

A study of the scribal hands of Knossos based on phylogenetic methods and find-place analysis

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PART II: EARLY, MIDDLE & LATE KNOSSIAN WRITING STYLES AND THE DATING OF THE KNOSSOS TABLETS

1. INTRODUCTION

In Part I, the Knossos hands were categorised according to whether the writing had an Early, Middle or Late Knossian style. In broad terms,¹ the three different styles can be associated with find-places as follows:

- The Early Knossian style is found in the Room of the Chariot Tablets.
- The Middle Knossian style is found on the tablets from the North Entrance Passage, Room of the Column Bases, Arsenal and the Corridor of the Sword Tablets.
- The Late Knossian style is found on most of the tablets found in the West & East Wings of the palace.

It has already been demonstrated that it is possible to divide the tablets into three groups, with contents which are, at most, only weakly linked (Firth 2002, pp. 260-269). In that study, the three groups were essentially the same as those given above although there were differences of detail because the earlier analysis did not have the advantage of using phylogenetic methods.²

It is clearly possible for there to be differences in writing styles that were in use at any given time. Therefore, in principle it is possible that all three of the above writing

¹ A more detailed description of the styles of tablet from each find-place was given in Part I, Table 4.

² The differences occurred because the Arsenal and *CoST* tablets were associated with the West Wing group of tablets rather than the *NEP* tablets, although the evidence for that was not very strong (see discussion below).

styles could have co-existed at the time when the palace was destroyed. This would be a somewhat surprising observation, because it would imply that there were three sets of scribes who were active at the same time within the limited area of the Palace but largely working in isolation from each other in terms of both the writing styles and the tablet contents.

It would be more readily understandable if the three different styles represented three different chronological periods. Such an interpretation would not only explain why there were three different styles representing separate stages in the evolution of the writing of the Linear B signs, but it would also explain the low levels of interrelationship between the three different groups of tablets represented by the three different styles. This interpretation is potentially very exciting, but it would first have to overcome many obstacles before it could be regarded as viable. Thus, Part II of this paper examines the validity of the hypothesis that there is a chronological separation between the Early, Middle and Late Knossian styles.

This discussion inevitably leads us back into the controversial area of the chronology of Knossos. We will also need to consider the numerous apparent anomalies that arise if we associate the Early, Middle and Late Knossian styles with separated chronological periods. We will also need to consider some of the underlying assumptions that have been used to date, for example, that *all* tablets were destroyed at the end of each annual cycle. The next section sets the scene by briefly outlining the discussion on the chronology of the Linear B tablets.

2. BACKGROUND DISCUSSION ON THE CHRONOLOGY OF THE LINEAR B TABLETS OF KNOSSOS

The dating of the Knossos tablets has been a controversial subject for over 50 years. Initially it was assumed that the bulk of the tablets were all part of the same archive (the “unity of the archive” hypothesis) and the debate raged around the single date of the archive. Following Popham (1970), the conventional view is that the bulk of the tablets date from early LM IIIA2. Hallager favours an LM IIIB date (1977). Raison (1978) adopted an intermediate position suggesting a transitional date between LM IIIA and LM IIIB. Although Palmer³ started the controversy by basing an argument on the relative dating of the contents of the Knossos and Pylos tablets, most of this debate centres on the dating of ceramics.

However, there has long been a feeling amongst Linear B specialists that the *RCT* tablets are in a different class to the other Linear B tablets at Knossos. Chadwick (1967, 1968) suggested that the *RCT* tablets could be practice tablets written by trainee

³ Summarised in Palmer 1963a, pp. 106-110.

scribes, although this suggestion did not find widespread favour. More recently, Driessen (1990) suggested that the *RCT* tablets pre-dated the bulk of the remaining tablets by up to two generations. His view is that there was an early destruction of the *RCT* and that the resulting debris remained intact throughout the remaining life of the palace. Indeed, Driessen (1994) went further and suggested that there could have been multiple destructions at Knossos. The suggestion that the *RCT* pre-dated the bulk of the Knossos tablets has generally found favour amongst Linear B specialists because it helps to rationalise the marked differences in style between the *RCT* and other tablets from Knossos and also the lack of interrelationship between the *RCT* tablets and the other Knossos tablets.⁴

In recent years, there has also been a debate arising from the similarity of hand 115 from Knossos and hand 115 from Khania (Olivier 1993, 1996; Palaima 1993). The accepted position is that the tablets of these hands were not the work of a single scribe. However, Driessen suggested that, in view of their similarity, the tablets of these two hands must be almost contemporary (i.e. within a generation).⁵

In this way the style of writing has had some influence of the dating of the tablets for Linear B specialists. However, some prominent archaeologists have not accepted this influence. It is worth considering here the objections that were raised by archaeologists who reviewed Driessen's book *An Early Destruction in the Mycenaean Palace at Knossos*.

Popham (1993) raised the objections that:

- The doors into the *RCT* were not shown as being blocked off in the excavation sketches as claimed by Driessen.
- Driessen had not correctly analysed the Rectangular Building.⁶
- Driessen did not give sufficient prominence to his discussion of Fp 48 (by hand 138), which according to Evans' *Handlist*, was found in the *RCT*.
- Driessen did not make a good case for the dating of the sealings (from the *RCT*) and stone vases (from the adjacent Room of the Stone Vases) to LM II.

Warren (1992) also raises objections to Driessen's discussion of the Rectangular Building. Hallager (2005) draws particular attention to the palm-print of R LAMBDA

⁴ However it should be noted that Erik Hallager cautioned against the view that the *RCT* tablets pre-dated the bulk of the Knossos tablets at the 12th International Mycenaean Colloquium in February 2006, particularly drawing attention to the apparent anomaly arising from palm-print R LAMBDA (see below). See also the discussion of the reviews of *RCTK* below.

⁵ *RCTK*, p. 9.

⁶ The Rectangular Building is also known as the Hellenic Temple or Temple of Rhea and was in the Central Clay Area to the south of the *RCT*. According to Driessen (1990, p. 100) the north wall of the Rectangular building was placed on top of the south wall of the *RCT*.

that, according to Sjöquist & Åström, there is “reason” to suggest appears on Xd 105 from the *RCT* and L 473 from Magazine IV.⁷ This is significant here because Xd 105 has an Early Knossian style whereas L 473 (hand 207) has a Late Knossian style.

Thus we have a situation where Linear B specialists would generally suppose that the *RCT* tablets have an earlier date than the remaining tablets but some prominent archaeologists disagree with Driessen’s analysis. It is important for us to highlight these objections to *Early Destruction* here because, if we are to use the phylogenetic analysis to suggest an earlier date for the *RCT* than for the remaining Linear B tablets, then it is necessary for us to be able to respond to such objections. Indeed the problems here are potentially greater because the phylogenetic analysis is not only suggesting a chronological separation of the *RCT* but also of the tablets with a Middle Knossian style from those of a Late Knossian style. Therefore, the next section explicitly addresses potential objections that would arise from anomalies (and apparent anomalies) if there was a chronological separation between the three different writing styles.

