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AGENCY MATTERS: SEAL-USERS IN PYLIAN ADMINISTRATION

Summary. This study aims to provide insights into the patterns discernible in the Pylian sealing practices with regard to the identity of the seal-owners involved. The focus is on reassessing the problem of the function of glyptic imagery and on testing the working hypothesis that differences in the subject matter of the seal devices used to produce the seal impressions may have reflected the hierarchical status of the Pylian seal-owners. On the basis of context, typology and iconography it is suggested that the heirloom signet rings impressed upon the direct object sealings and the combination nodules from the Archives Complex as well as upon a set of hanging nodules from the Northeastern Building designated offices within the Pylian administrative system. In the case of the open irregular string nodules from the Northeastern Building, the Wine Magazine and the Southwestern Building, it is argued that they mainly reflect a system of receipts. Last but not least, the example of a gold ring impression reproducing key palatial iconography is used to demonstrate that the seal devices should be interpreted as visual symbols that acquired their meaning through convention. One of the mechanisms through which the rings and the seals would have been differentiated and associated with individual offices or other institutions was possibly the way specific symbols were embedded within the composition of image.

INTRODUCTION: SEALED DOCUMENTS AS MEANS FOR DETECTING AGENCY IN MYCENAEAN ADMINISTRATION

In the Mycenaean polities of the Late Helladic III period (Fig. 1) documents produced by impressing seals on lumps of clay have indicated standardized administrative acts such as the receipt of incoming goods in the palatial establishments, the securing of commodities and, possibly, the distribution of their contents. The premise underlying the perception of the Mycenaean sealed documents as an effective means of institutional control is that the seals impressed upon them had a representational value, and plausibly signified individuals or their offices as well as collective groups. The study of the clay seal impressions can, accordingly, give insights not only into the nature of the transactions of each polity with its periphery but also to



Figure 1

Map of the Aegean with distribution of main types of Mycenaean administrative documents (after Hallager 2005, fig. 4).

the interface between the centralized bureaucracy functionaries and individuals or institutions at lower levels (Palaima 1987; 2000a, 225).¹

So far, the only sector of the Mycenaean society where agency is manifested is the institutionalized scribal bureaucracy. Mycenaean scribes did not authenticate the information of their tablets by applying seals directly to them, as their Near Eastern colleagues often did (Collon 1990, 19, 23 fig. 9, 45 fig. 32). This acceptance of full responsibility implies that they were not just literate palatial employees but active administrators, possibly members of the elite (Olivier 1968, 23–4; 1967, 135–6; Bennet 2001, 29–30). By no means, though, should they be perceived as static functionaries, confined to palatial complexes. Some of the scribes may have also been travelling palatial supervisors, inspectors or tax collectors. This is supported by the plausible identification of the ‘Collector’ *a-ko-so-ta*, who was active in the Pylian polity, with scribal Hand 1 (Kyriakidis 1996–1997, 202, 220–4; Bennet 2001, 31). They would also have been actively

¹ The use of sealed documents in the extra-palatial sphere still remains a matter of debate. Approaching this issue is connected with and hampered by the problem of the functional interrelationship and possible administrative role of some houses at Mycenae, Thebes and Tiryns, see Flouda 2006, 50–1, 389–90, 393.



Figure 2

Distribution of sealed documents in the Ano Englianos palace complex (late LH IIIB architectural phase reproduced after Nelson 2007, fig. 8).

involved in the supervision of consignments to the palaces, which involved clay sealings and nodules as accounting and mnemonic devices.

Nonetheless, the sealed documents recovered from the final destruction of the Ano Englianos palatial complex and from the early LM IIIA2 destruction deposit of the Knossian palace (object sealings, nodules,² noduli) imply the participation of a large number of persons in the sealing process (Fig. 2). If these clay documents are viewed as artefacts having semantic properties beyond the amuletic attributes of their seal devices, they can provide a new way to study agency. The morphology of the clay nodules, as well as the impressions of seals and/or gold signet rings that they bear, namely of objects with inherent social value, enables us to trace the choices that were made during their production process. This applies particularly to the standard prismatic two-hole hanging nodules, usually formed by clay folded around the knots of single-strand strings and distinguished by a 'gable-shaped' ridge at the point where the clay overlaps (Weingarten 1988, 7–9, Class VI/B; Palmer 1994, 147–50, Type I; *MOPS*, 58; Müller 2002, 66 Abb. 25a–e). These often bore inscriptions on the flattest side with the seal impression (facet .α) and eventually on the lateral sides as well. Hence, they have functioned as labels used to transmit basic information

2 Nodules, as opposed to sealings, *do not seal* objects; the type that has been classed as 'combination-nodule' by Weingarten (1988, 6–7, 8 fig. 3. Class XII/A) provides a clear exception.

during the requisition of commodities and, also, as primary documents recording single transactions.³ Generally being very solid, they may have been produced even at peripheral areas of the polities (Hallager 2005, 254), possibly by scribes (Palmer 1994, 149–50; *MOPS*, 96). This is strengthened by the assumption that most of the homogeneous group of Theban **Wu** nodules were made far away from the Kadmeia citadel by travelling scribes, as indicated by their clay and by specific toponymic references such as *te-qa-de*, *a-ma-ru-to*, *ka-ru-to* (Aravantinos 1984, 48; Piteros, Olivier and Melena 1990, 172, 181–4).

