-ro* means 'chez' or 'from'. There seem to be at least four people with this name, a *du-ma* on An 192, a *te-o-jo*, *do-e-ro* on Eb 169 and Ep 704, one labeled *a-no-ke-wa* on An 192, and one labeled *ti-ni-ja-ta* on Fn 79. Since the *du-ma* is an official of relatively high status, it is possible that where *du-ni-jo* appears without title or qualification (Un 138, Ae 8, 72, 264, etc.), it is a reference to the *du-ma* of that name³⁶. If *du-ni-jo* in *L* is the *du-ma*, then it may still be the case that the tablet records disbursements *from* the palace administered or approved by the *du-ma*. Yet, if this is true, the destination of the goods is left unnamed, so it seems slightly more likely that *du-ni-jo* is being held responsible for the delivery of goods to the central authority. That the *du-ma-te* can be the source, or at least the middlemen, for deliveries to the palace is shown by PY Jn 829.

Leaving aside Un 138 as a *non liquet*, the evidence seems to indicate that the *qe-te-o* tablets can refer to some sort of transfer of goods. The recipients of these goods can either be divinities (*J*), individuals (*H*, *I* [?]) or the palace itself (*Q-S*). The standard connection of *qe-te-o* with the idea of 'payment' is compatible with this context, though nothing we have seen so far specifically demands such a connection.

It has often been argued that the assistance we need is provided by KN Fh 348 (*I*), where *qe-te-o* seems opposed to *o-no*, but the usefulness of this tablet in determining the precise meaning of *qe-te-o* has been overestimated. The dossier of *o-no/o-na* was examined extensively by Lejeune and others, and the consensus which developed asserted that *o-no* should be connected etymologically

³⁵ Householder (*supra* n. 24) cites a few examples where *pa-ro* + dat./loc. seems to be used in parallel with simple dat./loc., but in none of these cases is it likely that the dative serves as the dative of the recipient. For many of Householder's examples it seems that *pa-ro* was written in the first entry of the tablet, then omitted from subsequent entries by ellipsis (see PY Cn 45, 600). PY Fr 1184, which has *pa-ro* on the first line and a dative on line 3, probably refers to two different transactions; see C. W. Shelmerdine, *The Perfume Industry of Mycenaean Pylos*, Göteborg 1985, pp. 80-81.

³⁶ See M. Lindgren, *The People of Pylos*, Uppsala 1973, vol. 1, pp. 43-44; vol. 2, pp. 146-147.

with ὀνίνῃ and with the other well-attested Mycenaean terms *a-no-no*, *o-na-to*, and *o-na-te*. The definitions offered for *o-no* included 'ration', 'payment', 'consideration', 'benefit', and other similar concepts³⁷. On the basis of such definitions it was argued that since *qe-te-o* is parallel to *o-no* on Fh 348, *qe-te-o* must have an opposite connotation, hence, 'lack of payment', or 'to be paid'. One scholar even went so far as to claim that regardless of any linguistic considerations, the evidence of Fh 348 demands that we translate *qe-te-o* as 'to be paid'³⁸.

Such confident assertions are hazardous. First of all, because the meaning assumed for *qe-te-o* in Fh 348 has played a crucial role in attempts to define *o-no* by context, the argument is somewhat circular³⁹. Secondly, the simple fact that *o-no* and *qe-te-o* introduce two headings on a single tablet does not imply that they are necessarily opposite in meaning. If one examines the dossier of *o-no* one finds, for instance, KN Fh 347, where *o-no* is written parallel to *ku-pi-ri-jo*: both words occur between a dative anthroponym and a quantity of oil. Despite this apparent parallelism, which is no less marked than the parallelism of *o-no* and *qe-te-o*, no one has argued that *o-no* and *ku-pi-ri-jo* stand in any sort of opposite or reciprocal relationship. Even if we confine the discussion to bureaucratic or economic terms, we find *o-no* together with *o-pe-ro* on PY An 724, *a-pu]-do-ke* (?) on PY Un 443, and *e-qa-na* on PY Ua 158⁴⁰. Clearly, it is possible for two economic terms on one tablet to refer merely to two different economic situations, rather than opposite states of the same situation.