3. CONSIDERING ANOMALIES AND APPARENT ANOMALIES

In Part II of this paper, we are considering the hypothesis that there are chronological separations between Early, Middle and Late Knossian Linear B hands. As this is the first time this division has been proposed in such detail, it is inevitable that there will be a number of apparent anomalies and possibly some genuine anomalies arising from this hypothesis. These are important because the validity of this paper is reliant upon being able to give an acceptable explanation of all such anomalies. Therefore the aim of this section is to consider each of the anomalies and apparent anomalies in turn.

In practice, the clay sealings do not generate any anomalies. Firth (2002, pp. 263-4) lists the six seal impressions that were each found on sealings from different locations. All of these impressions appear in a Late Knossian context apart from the sealing of the contorted lion, which was found in a Middle Knossian context in the Corridor of the Sword Tablets (= *CoST*) and the Arsenal.

We should also note that the men’s names do not generate any significant anomalies. In this case, there is difficulty finding a significant link between the *RCT* and *NEP* and between these and the other major deposits (Firth 2002, pp. 267-8). Therefore, the outcome of the analysis of men’s names is broadly consistent with the outcome of the phylogenetic analysis, although such an analysis of men’s names is inevitably less precise.

⁷ Unless stated otherwise, all references to Sjöquist & Åström are to Sjöquist & Åström 1991. The word, “reason”, is given in inverted commas here because Sjöquist & Åström impose a specific definition on this term, which is discussed below, in Section 3.1.

This leaves two sources of apparent anomaly. The first source is where tablets that are associated with one writing style appear in a find-place that is predominantly associated with another writing style. The second source is where a palm-print appears on two or more tablets with distinct writing styles.⁸

3.1. *Anomalies associated with the Early Knossian Linear B style*

All of the Early Knossian hands were found in the *RCT*. There are three tablets that were recorded by Evans as being found in the *RCT* but which were not made from the same clay and not written by the 124-group of scribes, Fp 48, V 52 and U 96.⁹ It is almost certain that Fp 48 was an error in recording by Evans of a tablet that was (probably) found on the same day in the Clay Chest (since Fp 48 and many of the Clay Chest tablets were written by hand 138).¹⁰ Skelton (2008) has demonstrated that V 52 is widely separated from the *RCT* in the phylogenetic tree and was written by a hand analogous to 101 (i.e. Late Knossian style).¹¹ Thus, since it is highly likely that it fortuitously found its way amongst the *RCT* tablets its find-place should be regarded as uncertain.¹² U 96 has very few signs and it is not possible to associate it with a writing style, therefore there is no need for it to be considered further here since it does not represent an anomaly. If we accept that Fp 48 and V 52 are errors of recording by Evans in his *Handlist* then there are no find-place anomalies associated with the Early Knossian style.

However, there is a palm-print anomaly that has frequently been noted. According to Sjöquist & Åström, there is “reason” to suppose that palm-print R LAMBDA was found on Xd 105 from the *RCT* (written by hand 124-4) and on L 473 from

⁸ For completeness, we note here that Sjöquist found that there was “reason” to suggest that the same palm-print, L ETA, appeared on B 5749 (hand 106 from the *NEP*) and Od 5758. It has recently been proposed to re-classify the latter tablet as Dk(1) 5758 by hand 120 (Nosch 2007, p. 57). Since hands 106 and 120 are both *NEP* hands there is no anomaly associated with this palm-print.

⁹ Driessen 2000, p. 20 footnote.

¹⁰ Driessen 2000, p. 20 footnote; Firth 2002, p. 96.

¹¹ See also Chadwick 1968, p. 17.

¹² Firth 2002, p. 96. Note also the discussion by Gulizio *et al.* (2001 pp. 457-458) who draw attention not only to differences of writing style and clay composition but also to the presence of salt crystals on V 52 which differentiates it from the tablets of the *RCT*. In their paper, Gulizio *et al.* (2001) argued that, despite these important differences of palaeography and physical characteristics, on balance they believed that V 52 belonged to the *RCT* because it was a V-series tablet (cf. the Vc series by 124-scribes although, as they noted, it differs from these *RCT* tablets because it lists divinities and not humans). In addition they noted that it differs from tablets from the Clay Chest (which was put forward as an alternative find-place, cf. Fp 48). However, Gulizio *et al.* (2001) clearly pre-dates the publication of Skelton (2008) which emphasises once again the palaeographic differences between V 52 and the other tablets from the *RCT* and thus might reasonably be expected to modify the balance in their reasoning.

Magazine IV (written by hand 207). From the outset, Olivier doubted this finding because it was inconsistent with Driessen's proposals on the relative dating of the *RCT* and the other tablets found at Knossos.¹³

In the context of the present analysis R LAMBDA appears to represent a significant anomaly. This is because Xd 105 is an *RCT* tablet with writing in the Early Knossian style but L 473 was written by hand 207 and the writing has a progressive Late Knossian style. Therefore, it is worth considering in some detail why Sjöquist & Åström thought there was "reason" to suppose that the same palm-print was found on Xd 105 and L 473. Fortunately, their publications provide us with sufficient detail to be able to understand their reasoning.

Let us begin by considering the term "reason" used by Sjöquist & Åström. They define the term as follows: "'Reasons for thinking that the prints may have been made by the same hand' is not an inferior form of identification but rather a statement of a trend. In these cases, the comparative investigation has shown that the other 'flatteners' can very likely be excluded but that there are several signs which indicate that the clay tablet may be traceable to a certain 'flattener'. These signs are the appearance and extent of the papillary lines, the pattern formation and any corresponding details".¹⁴ In respect of R LAMBDA, Sjöquist & Åström wrote: "Right LAMBDA is identified by traces from the right hand's hypothenar zone, with the rather unusual pattern type 3".¹⁵

In this way, Sjöquist & Åström are very clear why they think there is "reason" for suggesting that the same palm-print is on tablets 105 and 473. It is because both palm-prints are of a rather unusual type, namely, a type 3 pattern on the hypothenar zone of the right hand and there are no contrary indications. We can list the tablets with palm-prints of this type using Sjöquist & Åström's Table I.

TABLE 1

Tablet	Scribe	Find-place	Notes
Xd 105	124-4	<i>RCT</i>	R LAMBDA
L 473	207	F3	R LAMBDA
L 588		F14	Rough papillary lines
Ak 610	103	F14	
Ga 1533	221	J4	ANON. IX
Xd 7978	124?	<i>RCT?</i>	

¹³ Olivier 1991, pp. 124-125.