In his influential study of *o-no* Lejeune attempted to strengthen the case for the opposition between the two terms by noting a certain congruency in their dossiers, but in fact the differences between the way *o-no* and *qe-te-o* are used are more striking than the similarities, and such differences cast even further doubt on the idea that the two terms could pertain to the same bureaucratic

³⁷ See J. Chadwick, «Pylos Tablet Un 1322», in *Mycenaean Studies*, Madison 1964, pp. 21-23; Lejeune, pp. 287-312; Duhoux, pp. 131-134.

³⁸ Hooker, p. 67.

³⁹ See Lejeune, pp. 297-298, where he mentions three ostensibly economic terms which are associated with *o-no* on the tablets: *e-qa-na*, *qe-te-o*, *po-re-no*. Of these three, *qe-te-o* is the only one for which he can offer a confident definition. Thus the use of *qe-te-o* in delineating the semantic field of *o-no* is obviously of great importance.

⁴⁰ See Lejeune, pp. 298-301, on the possible economic import of *e-qa-na*.

operation. First, Lejeune claimed that both *qe-te-o* and *o-no* apply almost exclusively to the same three categories of goods: cloth, oil and «denrées diverses»⁴¹. The comparatively small size of the *qe-te-o* dossier limits the validity of such statements to begin with, and besides, the two dossiers are not as similar as Lejeune claimed. One wonders, for instance, whether «denrées diverses» form a legitimate category of goods. PY Un 138 (*L*) contains the only entry in this category for the *qe-te-o* family, and the commodities enumerated there include grain, wine, olives, sheep, goats, pigs, and cattle. Lejeune lists two *o-no* tablets under this category⁴². In PY An 35, one finds goats and wine once again, but one also finds figs, wool and the commodity *146, none of which occurs in *L*. In the other, PY Un 443, one finds grain, wool and *146. If the individual goods which make up the «denrées diverses» are of any importance, then the similarity between these two *o-no* tablets and *L* is not terribly striking.

Of course, Lejeune was writing before the discovery of the Theban sealings, where we find a fourth category, livestock alone, which is not represented in the *o-no* dossier. Even before the sealings came to light, however, other dissimilarities were noticeable: as Lejeune himself stated, for instance, there are no sure attestations of *o-no* on a tablet recording religious dedications⁴³. But *qe-te-o* is associated with religious offerings in PY Fr 1206 and KN Fp 363. Gallagher has pointed out additional dissimilarities: *qe-te-o* occurs with many kinds of animals, while *o-no* appears only with CAP^f; *o-no* is more often written in close association with ideograms than is *qe-te-o*, and there are no usages of *o-no* similar in syntactic complexity to *to-so*, *qe-te-o* (*J*) and *qe-te-a₂*, *pa-ro*, *du-ni-jo* (*L*)⁴⁴. Owing to the limited amount of data at our disposal, such differences cannot be overlooked.

Scholars who argue for the direct opposition between *o-no* and *qe-te-o* apparently have in mind the sort of relationship demonstrable between *a-pu-do-si* and *o-pe-ro*. The relationship between these two terms, however, is corroborated numerically, since the quantities of goods listed after *o-pe-ro* or *o* regularly represent the

⁴¹ Lejeune, pp. 296-297.

⁴² Lejeune, pp. 290-291.

⁴³ Lejeune, p. 293.

⁴⁴ Gallagher (*supra* n. 6), pp. 95-96.

difference between the quantities listed in assessment records and the quantities listed in inventory or delivery records, as in the PY Ma tablets. No such mathematical proof of the opposition between *o-no* and *qe-te-o* exists. Moreover, if *qe-te-o* really does represent an absence or deficit of *o-no*, it is surprising that Fh 348 is the only tablet where the two terms appear parallel. One would expect that in the better-then-twenty tablets on which *o-no* appears, *qe-te-o* would show up with a bit more regularity.

Thus, even if the possibility that *qe-te-o* is the opposite of *o-no* cannot be ruled out competely, one should feel neither confident in this hypothesis nor constrained by it. Gallagher's new proposal for the interpretation of *o-no* —that it means «ass-load» rather than «payment»— would, if correct, preclude any intrinsic opposition between *o-no* and *qe-te-o*, unless *qe-te-o* itself designates some sort of measure. Gallagher actually considers the possibility that *qe-te-o* in Fh 348 is a type of measure possibly related to the vessel designated *qe-to*⁴⁵. He ends up rejecting this notion as unlikely since *qe-te-o* elsewhere occurs with commodities which are not conducive to being measured in 'jarfuls'⁴⁶. Yet this may be one case where it is worthwhile to entertain the idea that *qe-te-o* need not mean the same thing on all the tablets. For those tablets where *qe-te-(j)o* is associated exclusively with oil (*H, I, J, K*), 'jarful' would be perfectly appropriate.

In any case, attempting to use *o-no* to identify the meaning of *qe-te-o* in general does not get us very far. Since *o-no* sheds no light on *qe-te-o*, we are faced with the regrettable conclusion that all the contextual evidence for the meaning of *qe-te-o* is equivocal. While 'to be paid' is certainly a possible translation, it is not the only possible translation. Moreover, even if one accepts this standard interpretation, further problems arise. One must ask just what it means to 'pay' something in the Mycenaean economic system, and how this sort of 'payment' relates to other concepts involved in the transfer and allocation of goods, concepts expressed by such words as *a-pu-do-si*, *do-so-mo*, *ta-ra-si-ja* and particularly *o-pe-ro*. One aspect of this problem is an apparent redundancy of terminology: if in fact *qe-te-o* does refer to a deficit which 'needs to be paid', then, as Killen has succinctly stated, «it is surprising that the

⁴⁵ This was previously suggested by C. Milani (quoted by Gérard-Rousseau [*supra* n. 21]).

⁴⁶ Gallagher (*supra* n. 6), p. 95.

term used... is not *o-pe-ro*. This plainly means 'deficit' in a large number of other contexts in the tablets, and it would be surprising if the palace had two different terms to express the same administrative reality»⁴⁷.

Killen's own solution to this problem is to suggest that whereas *o-pe-ro* indicates a «shortfall in a contribution or payment to the palace», *qe-te-o* denotes «a shortfall in contribution or payment *by* the palace»⁴⁸. It is with this hypothesis that Killen is able to assert that the individuals on the L(5) tablets are the recipients, rather than the source of the *qe-te-o* cloth.

Killen's hypothesis is compatible with many of the *qe-te-o* tablets since, as we have seen, many of them deal with disbursements from the palace. Also, Shelmerdine has argued that Killen's explanation works particularly well with PY Fr 1206 (J): since the amount of oil on this tablet is well above the norm for the Fr series, it is credible that the palace might have fallen behind on its disbursements⁴⁹. Once again, however, the Theban sealings have served to disprove what previously seemed to be an elegant hypothesis; three of them clearly show *qe-te-a₂* goods coming *to* the palace (P-R). We should also consider here the problems which were mentioned above with regard to Killen's interpretation of Un 138 (L). Here Killen is compelled by his own theory to translate *qe-te-a₂*, *pa-ro*, *du-ni-jo* as 'due to be paid to *du-ni-jo*'⁵⁰, but regardless of how one views the meaning of *pa-ro*, this cannot be correct. If one construes *pa-ro*, *du-ni-jo* as 'from' *du-ni-jo*, it would obviously run counter to Killen's hypothesis. But if one prefers the translation 'chez' *du-ni-jo*, this is also incompatible with Killen's suggestion. This is shown clearly by Killen's own analysis of Knossos cloth records, where he convincingly argues that such phrases as *pa-ro*, *e-ta-wo-ne* refer to cloth 'in the possession of' *e-ta-wo*, that is, cloth that has already been delivered and is no longer due⁵¹.

The problem of how *qe-te-o* is different from *o-pe-ro*, if *qe-te-o* means 'to be paid', is one that deserves attention. It is very pos-

⁴⁷ Killen, p. 169. Of course, one might consider the possibility that *o-pe-ro* specifies neutrally that something is 'owed', whereas *qe-te-o* 'to be paid' specifically stresses the obligation to make up such a deficit.

⁴⁸ Killen, p. 169 (italics mine).

⁴⁹ Shelmerdine (*supra* n. 35), pp. 80-81.

⁵⁰ Killen, p. 170.