¹⁴ Sjöquist & Åström 1985, p. 46.

¹⁵ Sjöquist & Åström 1991, p. 39. Sjöquist and Åström define "Hypothenar zone" and "type 3" in their earlier publication (1985, p. 23).

As can be seen from Table 1, there is only one tablet for which rough papillary lines have been noted (L 588) and it is worth emphasising that this note is not applied to R LAMBDA and ANON. IX. Thus, Sjöquist & Åström imply that there are at least 3 distinct tablet makers with a type 3 pattern on the hypothenar zone of the right hand¹⁶ and possibly 5 distinct tablet makers. So at first sight it seems surprising that Sjöquist & Åström regarded this type of palm-print as being “rather unusual”.

We can gain some understanding of Sjöquist & Åström’s reasoning by noting the passage where they estimate the numbers of scribes and tablet makers at Knossos.

Dr Olivier assumed that there were more than 75 scribes in the Palace of Knossos. In Sjöquist’s opinion, the combined numbers of scribes and flatteners could have been at most 50 people. A comprehensive evaluation might provide a basis for a more secure judgement of the number of people. Some clues would be given by the likely total number of tablets, and by the available working and living space for scribes and flatteners, the quantities of recorded items in relation to farmland and pasturage, the amounts of trade goods and offerings, etc. If there were, say, about 20 scribes, as many scribes/flatteners, and about 10 flatteners, they must have had a variety of such tasks to keep them occupied. The number of identified hands [i.e. hand prints] are 46. Some of these may belong to the same person, since right <and> left hand have been given different names.¹⁷

This passage is important because it gives a great deal of insight into Sjöquist’s methods of reasoning. He is (somewhat boldly) dismissing Olivier’s estimate of 75 scribes. This is because Sjöquist thinks that it is impractical to have such a large number of scribes and their associated flatteners working at the same time in the Palace of Knossos. Instead he is proposing a total of at most 40 scribes (by choosing to ignore the palaeographic evidence). He is also proposing a total of at most 30 tablet makers and suggesting that of these 20 would also have been scribes. Thus he estimates a total workforce of at most 50 people. He then had a logical problem because, on the one hand, he thought that it was practical to have at most 30 tablet makers at Knossos and, on the other hand, he had identified 46 named tablet makers and many unnamed ones (that are listed in Sjöquist & Åström Table I). This inevitably led Sjöquist to try to associate together some of the palm-prints even though there are not strong reasons for identity. It seems likely that, if Sjöquist had been told that the Knossos tablets could date from three separate time periods, then his practical estimate of the number of scribes would have increased to ~120 and his “reason” for suggesting that the same tablet-maker made 105 and 473 would have considerably diminished. On this basis, it is proposed that we should no longer give weight to Sjöquist’s suggestion that there is “reason” that the same palm-print appears on Xd 105 and L 473.

¹⁶ That is R LAMBDA, ANON. IX and the tablet-maker with rough papillary lines who made L 588.

¹⁷ Sjöquist & Åström 1991, pp. 44-45.

Before concluding this sub-section, we should also consider two further palm-prints. Firstly, tablet 7585 has the same palm-print, R PSI, which appears on Xd 7597 & 7614 from the *RCT*. This apparent anomaly has already been addressed by Olivier (1991, p. 125, FN 22) as follows, “il n’est pas du tout exclu que X 7585 soit une tablette de la “main” “124” (elle deviendra donc Xd 7585 [“124”?]”. Secondly, Sjöquist states there is “strong reason” to suggest that tablet 7930 has the same palm-print, L KAPPA, as Vc 7933 from the *RCT*. In this case, Olivier states definitively that 7930 is certainly not an *RCT* tablet written by one of the *RCT* hands. However, in practice, there is only one sign on 7930 and this is too little to identify the writing style and so this does not create an anomaly within the present discussion.

In this way, we have demonstrated that there are no inexplicable anomalies, based on the Linear B tablets themselves, arising from the suggestion that the *RCT* tablets pre-date the bulk of the Knossos tablets by a significant time period.

3.2. *Anomalies associated with the Middle & Late Knossian Linear B styles*

3.2.1. Western Magazines

There are a number of tablets that were found in the area of the Western Magazines that were written by *NEP* scribes. Since the scribes in the Western Magazines are predominantly Late Knossian and those in the *NEP* are predominantly Middle Knossian, this would appear to be anomalous.

The tablets in question are listed in the following tables.

TABLE 2a

Odd tablets found in West Wing	Scribe	Find-places for this scribe
B(3) 808, Dq(4) 686	106	F18, I3
DI(1) 463	118?	F3?, I3
Dk(1) 671	120	F15, I3

TABLE 2b¹⁸

Odd tablets found in <i>NEP</i>	Scribe	Find-places for this scribe
E 849	136?	E5, F15, G2, I1, I3?, J1
L 869	207	F3, H2?, I3
Dq(3) 1026	217	B4, ¹⁹ F1, I3

¹⁸ V 958 has not been included in the list of tablets by hand 101? in this analysis (see Part I).

¹⁹ B4 is the “Area Beyond W. Wall (i.e. Western Court)” and it is reasonable to assume that tablets from B4 and F1 originally were from the same cache (Firth 1998, p. 17).

We will appeal here to the discussion that is set out below in Section 4. It will be suggested there that it is unlikely that the *NEP* was ever a scribal centre. It is more likely that the West Wing became the scribal centre when the *RCT* fell out of use and that at some stage some of the tablets were collected together and stored in the *NEP*. According to this scenario, the tablets in Table 2a would have been odd pieces that were omitted from this transfer of tablets from the West Wing to the *NEP*. Similarly, a number of the tablets by hand 217 were omitted in this transfer.

This still leaves us with a small number of tablets included in Table 2b. If the above scenario were accepted then the tablets in the *NEP* would represent a range of dates because they are simply a collection of tablets that were no longer required in the West Wing and moved to the *NEP*. Therefore, E 849, L 869 and V 958 represent the most recent tablets in the group of inscriptions that were transferred to the *NEP*. It is likely that hand 136 (and possibly 207) were still active when the palace was destroyed, so according to this hypothesis, E 849 (and L 869) would be examples of earlier tablets written by these scribes many years before the conflagration.²⁰

Table 4 of Part I also includes a number of fragments which we can discuss here. According to the above hypothesis, X 410 (F2); F 452, X 459 (F3); X 7559, 7633 (F4) and Ak 640, Ap 5547, 8154 (F14) would also represent fragments of tablets that were left behind in the West Wing when the other tablets were cleared out. These are essentially scraps of tablets that we could readily suppose were hidden in dark corners of the work areas and forgotten.