⁵¹ Killen, pp. 160-161.

sible, perhaps even probable, that different categories of 'debt' existed in the Mycenaean system, even if we are unable to pinpoint the distinction between them. It is also possible that *qe-te-o* and *o-pe-ro* are essentially synonymous, and that the Mycenaean scribes possessed a certain amount of freedom in their choice of words. It is just as possible, however, that *qe-te-o* means something other than 'to be paid'. Although this meaning is not precluded by the contextual evidence, the contextual evidence does not demand or even strongly suggest this definition either. If a strong case is to be made for the interpretation of *qe-te-o* as 'to be paid', it must be based on linguistic arguments. But as we shall see in the following discussion, the linguistic evidence for the meaning *qe-te-o* is likewise ambiguous.

III. LINGUISTIC EVIDENCE:

The early suggestion that *qe-te-o* could represent **kwēi-teon*, the Linear B counterpart of a putative **τειτέον*, provided a seemingly simple and elegant explanation for the term. The convenience of this possible interpretation exerted a strong influence on subsequent scholarship and caused certain problems to be downplayed or overlooked altogether. **τειτέον*, of course, does not exist in alphabetic Greek as such, but we do have the compound ἀπο-τισ-τέον occurring twice in the preserved literature, the earlier attestation being in the *Lac. Pol.* of pseudo-Xenophon (9.5)⁵². This proves that a -τέον derivative of **kw(e)i-* is possible, and suggests that **kw(e)is-teon* (= **τεισ-τέον*) would be a better restoration of the hypothetical Mycenaean form. It does not prove that such a form existed in Mycenaean.

There is no major difficulty in positing a derivative of the root **kw(e)i-* in Mycenaean. No reflex of this root has been identified beyond doubt but there are a few possible examples, chief among which is *e-ke-ro-qo-no*, an occupational term that occurs several times in the Pylos personnel tablets. This term has been explained plausibly as **enk^beiro-kw oinoi*, 'wage earners', showing the o-grade of the **kw(e)i-* root⁵³. Another possible reflex is *qe-ja-me-no* on PY

⁵² Also Ael. Arist. 46.2.

⁵³ Palmer, p. 116; *Documents*², p. 161. This word occurs on Aa 777, Ab 6563, Ad 691.

Eb 294 and Ep 704, which has been interpreted as an athematic aorist participle of this root ⁵⁴.

The only plausible alternative to **kw(e)i-* that has been proposed is **gwhedh-* ⁵⁵. This root shows up in alphabetic Greek in θέσσασθαι and πόθος, but does not occur in Mycenaean unless *qe-te-o* corresponds to *θεσ-τέον. **gwhedh-* has not found as much favor as **kw(e)i-*, chiefly because the meanings associated with it in classical Greek, such as 'pray', 'desire' and 'regret', do not seem as well suited to the bureaucratic context of the tablets. According to Lejeune, all known reflexes of **gwhedh-*, in Greek and elsewhere, pertain to «la vie morale», and never to the technical jargon of law or economy ⁵⁶. Semantic categories are notoriously flexible, however, and it is hardly inconceivable that words associated with 'desire' could develop a special economic significance, even if that specialized meaning left no trace in later Greek. In a parallel case, one finds *e-u-ke-to* ('she claims') as part of the Mycenaean bureaucratic vocabulary, but in later Greek εὔχομαι becomes more and more confined to the vocabulary of «la vie morale» with the meaning 'pray'.

The semantic argument against **gwhedh-* is remarkably weak, and the only reason it has gained such currency is probably the fact that **gwhedh-* is simply less convenient. It takes some effort to imagine a derivative of **gwhedh-* with as immediate an economic signification as 'to be paid'. *Requiriertes*, Furumark's suggested translation for a derivative of **gwhedh-* is decidedly more vague ⁵⁷. Such inconveniences, however, do not justify abandoning the hypothesis, since what is vague to us was not necessarily vague to speakers of the Mycenaean dialect.

I would argue that the only real advantage which **kw(e)i-* has over **gwhedh-* is the existence of other possible derivatives of **kw(e)i-* in Mycenaean. If one is still impressed by the argument

⁵⁴ Lejeune, p. 300; Ruijgh, p. 376. Palmer (*Interpretation*, p. 416) also offered the translation ἐπίτεισις for the form *e-pi-qe-i-si* appearing on earlier transcriptions of KN Lc 561. Nowadays, both *KT*⁵ and *CoMIK* give the reading *e-pi-qe re-si*.

⁵⁵ This was first suggested by Furumark, *Eranos* 52, 1954, p. 42. It has also been proposed that the *qe-te-o* family represents forms of the word τέθος (*Documents*², pp. 220-221), but this word, which appears first in Callimachus, is likely to come from the same root as τέλος, which does not have an initial labiovelar (see Lejeune, p. 304).

⁵⁶ Lejeune, p. 305. His argument here has apparently been quite persuasive. Cf. Duhoux, p. 144, where he quotes Lejeune at length on the subject.

⁵⁷ Furumark (*supra* n. 55).

that derivatives of **g^wed^h-* pertain exclusively to «la vie morale», then one must keep in mind that the same is largely true of **k^w(e)i-* throughout most of its history as an Indo-European root. In early Greek, τίνω and its relatives are primarily part of the vocabulary of revenge and satisfaction for injustice⁵⁸. τίνω and ἀποτίνω in the active most often mean 'make atonement for a transgression'. In the middle, τίνομαι and τίνυμαι mean 'take vengeance for a transgression'. That this represents the original use of the words more closely than the neutral 'pay' is shown by the meanings associated with a number of Indo-European cognates, such as Sanskrit *cāyate* ('take vengeance') and Avestan *kaena* ('punishment')⁵⁹. In later Greek, τίνω does begin to be used in the more neutral sense of 'pay', but the meaning 'pay in atonement' continues to predominate. Correspondingly, in the language of civilized institutions, τίνω is often used in the context of fines and penalties. For example, ἀποτιστέον, where it occurs in pseudo-Xenophon, refers to the payment of a ζημία.

Thus, if one applies the same semantic logic to **k^w(e)i-* as is commonly applied to **g^wed^h-*, one must conclude that *qe-te-o*, if it is derived from **k^w(e)i-*, does not refer to a simple 'payment', but to the payment of some sort of fine or restitution. This would entail quite a different interpretation from the usual readings, but as we shall soon see, it is not an interpretation that should be rejected out of hand.

So far, then, we have two possible roots, **k^w(e)i-* and **g^wed^h-*. To either of these two roots, the standard interpretation would have us append a «gerundive» -τέον suffix, and here we encounter still greater difficulties. If *qe-te-o* is derived from **k^w(e)i-*, it presents the e-grade of the radical, whereas the zero-grade is expected with -τέον formations. This has daunted few champions of the *communis opinio*. Although **qi-te-o* (= *τι(σ)-τέον) would be less troublesome, it is frequently pointed out that the **k^w(e)i-* root sometimes forms other analogical e-grade derivatives where one expects the zero-grade⁶⁰.

⁵⁸ See, for example, *Iliad* 3.289, 20.260; *Odyssey* 8.348; Hesiod, *Theog.* 210, 472; Hdt. 1.123, 9.94.

⁵⁹ Cf. *Dictionnaire*, s.v. τίνω.

⁶⁰ Lejeune, p. 306; Duhoux, p. 146. For instance, ἔστεισις is attested in the Arcadian dialect at Tegea (*I.G.* 5.2.6.37) instead of the expected ἔστισις.

More serious problems begin when we consider that there are no firm examples of the -τέον formation either in Mycenaean or anywhere in Greek before the fifth century⁶¹. This fact raises the possibility that the -τέον formation is a later innovation, perhaps a secondary formation from verbal adjectives in -τος which often have a connotation of potentiality approaching obligation⁶². Lejeune's statement that «l'ancienneté de -τέος [sic] n'a donc jamais été mise en doute»⁶³, is not completely accurate⁶⁴. In fact, the only noteworthy argument for a pre-fifth-century heritage for the formation is based on a supposed etymological relationship with the Sanskrit «gerundive» forms -*tave* and -*tavyā*-⁶⁵. On the one hand, it is far from evident that either of these forms could be cognate with the Greek -τέον. The former is a declensional form of the Sanskrit infinitive in -*tu*; the latter is an adjectival derivative of the same infinitive and seems to have developed only late in the history of the language⁶⁶. On the other hand, it is absolutely clear that neither of these forms have anything to do with *qe-te-o*, since *qe-te-o* lacks the inherited /w/ implied by the Sanskrit forms. Either way it is problematic for the traditional interpretation: if -τέον is cognate with the Sanskrit forms, then *qe-te-o* is not a -τέον formation; if -τέον has nothing to do with the Sanskrit forms, the «ancienneté» of the -τέον suffix can indeed be called into question.