3.2.2. Room of the Column Bases

Sjöquist & Åström state that palm-print L DELTA appears on Fh 360, 372, 5450 (written by hand 141 from the RCB) and that there is “strong reason” to suggest that it also appears on Ch 7065 (written by hand 110 and almost certainly found in the *NEP*). There is a very puzzling aspect to this “identification” because for 360 & 5450, Sjöquist is able to state clearly in Table I that the palm-print identified is pattern 1 on the hypothenar zone of the left hand. However, for 372 & 7065, in Table I, he is unable to give any details identifying the pattern of the palm-print, whether it is a print of the thenar or hypothenar zone of the palm or even whether the print was made by a left or right hand. From the outset, Olivier expressed doubt about the identification of L DELTA on 7065 (1991, pp. 124-5). In view of the level of Sjöquist’s uncertainty in the description of the palm-print on 7065 then it seems reasonable to share Olivier’s doubt. Nevertheless, we should stress that, even if we

²⁰ There is some doubt about whether hand 207 was still active when the Palace was destroyed because of the relatively small number of tablets by this scribe that were preserved.

were to accept Sjöquist & Åström's suggestion, this does not represent an anomaly within the present discussion, as hands 110 & 141 are both Middle Knossian.

3.2.3. Area around the Room of the Bügelkannes (I1, I4)

This find-place includes the Room of the Flower Gatherer and the Room of the Bügelkannes (both 1900 and 1901 seasons). The find-place information given in the excavation notes do not allow us to identify which tablets were found in Room of the Flower Gatherer and which tablets were found in the Room of the Bügelkannes during the 1900 season. However, we are informed that "Some tablets" were found in the Room of the Flower Gatherer and "Many tablets: much perished" were found in the Room of the Bügelkannes.²¹

This find-place contains a combination of tablets with a Middle Knossian style (Ap 769; B 755, 772) and tablets associated with hands that have a Late Knossian style (Ai(2) 762, E 749, Od 765). The simplest solution here is to assume that the tablets with one style were found in the Room of the Flower Gatherer and tablets of the other style were found in the Room of the Bügelkannes. Since the Room of the Bügelkannes was a small storeroom, then it is most probable that the Middle Knossian tablets were found here and the Late Knossian tablets were found in the Room of the Flower Gatherer.

Palm-print R TAU appears on V 756 (hand 125), L 758, K 773, 774, 776 (hand 224). From the point of view of the present analysis, this list does not contain any anomalies since we cannot identify with sufficient certainty the style of L 758 or the tablets by hand 224. Hand 125 has a Middle Knossian style. Clearly the presence of palm-print R TAU on these tablets would tend to suggest that all these tablets all date from around the same period.²²

3.2.4. East-West Corridor

There are three potential anomalies involving palm-prints on tablets associated with hand 117.

R PI appears on six sheep tablets inscribed by hand 117 but Sjöquist found "reason" to suggest that it was also on C 7698. Olivier has suggested that 7698 was by hand 110? (although this attribution was subsequently omitted in *KT4*, *KT5* and *CoMIK*) and also that it was probably found in the *NEP*.²³

²¹ Evans' *Notebook* for 1900 p. 67, reproduced as Plate XV of *OKTi*, see also Firth 2002, p. 217.

²² It is noted for completeness that Melena suggests that V 756 was probably found in the *NEP* and that there is an error in Evans' *Handlist* (Firth 2002, p. 97; see also Driessen 2000, p. 37).

²³ For Olivier's suggestion that 7698 could be attributed to scribe 110? see Godart *et al.* 1970, p. 165. For the probable allocation of 7698 to the *NEP*, see Olivier 1991, p. 126.

R YPSILON appears on Dv 7219 (117?) and Sjöquist found “strong reason” to suggest that it also appears on C 5734. According to Olivier, 5734 was probably found in the *NEP* and written by the same scribe as C 1044 (also from the *NEP*).²⁴

L ALPHA appears on X 38 from the S.W. Corner and on Mc 5124 from the Arsenal.²⁵ Sjöquist also found “reason” to suggest that it appears on Da 1299.

The number of examples here might suggest that there was a connection between some of the tablet makers of the *NEP* & Arsenal and those who made tablets for scribe 117. Since the palm-prints of a person remain unchanged during his adulthood, it is possible that the tablets for the *NEP* and Arsenal were made when R PI, R YPSILON and L ALPHA were youths but the tablets for hand 117 were made when these tablet makers were older. It is possible that L ALPHA could be the same person as either R PI or R YPSILON (since these are prints from left and right palms, respectively).²⁶ Thus, if we were to accept Sjöquist’s findings, the strict conclusion that can be drawn is that the time separation between the *NEP*/Arsenal deposits and the sheep deposit in the East-West Corridor is at most the maximum length of the adulthood of the tablet-makers R PI, R YPSILON and L ALPHA (say, 50 years). However, it will become apparent that this effectively does not present an additional constraint.

3.2.5. Corridor of the Sword Tablets

The tablets from *CoST* were written by hands 101, 102b, 105 & 126²⁷. Table 4 of Part I identifies hands 102b, 105 & 126 as Middle Knossian and hand 101 as Late Knossian, which would appear to be anomalous. The basis for including V 1523 by hand 101 in *CoST* is Evans’ *Handlist*, where tablets *SM* 1517-1529 were under the catch-heading “Near Sword Tablets”. However, at this late stage of recording tablets from the palace, the *Handlist* was maintained with less care than had been taken during the 1900 & 1901 seasons. In particular, the tablets did not have *Original Numbers* which would allow us to reconstruct the position of

²⁴ For the attribution of 5734 to the same hand as 1044, see Killen & Olivier 1966, p. 64. For the probable allocation of 5734 to *NEP*, see Olivier 1991, p. 126.

²⁵ It is interesting to note that Sjöquist originally appears to have set up his spreadsheet using *KT3* (1964) and then later attempted to correct it to a more recent version of *KT*. This can be deduced from uncorrected references to Og 425, 426, 427 etc. on p. 39 (and also in Table II). It is also worth noting that, in the text, Sjöquist does not refer to 5124 but to 5809.

²⁶ It is even possible that some of these prints could have belonged to scribe 117 himself, when he was making tablets for others whilst he was serving his apprenticeship and learning how to be a scribe. This is, of course, speculative but it is quite plausible.

²⁷ Firth 2002, p. 249. This list might have included 221? but doubts have been expressed about this (Firth 2002, p. 250) and so it has been omitted. Further, the list refers to 102b, rather than 102?; see the discussion on 102a & 102b in Part I.

this tablet in the *Original Handlist* before Evans began the re-numbering and re-ordering of the tablets. According to *OKTi* (p. 33), tablet 1523 appears by itself on a loose-leaf pasted up page with no indication of find-place on that page. The most straightforward way to correct the present anomaly is to suggest that V 1523 might not have been found in *CoST* but that Evans might have inserted the loose leaf page into the wrong position in the *Handlist*.