While these considerations do not completely rule out the possibility of a -τέον adjective, they at least entitle us to examine other

⁶¹ For Mycenaean, some examples of this formation have been suggested, but none of them is very plausible. *Documents*², p. 338 halfheartedly suggests that *a-te-re-e-te-jo* on PY Tn 996.1 means 'needing to be bailed out' (cf. Ruijgh, p. 242). Derooy and Gérard (*supra* n. 2), pp. 133-134, propose that *ki-ri-te-wi-ja* denotes a class of «super-esclaves» who are 'to be distinguished'.

For later Greek see E. Schwyzler, *Griechische Grammatik*, Munich 1939, vol. 1, pp. 810-811; C. Bishop, «The Greek Verbal in —TEO», *AJP* 20, 1899, pp. 1-21, 121-138, 241-253. The Hesiodic word φατειόν, found in the line-ending formula οὐ τι φατειόν (*Theog.* 310; *H.Sc.* 144, 161), is probably a product of metrical lengthening of φατός rather than an early example of a -τέον formation. Cf. the equivalent formula οὐ φατόν (*H.Sc.* 230; Pindar, *Ol.* 6.37; *I.* 7.37) and note the oxytone accent.

⁶² See P. Chantraine, *La formation de noms in grec ancien*, Paris 1933, p. 306. Examples of adjectives which have a sense of potentiality are θνητός and λυτός.

⁶³ *Mémoires* II, p. 305.

⁶⁴ See Bishop (*supra* n. 61), pp. 1-2.

⁶⁵ Schwyzler (*supra* n. 61).

⁶⁶ See W. D. Whitney, *Sanskrit Grammar*, Oxford 1950, pp. 345-355.

possibilities. If we are dealing with a verbal root in **k^w(e)i-*, then *qe-te-o* almost certainly represents a derivative of the root expanded with *-τ-*. Such derivatives of **k^w(e)i-* are plentiful in alphabetic Greek, including an agent noun in *-τα-* (τίτας), a verbal adjective in *-το-* (ἄτιτος) and an action noun in *-τι-* (τίσις < *τίτις). For **g^whed^h-* there is likewise the verbal adjective *θεστός found in the compounds ἀπόθεστος and πολύθεστος.

qe-te-o could not represent any of these words as such, but it could represent an adjectival derivative of one of them. In fact, the alternation between *-o* and *-jo* in *qe-te-o* and *qe-te-jo* is a frequent variation found in the endings of a large class of adjectival derivatives in Mycenaean⁶⁷. If *qe-te-o* is such a word, it is perhaps best to derive it from a verbal adjective or substantive in *-to-*, since there are plenty of examples of such words forming secondary derivatives, for instance, βρότειος from βροτός and στράτειος from στρατός. As an alternative, some have suggested that *qe-te-o* represents an adjectival derivative of a noun in *-ti-* formed by thematizing the e-grade of the suffix (**-tei-o-*), but I have yet to see any parallel offered for such a formation⁶⁸.

Regardless of how one derives the word, once one has called into question the *-τέον* formation, the interpretation of *qe-te-o* becomes much more problematic. Whereas the *-τέον* suffix produces a fairly precise connotation ('needing to be - -'), other verbal suffixes are capable of great semantic versatility. A substantive **k^wei-to-*, for instance, could mean 'something paid', 'something payable' or 'payment', while an adjectival derivative of this word could be anywhere in the semantic sphere of 'pertaining to payment'.

Several scholars have recently hypothesized that such an adjectival derivative is in fact the true origin of the *-τέον* suffix⁶⁹, and have thereby attempted to salvage the meaning 'to be paid' for *qe-te-o*. The only evidence for this theory, however, is the supposition that *qe-te-o* must mean 'to be paid', and the realization that the traditional etymologies for *-τέον* cannot explain the form of *qe-te-o*. Obviously, such an argument would only be valid if there were strong non-linguistic (that is, contextual) evidence that *qe-te-o* means 'to be paid'. As we have seen, there is no such evidence.

⁶⁷ Such adjectives are discussed in detail by Ruijgh, pp. 233-270 and Risch (*supra* n. 2).

⁶⁸ Lejeune, p. 305; Duhoux, pp. 143-144; Bader, p. 121; Ruijgh, p. 267, n. 161.

⁶⁹ Lejeune, p. 305; *Interpretation*, p. 261; Duhoux, pp. 163-4; Bader, p. 141.

One further problem arises from the curious assemblage of endings in the *qe-te-o* family: *e-o*, *e-jo*, *e-a*, *e-a₂*. The first three can be easily explained as normal declensional or orthographic variations in the *-e-(j)o-* adjectival endings, but *-e-a₂* cannot. Mycenologists have often denied this difficulty by stating that *-j-* was in the process of becoming an aspirate in the Mycenaean period, and that therefore *qe-te-a₂* is essentially equivalent to (non-existent) *qe-te-ja*, while *qe-te-o* and *qe-te-a* in fact represent *qe-te-ho* and *qe-te-ha*⁷⁰. Independent evidence for this change of *j > h* in Mycenaean, however, is rare, and it is limited to initial position, such as in the alternation between *ja-ke-te-re* and *a₂-ke-te-re*. I know of no evidence for this shift occurring intervocalically, and in any case, in the long list of adjectives in *-e-o/-e-jo* and *-e-a/-e-ja*, there is not a single example of the spelling *-e-a₂*⁷¹.

On the other hand, almost all the identifiable words ending in *-a₂* are plurals of s-stem nouns or adjectives⁷², and it is at least worth considering that *qe-te-a₂* is such a word. For a derivative from **g^wed^h-*, one could imagine a Mycenaean nominative singular neuter noun **k^wet^hos*, with a plural form **k^wet^he(h)a*. A similar derivative from **k^wei-* is harder to imagine, since it would require an expansion of the root in *-t-*, but there are a handful of parallels for neuter s-stems so formed, such as κλίτος, μάτος and *κτάτος⁷³.

Emmett L. Bennett, Jr. actually proposed this derivation for *qe-te-a₂*, long before the current orthodoxy was formed⁷⁴. One reason it found little favor was that while it did a good job of explaining *qe-te-a₂* and *qe-te-a*, it did not account for *qe-te-o* and *qe-te-jo* as elegantly. If all are forms of the same word, then *qe-te-o* and *qe-te-jo* could only be genitive. While all of the occurrences of *qe-te-o* and *qe-te-jo* come in contexts which would admit partitive or descriptive genitives, having different cases of a word appear in similar contexts seemed cumbersome to some⁷⁵. A more fundamental objection, however, arises from the fact that the form *qe-te-jo* cannot easily represent an s-stem genitive. For it to do so would mean that the Mycenaeans inserted a euphonic glide intervocalically

⁷⁰ Lejeune, p. 304; Ruijgh, p. 65; Duhoux, p. 143; Heubeck, pp. 99-100.

⁷¹ Cf. Ruijgh and Risch (*supra* n. 67).

⁷² Such as *pa-we-a₂*, *me-zo-a₂*, *no-pe-re-a₂*, *te-tu-ko-wo-a₂*.

⁷³ *κτάτος is implied in the form κτάτεσι found in Hesychius.

⁷⁴ Bennett, p. 45.

⁷⁵ Cf. Lejeune, p. 302.

to replace a lost aspiration (-*ejo-* < -*eo-* < -*eho-* < -*eso-*). While this is not inconceivable, there is not a single example of it happening in any of the identifiable genitives of Mycenaean s-stems⁷⁶.