3.2.6. Area of Clay Signet Room

There is an apparent anomaly here because one tablet was written by hand 102b, which is Middle Knossian, and other tablets are written by Late Knossian hands (117?, 135? and 215). However, these tablets were found separately. B1055 (hand 102b was found in the Room of the Clay Signet whereas D1 1060 (hand 215) and Dp 1061 (hand 117?) were found in the area south of the Signet Room. Thus, there is not an anomaly as B 1055 could simply be the remains of an old tablet that was fortuitously not destroyed by the scribes at the end of the annual cycle.

3.2.7. Conclusions of Section 3

We have demonstrated that, if a hypothesis was proposed that there was a significant chronological separation between the Early, Middle and Late Knossian styles, then this hypothesis could not be discounted by examining the potential anomalies that would arise. In other words, there is a plausible series of arguments to counter all of the apparent anomalies.

It is significant that our attempts to divide the Knossos tablets into three separate groups have generated a relatively modest list of apparent anomalies and this itself can be taken as a positive indication.

The next section attempts to construct a plausible explanation for the finding of tablets at Knossos with widely differing styles.

4. CONSTRUCTING A PLAUSIBLE EXPLANATION FOR THE FINDING OF TABLETS WITH WIDELY DIFFERING STYLES

The results of the phylogenetic analysis inevitably open up the complex debate on the dating of the Knossos tablets. It is beyond the scope of this paper to try to rationalise the whole of the dating evidence for Knossos in a comprehensive survey. It is judged to be sufficient to demonstrate here that it is possible to provide a plausible scenario that is compatible with most of the data. At this stage, this should be regarded as a working hypothesis.

Driessen (1994) has already proposed one explanation for finding widely different styles at Knossos. He suggested that these might have arisen because there were multiple conflagrations with different groups of tablets being preserved in each conflagration. However, it is difficult to accept this because it seems implausible that piles of debris from earlier destructions remained intact for up to two generations whilst the life of the palace continued around them. Therefore, instead of appealing to multiple conflagrations we will set out a different possible explanation.

The palace at Knossos was a large building with a very large number of rooms and many storage areas. Let us consider the possibility that there could have been forgotten fragments of tablets or caches of tablets stored in the building that remained untouched for many years. If this were correct, when the palace was destroyed by fire, the conflagration would have fired recent tablets and old tablets alike. Archaeologists refer to items that are stored beyond their period of manufacture as heirlooms, implying that they had a special value. We are not suggesting here that the old tablets had any particular value; simply that they were left forgotten in unused parts of the palace. Stated more generally, if the same large building has been continuously occupied for the same purpose for a long period today it would not be unusual to find caches of relatively unimportant documents that date back over many years.

The Room of the Chariot Tablets would be one such forgotten area. This might have been forgotten because its particular scribal activity of allocating a specific set of military equipment had been completed or because it had been moved to a more suitable location or because there had been some damage to the structure of the building and continued use of the *RCT* was undesirable. We should note that such an explanation does not require us to consider the blocking of doors and the date of the Rectangular Building, which were raised in the reviews of *Early Destruction*. Furthermore, we have already considered Fp 48 and palm-print R LAMBDA that were raised in those reviews (see Section 3).²⁸

The North Entrance Passage would be another forgotten area once it had been blocked off in LM IIIB.²⁹ In the case of the *NEP*, it is most unlikely that it was ever used as a scribal area because of the gradient of the passage, but it could have been used as a storage area for tablets that might have seemed “worth keeping” at one time and then became forgotten. If the *NEP* tablets were kept in this way, then care

²⁸ Popham (1993) raised the additional objection to *An Early Destruction* that Driessen did not make a good case for the dating of the sealings and stone vases to LM II, implying that Popham would prefer to date them to the destruction in LM IIIA in-line with his paper (Popham 1970). In this paper, we will suggest an LM IIIA1 date for the *RCT* tablets and thus avoid this objection (see Section 5).

²⁹ See Firth 2002, pp. 220-226 for a discussion of the *NEP*.

should be taken before dating them according to the various items that were stored with them.

Thus, if we permit ourselves to allow the possibility that the palace of Knossos contained a number of stores of old tablets, then we have the beginnings of an explanation for the co-existence of tablets with widely differing styles. However, before going further, we should consider the likelihood that the palace contained stores of old tablets.

Hitherto, it has generally been assumed that each year *all of the tablets* were destroyed and the clay was “re-cycled”. However, this would suggest that the Linear B scribes of Knossos were Bronze Age heroes of scribal organisation and practice, attaining exceptional levels of efficiency and tidiness that most of us are unable to achieve today!³⁰

It was already noted by Firth (2002, p. 174) that the tablets from Magazine IV are a miscellaneous group of inscriptions that do not appear to be part of a larger coherent archive, suggesting that they could be the remains of archives from previous years. We also have Popham’s description of the distribution of Linear B tablets at Knossos, which implies a degree of untidiness,

scribes and archives spread over large areas of the Palace and in unexpected places. It is somewhat reminiscent of, say, the Ministry of Supply, evacuated from London during the last war and accommodated in one of the stately country houses of Britain, with clerks sitting in the ballroom (with its tapestries still hanging on the walls) and in alcoves along the corridors filing cabinets and all, amid the ancestral possessions of the owners.³¹

Instead of assuming that the scribes were perfectly organised, it is highly likely that they were no better at maintaining order in their offices than most of us are today. Let us assume that the scribes tried to maintain order by destroying most of the tablets each year, but that it was not unusual for some tablets to remain intact either because they were still required or because they were overlooked. We should note that tablets could have been overlooked simply because some sets of tablets were left on the shelves or because a few tablets had been dropped on the floor and broken, leaving forgotten fragments in dark corners. Such assumptions would seem to be readily acceptable.

Now let us extend these assumptions further. It is clear that the West Wing was an important area for scribal activity. Let us assume that the number of these old tablets steadily accumulated in the West Wing year after year until at some point it was decided to clear out all the old tablets (and boxes of tablets) and put them in

³⁰ Note also that there is evidence that a small number of tablets at Pylos pre-dated the bulk of the archive (Palaima pp. 164-165; Skelton 2008).

³¹ Popham 1987.

a storage area (i.e. the sealed off passage which had once been the *North Entrance Passage*). In principle, the scribes could have destroyed these tablets, but caution prevented their wholesale destruction “just in case” there was something important amidst these old inscriptions. In this way, a miscellaneous assemblage of tablets (and boxes of tablets) would have been transferred from the West Wing area into storage in the *NEP* and then forgotten. Such tablets would not form a coherent archive and they would not have been written in the same year. Instead, they would be a random cross-section of the work of the scribes over a number of years. The small number of miscellaneous fragments and tablets written by *NEP* scribes that remained in the West Wing area were simply odd pieces that were overlooked during the clearance.³²

This line of assumptions could be described as “imaginative” but, nevertheless, it seems very plausible. Essentially it is being proposed here that we should not be treating written documents as though they were everyday items like pottery. We should accept that documents could be retained for complex reasons that we cannot hope to ascertain in any detail. If we can accept a scenario of the kind set out above, then it is possible to begin to explain the results of the phylogenetic analysis that were derived in Part I.

Having shown that it is plausible that the Knossos deposit can be separated into three chronological groups, the next step is to try to attach dates to the three different Knossian Linear B styles.

5. ATTACHING DATES TO THE THREE CHRONOLOGICAL GROUPS

It has been demonstrated that there are no insurmountable anomalies (in terms of find-places, palm-prints, sealings and men’s names) in accepting the hypothesis that the Early, Middle and Late styles occurred at different periods. The purpose of this section is to attempt to associate dates with each of these styles and to consider how these dates would fit in with the wider discussions on the chronology of Knossos.

On the basis of the phylogenetic studies to date, we can equate:

- The dating of the writing style of the Middle Knossian Linear B hands with the LH IIIA2 tablet U1 2 from Petsas House, Mycenae (Skelton 2008).³³

³² This could provide an explanation why two parts of the same tablet (D 411 + 511) were recorded as having been found in completely different locations. According to Evans’ *Handlist*, 411 was found in the *NEP* and 511 was found in Magazine VIII. It had previously been suggested (Firth 2002, p. 96) that this was probably due to an error in the *Handlist*. However, these diverse find-places are no longer improbable if the assumption set out in the main text is valid.

³³ Note that the dates of LH IIIA2 coincide with those for LM IIIA2 (Warren & Hankey 1989, p. 169).

- The dating of the writing style of the Late Knossian Linear B hand 115 with the LM III B1 Khania hand 115 (Driessen 2000, p. 9, Skelton 2008).

The Early Knossian style pre-dates the Middle Knossian (LM IIIA2) and post-dates Pylos hands 13 and 91 (see Skelton 2008a and Part I of this paper). However, since we do not have firm dates for these Pylos hands we are unable to use them to provide a reliable date for the Early Knossian style in this way.³⁴ An alternative way of dating the Early Knossian tablets from the *Room of the Chariot Tablets* is to consider the sealings. Weingarten (1988) gives the dates LM II or early LM IIIA1 based on the shapes of the sealings. Driessen (1990, pp. 65-66) gives the dates of the motifs of the sealings (following Pini and Younger), which are consistent with an overall date of LM IIIA1 for the tablets of the *RCT*.³⁵

Part III of this paper will present another way of examining this question using an extended phylogenetic analysis that considers the rate of evolution of the scribal hands and, in this way, proposes specific dates for scribal hands. The findings from that analysis are broadly consistent with the results of the above analysis.

We should now consider whether there are any anomalies arising from these periods.³⁶ It is clearly beyond the scope of this paper to try to unravel all of the long-standing debate on the chronology of Knossos. We will limit ourselves to discussing

³⁴ In principle, we could try to date the *RCT* tablets by noting that they post-date the Pylos tablets written by hand 13. If we pursue this, then the most obvious period to associate with hand 13 would be the start of LH III B, when the palace at Pylos was reconstructed (Shelmerdine 1998, p. 81; by assuming that the tablets by hand 13 were included within the rubble used for the building). However, this would imply that all the Knossos tablets were LM III B. But this is not consistent with the LM IIIA2 date for the Petsas House tablet from Mycenae. It seems more likely that the tablets of hand 13 were indeed part of the rubble, but that this rubble was being re-cycled from an earlier construction of the palace at Pylos. Skelton (2008) pursued a different course by highlighting Palaima's observation that Pylos hand 91 appeared to be associated with wares of Mycenaean LH IIIA (Palaima 1988, p. 113). In Skelton's analysis, hand 91 and hand 13 both predate the *RCT* scribes. Although this is an interesting observation, it would appear to be indicative rather than a well-defined dating of these hands.

³⁵ In principle, the sealings could have been substantially older than the seals used to make them. However, Hallager (2005) notes that these sealings are physically different from those used in the Minoan period and in LM III B/LH III B (cf. Weingarten 1988). However, he places emphasis on the palm-print of R LAMBDA as a basis for not accepting a major difference in time between the *RCT* and the remaining deposits of Linear B tablets. This leads him to have to speculate that the *RCT* sealings were kept as examples of "archaic" scribal practice. Following the present re-evaluation of R LAMBDA in Section 3, we can date the *RCT* tablets to LM IIIA1 without the need for such speculation.

³⁶ For completeness, we should note that these periods are consistent with the conclusion in section 3.2.4 with regard to the difference of up to 50 years between the *NEP*/Arsenal deposits and those in the East-West Corridor.

aspects that relate directly to the Linear B tablets and leave it to others to tackle the larger debate. Furthermore, we will not try to engage with all of the players in the lengthy debate on the chronology of the tablets, but concentrate attention on the writings of Popham, who favours an early LM IIIA2 date for the tablets, and Hallager, who favours an LM IIIB date.³⁷

Both Popham and Hallager agree that there was a fire in the Palace of Knossos in the early part of LM IIIA (Popham 1970, p. 85; Hallager 1977, p. 50). According to Popham (1970 p. 85),

Thereafter the Palace lay for a while in ruins until possibly late in the IIIA period or early IIIB when certain outlying rooms and some of the houses were reoccupied. There was no wholesale clearance of the buildings; large areas were left choked with their earlier IIIA destruction debris and only here and there, mainly on the outskirts of the Palace, where perhaps reconstruction and access were easiest, were groups of rooms cleared out and patched up. Occasionally, as seemingly in the case of the Domestic Quarters, reoccupation was concentrated at a higher level much of which has subsequently eroded away. The mass of late pottery in this region, and its character, strongly suggests some connection with worship at the Shrine of the Double Axes and it may well be that much of the reoccupation and its stores of pottery, some of it unusual in type, had a similar religious association. This partial occupation came to an abrupt end towards the end of the IIIB phase.