Thus we find ourselves in something of a dilemma: *qe-te-o*, *qe-te-jo* and *qe-te-a* can be explained easily as adjectival derivatives, but *qe-te-a₂* cannot. *qe-te-a₂* (and *qe-te-a*) can be explained easily as an s-stem, but that causes problems for *qe-te-o* and *qe-te-jo*. Under these circumstances, the most economical path to take is to suppose that the four forms are not forms of the same word after all. One hypothesis might be that *qe-te-a₂* is an s-stem noun and that the other forms are adjectives derived from the same noun. There is nothing in the context of the tablets that precludes this possibility. In fact, it may be worth noting that the tablets which use *qe-te-a₂* (L, P, Q, R) either definitely or possibly record the transfer of goods to the palace, while the tablets recording the movement of goods from the palace (H, J, K, possibly A-E, I) use the forms *qe-te-a*, *qe-te-o* and *qe-te-jo*.

Such a hypothesis would explain the forms of the words, but once again it would do little to help us to a precise definition. We have a precedent for a noun and its adjectival derivative both serving as bureaucratic jargon in the pair *do-so-mo* / *do-si-mi-jo*, which Lejeune proposes to translate as 'contribution' and 'resulting from contribution' respectively⁷⁷. If for the sake of argument we adopt the derivation of *qe-te-o* from **k^w(e)i-*, then perhaps it is fair to hypothesize that *qe-te-a₂* similarly refers to 'payments' and that the other three forms denote 'resulting from payment'. Given what was said earlier about the original semantic associations of **k^w(e)i-*, one might even go so far as to translate *qe-te-a₂* as 'fines' and the others as 'resulting from fines'. With this hypothesis, the disbursement of *qe-te-a* and *qe-te-jo* goods to religious entities (H, J) becomes particularly intriguing. Perhaps certain goods collected by the authorities as recompense for transgressions ('resulting from fines') were earmarked for religious purposes. One thinks of the statues in Zeus' sanctuary at Olympia which were financed by the fines levied against those who cheated in the games⁷⁸. Whether these tablets provide evidence for the administration of justice in

⁷⁶ E.g. *pa-we-o*, *a-pi-me-de-o*, *pe-ri-me-de-o*, *wa-de-o*.

⁷⁷ See Lejeune, «ΔΟΣΜΟΣ et ΑΠΥΔΟΣΙΣ», *Museum Helveticum* 32, 1975, pp. 1-11.

⁷⁸ See Pausanias 5.21.2.

Mycenaean culture is, of course, impossible to say with any confidence. The scenario I have just described is simply an example of the sort of interpretation that can be performed within the bounds of the contextual and linguistic evidence.

IV. CONCLUSION

As I warned at the beginning, my conclusions are not such as to form the basis for a definitive interpretation of each and every occurrence of *qe-te-o*, *qe-te-a₂*, *qe-te-jo* and *qe-te-a* in the Linear B tablets. Yet they do allow us to see that the problems involved in interpreting these terms are very complex and will not yield one simple, elegant and universally applicable solution.

First, I have demonstrated that the current contextual and linguistic evidence makes it virtually impossible to interpret *qe-te-o*, *qe-te-a₂*, *qe-te-jo* and *qe-te-a* as inflectional forms of the same word: the variation in endings is not wholly consistent with any single type of word in Mycenaean. The root from which they are derived may be **kw(e)i-*; but **g^whed^h-* is also possible. The semantic objections against **g^whed^h-* are particularly weak and apply also to **kw(e)i-*. -τέον is only one of several possible endings hidden beneath the Linear B orthography, and thus any interpretation that depends on the specific connotation of -τέον stands on shaky ground. I have shown that it is feasible to consider that *qe-te-o* and *qe-te-jo* (and perhaps *qe-te-a*) are adjectival derivatives of a verbal adjective or substantive in *-to-*, while *qe-te-a₂* (and perhaps *qe-te-a*) is a plural form of an s-stem noun. Many of the inscriptions deal with the transfer of goods, so some concept of 'payment' may be involved. Yet the diversity of the sorts of records in which the *qe-te-o* family appears makes any such generalization hazardous. Given this diversity, it is even possible that *qe-te-o*, etc. might have completely different meanings in different series of tablets. Consequently we perhaps should not rule out the recently proposed translation of *qe-te-o* in Fh 348(I) as 'jarful'.

Calgary, Alberta PZN INT CANADA
University of Calgary
Department of Classics
2500 University Drive NW

WILLIAM F. HUTTON