Hallager (1977) challenges a number of the statements made by Popham. He demonstrates that there was extensive re-building work in the West Wing after the fire in the early part of LM IIIA. By considering the distribution of intact and complete LM IIIB vases, he demonstrates that the occupation after the fire included the central part of the Palace and so was not confined to rooms on the outskirts of the Palace, as asserted by Popham. However, there is agreement that this final phase of occupation was terminated in the LM IIIB period (although Hallager suggested that it is possible that the shrine of the Double Axes continued in use after this period). It is useful to include a part of a summary statement describing Hallager's views (1977, pp. 86-87),

It is obvious that very extensive works took place in the West Wing of the Palace in the early III A period. ... It is also obvious that the West Wing of the Palace before this destruction contained a relatively great amount of fine decorated pottery, most outstanding the Palace Style Jars, since several fragments of these were found in the ... sealed deposits. It is therefore necessary to imagine that the destruction caused extensive damage to the upper storie(s) of the building. The fragments of roofs, walls,

³⁷ For completeness, we should note that Popham was not in agreement with many of Hallager's conclusions (Popham 1979).

broken pottery etc., which was the result of this damage was later, partly used as fill in the floor-cists in the basement and partly as fill in the rebuilding of the walls and floors at the upper floor level(s) and partly shovelled out over the south slope from which area most sherds from Palace Style Jars are said to have been found.

The changes which happened in connection with the rebuilding of the West Wing indicate also a change in the function of this part of the Palace. The different Linear B archives which belong to the final destruction also clearly indicate that the West Wing when it was finally destroyed *mainly* functioned as “offices”, magazines and perhaps workshops. In a building of this kind one would not expect great amounts of fine decorated pottery.

Thus, Hallager’s interpretation of the archaeology would be consistent with the dates deduced for the different writing styles. In particular, a destruction in the early part of LM IIIA (after which the *RCT* was abandoned) followed by rebuilding on the upper floor of the West Wing (after which it became the main focus for scribal activity), with a final destruction in LM IIIB.³⁸

The Arsenal is sufficiently separated from the Palace that its destruction could have occurred at a different time. The ceramic dating evidence for the Arsenal is poor. According to Evans (1904, p. 62), LM II sherds were found. However, it is evident from the writing style of the Arsenal tablets that the destruction was later than LM II.³⁹ It follows that, in practice, the style of writing on the tablets provides the best evidence available for the dating of the destruction of this building.

We should also note one other piece of evidence on chronology. Popham (1988) argues against the Linear B tablets dating from the 13th century because they contain listings of chariots, corselets and swords whereas there is an absence of such evidence for such military power in the archaeological record of Crete. The situation regarding swords is summarised by Macdonald (1984) as follows,⁴⁰

After the destructions in Crete and the Islands around 1450 B.C., the Knossian palatial administration was apparently controlled by Mycenaean, possibly from the Argolid, who spoke a form of Greek. Knossos, however, remained the artistic and technical innovator, one aspect of which was represented by the Knossian workshop which produced the finest swords and spearheads in the Aegean from LM II to IIIA2. At Knossos, these weapons occur in graves which could represent officers in

³⁸ Hallager was later reported (by Malcolm Weiner, *priv. comm.*) as favouring a date for the destruction of the Knossos tablets at the transition between LM IIIB1 and 2, around 1250 B.C., at the approximate time of the abandonment of Kommos. This date would be consistent with the similarity in writing styles between hands 115 from Knossos and Khania.

³⁹ Driessen (1996) adds the information that “later sherds were apparently also collected”.

⁴⁰ We would like to thank Malcolm Wiener for drawing our attention to differences in sword production in LM IIIA and LM IIIB (*priv. comm.*).

the Knossian military organization. ... After LM/LH IIIA2, a decline is apparent in many crafts including bronze-working. The uniformity of sword-types disintegrates during LH IIIB, so that by the twelfth century every Aegean sword “appears to be *sui generis*”.⁴¹ This suggests a greater number of weapon workshops after LM/LH IIIA2. It has been suggested that the standardization of sword-types in the late fifteenth and early fourteenth centuries was due to the Knossian workshop which produced the finest sword-types of types C, D, and Gi. It is tempting to associate the later lack of uniformity and general decline in bronze-working with the destruction of that workshop and the extinction of its workmen in LM IIIA2. Similarly, the absence of warrior graves in the Knossos area after that time might indicate that the Knossian military organization had ceased to exist.⁴²

This picture is in complete agreement with our findings following the phylogenetic analysis. This is because we have assigned the militaristic *RCT* tablets to the LM IIIA1 period, and the Arsenal tablets, together with the sword and chariot tablets found in *CoST* and the *NEP*, have been assigned to the LM IIIA2 period. However, the tablets with the Late Knossian style from the LM IIIB1 period do not include listings of chariots or swords. It is tempting to go further and to speculate tentatively that the destruction of the Knossian workshop that is postulated by Macdonald might possibly be directly associated with the destruction of the Arsenal.

It is worthwhile trying to summarise the above discussion by setting out a plausible sequence of events, even though this must inevitably be quite speculative. In LM IIIA1, scribal activity was concentrated in the *RCT*. In early LM IIIA2 there was a fire that was followed by a rebuilding programme (as set out by Hallager) and this would have included the reconstruction of the rooms on the upper floor of the West Wing. These rooms became the main centre of scribal activity when the *RCT* was abandoned.⁴³ During LM IIIA2, the Arsenal was destroyed by fire. This may have been linked to a more widespread destruction of the workshops at Knossos used for the manufacture of weaponry. In LM IIIB, the *NEP* was blocked off and the passage was used as a store and redundant old tablets were transferred into this storage area. Finally, in LM IIIB1, there was a further conflagration and the bulk of the Palace was destroyed (except for the Shrine of the Double Axes).

⁴¹ Here Macdonald is quoting N. K. Sandars, 1963, in particular p. 133.

⁴² It is worth noting that in LM IIIB, Knossos also lost its pre-eminence in ceramic production and that regional workshops became more important and regional variations arose (Kanta 1980, pp. 288-290).

⁴³ Even within this speculation, it does not seem necessary to assume that the *RCT* tablets were fired in LM IIIA1. This scribal area could simply have been abandoned because it was deemed to be no longer suitable.

In this way, we have demonstrated that it is possible to place the three Knossian writing styles within periods and to cast these within the overall chronology of Knossos without producing major anomalies. Indeed, it could be suggested that this provides a more satisfactory explanation than has previously been achieved.

6. DISCUSSION

It is instructive to set out in Table 3 the major subjects that were covered by each of these stylistic groups:

TABLE 3

Subject	Early Knossian	Middle Knossian	Late Knossian
Military equipment	chariots corselets	chariots swords helmets body armour	X
Saffron	Np(1)-set	Np(2)-set	X
Livestock	sheep goats cattle pigs horses	sheep goats cattle pigs horses	sheep
Western Cretan toponyms	<i>ku-do-ni-ja</i> <i>ka-ta-ra</i> <i>u-du-ru-wo</i> <i>wa-to</i>	<i>ku-do-ni-ja</i> <i>a-pa-ta-wa</i> <i>ka-ta-ra</i> <i>o-du-ru-wo</i> <i>si-ra-ro</i> <i>wa-to</i>	<i>ku-do-ni-ja</i>
Large quantities of grain	X	F 852	X
Male slaves (<i>do-e-ro</i>)	X	Ai 966, C 911, 912, 915, B 822, 988?, 5984	Xe 5877
Herbs & spices	X	Ga 953	Ga(1), Ga(2), Ga(3)
Honey	X	X	Gg-series
Textiles	L 104, 178, 192, 5599	L 868, 870, 871	Extensive series of tablets written by hands 103, 115 etc.
<i>ta-ra-si-ja</i>	X	So 4442 (wheels)	Lc 535, 536, Le 642 (textiles)

This table gives the strong impression that the three writing styles represented three separate types of activity at Knossos. The Early Knossos Linear B style is used on the *RCT* tablets that are primarily concerned with the allocation of military equipment. However, there are also a small number of tablets recording livestock (including Ce 162, which appears to include 10,000 sheep). The Middle Knossian Linear B style is used on tablets associated with the manufacture of military equipment and also with the management of livestock, including livestock in Western Crete. These tablets have a relatively large number of explicit references to male slaves. They also include F 852, which has the single largest listing of grain amongst the Knossos tablets. The Late Knossian Linear B style is primarily used on tablets associated with the management of the wool and textile industry, but it is also used on tablets listing honey, herbs and spices.

If we accept that these three types of activity were not contemporary, then it is possible that the differences shown in Table 3 could arise simply from the variability of the material preserved. However, it would appear that these differences are sufficiently systematic that it is unlikely that they are just due to the random chance of preservation. Thus, it seems more likely that these differences reflect three different phases of military and economic activity on Crete.⁴⁴

In the first phase, the overwhelming interest was in arming a force of soldiers whose names are predominantly Greek (Driessen 1992; Firth 1993). In the second phase, the military interests continued. However, in this phase, Knossos has detailed interests across the island, specifically including Western Crete, and in addition there is a relatively large number of specific mentions of male slaves.

In the final phase, most of the tablets are concerned with the wool and textile industry, with some interest in honey, herbs and spices, but with no mention of the manufacture and distribution of chariots and armaments. Furthermore, in the final phase, there is an absence of named locations in Western Crete other than *ku-do-ni-ja*, presumably because at this stage Western Crete is no longer under the control of Knossos and *ku-do-ni-ja* has its own bureaucracy.⁴⁵ In addition, only a single tablet has a reference to *do-e-ro* and there is no interest in saffron or in livestock other than

⁴⁴ Note that this would not imply, for example, that there was no honey collected on Crete until the Late Knossian phase, rather that it does not appear to have been given the same level of attention by the scribes of the palace.

⁴⁵ It is interesting to note that there are several place-names associated with sheep flocks which appear on the Middle Knossian tablets but not on Late Knossian tablets (i.e. *da-ta-ra-mo*, *ka-ru-no*, *ma-ri*, *ma-so-mo*, *qa-nwa-so*, *sa-jo* and *si-ja-du-we*; see McArthur 1993, p. 55). This is significant because the Late Knossian tablets include several hundred sheep tablets. It implies that Knossos probably no longer had sheep in these places in the period corresponding to the Late Knossian style. Indeed, it is possible that, in this latter period, Knossos no longer had control of these places.

the many sheep flocks, which were specifically for the production of wool. Thus, this final stage is primarily concerned with textile manufacture on an industrial scale as a basis for trade.⁴⁶

It is worthwhile drawing attention to one further striking difference between the different phases, and that concerns the nomenclatura elite (using Driessen's terminology), individuals who are designated by a title. Table 4 is based on Driessen 1992, but Table II separates these men according to the three phases defined above.

TABLE 4⁴⁷

Title ⁴⁷	Early Knossian	Middle Knossian	Late Knossian
a-to-mo	V 56	C 979	
mo-ro-qa	Xd 7586	C 954	
u-wo-qe-we (ne)	V 145	C 902	
we-re-we	V 145	C 902	
ra-wa-ke-si-ja	Xd 154	X 1027	As 1516
wa-na-ka	Vc 73, Vd 136	X 976	Ga 675, Lc 525
e-qe-ta		Am 821, B 1055, L 871	Lc 646, Ld 571, 572, 575, 583
e-re-ta		C 902	As 5941
i-je-re-u		Am 821	Fp 1, 13
qa-si-re-wi-ja		K 875	As 1516
a-ke-re-mo		Uf 838, V 865	
da-mo-ko-ro		C 7058, 7793	
da-nu-wo		C 902, 911	
du-ma		C 1030, 1039	
e-ra-ne		C 902	
ko-re-te		C 902, V 865	
me-ri-du-[ma		X 1045	
po-ro-ko-re-te		V 865	

It is immediately evident that the number of the nomenclatura elite identified in the Middle Knossian phase easily outnumbers those identified in either of the other two phases. It might be possible to associate this with the need during this phase for Knossos to keep a firm hold on its influence across the whole island.

⁴⁶ Following Hallager (1977, p. 93), we should note the importance of Inscribed Stirrup Jars of the LM IIIB period. Within the current analysis, these would have contemporary with tablets of the Late Knossian style. Note in particular the *ISJ* with the name, *wi-na-jo*, which was probably produced in the Knossos area (Catling *et al.* 1980, p. 87) and found in the Unexplored Mansion. Similar *ISJ*'s with the name *wi-na-jo* have been found at Armenoi and Midea. The latter is dated to LM IIIB2 (Demakopoulou & Divari-Valakou 1994).

⁴⁷ Including words closely based on these titles.

7. CONCLUDING REMARKS

The objective of this paper has been to explore the hypothesis that there is a chronological separation between the Early, Middle and Late Knossian styles. It has been demonstrated that it is possible to overcome the potential anomalies that arise in terms of find-places and palm-prints. It has also been demonstrated that it is possible to allocate each of the styles to a different ceramic period, respectively LM IIIA1, LM IIIA2, LM IIIB. On this basis, it is suggested that the original hypothesis is viable.

It has been demonstrated that the hypothesis leads to the tablets emanating from three rather different socio-economic periods. The Early Knossian tablets of the *RCT* are largely militaristic in content. The Middle Knossian tablets continue to reflect a militaristic regime with interests across the island including Western Crete, although there is now increased interest in grain and livestock. The Late Knossian tablets no longer show a detailed interest in towns in Western Crete other than *ku-do-ni-ja*, presumably because at this stage Western Crete is no longer under the control of Knossos and *ku-do-ni-ja* has its own bureaucracy. Further, they do not include tablets dealing with chariots, swords and corselets. Instead, they are a detailed account of industrial scale production of wool and textiles, with some interest in herbs, spices and honey. In other words, these tablets reflect an interest in manufacture and trade. These latter findings should be considered together with the LM IIIB Inscribed Stirrup Jars, which are also a representation of trade during this period.

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