According to the traditional view, the seal impressions of the hanging nodules specified the identity of the palace administrators and/or officials validating each transaction (Aravantinos 1984, 44; Palaima 1987, 256–8, 261 n. 256; Shelmerdine and Bennet 1995, 128 n. 14; *MOPS*, 95). This notion has been recently challenged by Palmer (1994, 160–5; 1996), who suggested that the majority of the impressions on the Pylian Wine Magazine irregular nodules might denote contributors of wine in the framework of a direct assessment system.

On the other hand, aspects of the use of the ‘open irregular string nodules’, which had a much larger string-hole and no fixed shape, remain rather ambiguous.⁴ This nodule type with an open reverse includes Weingarten’s ‘molars’ (Weingarten 1988, 6–7 fig. 2. Class XII/B). It is not clear whether these were formed when clay partly covered thick cords made of leather, gut or fibre or whether they were possibly broken, when detached from the commodities (Müller 2002, 59–64, figs. 16a, 18). In any case, Hallager’s (2005, 254–8, figs. 2, 5d–e) suggestion that they were attached to goods after their delivery to the palace storerooms, and its implications for deducing agency, deserve to be explored.

The recent publication of the Pylos corpus of sealed documents, as well as new finds from Thebes and Midea, provides a chance for a re-evaluation of the two aforementioned issues and, also, for posing new questions. In particular, what symbolic structures would affect the choices of the makers of the sealed documents? Can firm criteria concerning the attribution of seal-types to seal-users be established? Did the image of the sealstones or signet rings used to impress the sealed documents serve as an institutional or as a hierarchical attribute? Or did the material of these artefacts determine their representational value? Last but not least, what did the seal impressions on the direct object sealings and on the independent documents called *noduli* signify?

As a starting point, this paper aims to bring forward some of the individual agents mobilizing resources in the LH IIIB2 Pylian polity by considering seal imagery in actual seal use. The method employed will be the contextualization of the sealed documents as well as the integration of their occasional inscriptions and of typological observations with the respective seal- or ring impressions. This focus on the administrative assemblages from Ano Englianos is justified by the lack of chronological homogeneity of the Mycenae groups of sealed documents and by the exclusiveness of their seal impressions in specific buildings.⁵ Moreover, a review of

- 3 Contrary to these and to the nodules with a ‘pyramidal-shaped’ ridge, the ones with a ‘dome-shaped’ ridge were usually attached to thicker cords or to knots made by two strings or cords, and then broken away after their detachment from the commodities, see Müller 2002, 65–6. Thus, they most commonly secured the integrity of commodities.
- 4 These correspond to Palmer’s Type III nodules (Palmer 1994, 149) and to Pini and Müller’s ‘Plomben mit offener Rückseite’ (Müller 2002, 59–64).
- 5 Palaima (1987, 261) suggested that ‘the exclusiveness of individual seal-types to single establishments may derive from special contracts between workers/suppliers of officials of other establishments and those operating these establishments’. This phenomenon can, alternatively, be explained by the fragmentary character of the assemblages, which also impedes the reconstruction of the LH IIIB1–2 central administration at Mycenae.

the evidence on seal ownership in the Late Bronze Age mainland will provide the background for the study. Despite the scepticism towards drawing links between ring motifs and their owners (Cain 2001, 28; Müller 2005, 175), the pictorial structure of a special Pylian signet ring impressed on a group of inscribed nodules from the Northeastern Building will provide additional insights into the possible bureaucratic role of its bearer.⁶ Finally, where relevant, aspects of the probable interaction of specific Pylian seal- and/or ring-users with the corresponding scribes will be addressed.

LATE BRONZE AGE SEAL OWNERSHIP STRATEGIES

Seal ownership has been extensively explored in the case of Mesopotamia, where the seal inscriptions provide clear patterns regarding the social agents of the sealing process (Collon 1990, 18–19; Nijhowne 1999). For example, the inscriptions and the image on cylinder seals belonging to bureaucrats of the Ur III state have been treated as conveyors of information regarding the owners' place in the administrative system (Winter 1987; Widell 2004). Although Aegean sealstones have no such identifying inscriptions,⁷ which would enable us to construct narratives of that kind, recent research stresses their symbolic dimension. Size, material, artistic quality, and time expended in manufacture have been proposed as signifiers on a semiotic level (Younger 1990, 240). From the EM III period onwards, Minoan seals are thought to have served as emblems of personal identity or group affiliation, while their use was institutionalized at the beginning of the Protopalatial period (Sbonias 1999, 44–6; Weingarten 2005, 764–5). Their employment as means of individual representation also underlies the application of seal impressions on the clay roundels used by the late Protopalatial and Neopalatial central administration, in order to record the number of goods exiting the storerooms (Hallager 1996, 94–5, 115–17).

With regard to the early Mycenaean period, we are ignorant of the institutional framework of the production, circulation and use of sphragistic artefacts. Early Mycenaean sealstones and signet rings are also likely to have served as personal status markers and insignia of family and/or group affiliation in a predominantly illiterate society, since many of them have followed their owners to the grave. So far the material from published mainland funerary contexts offers limited insights into the hierarchic level of the deceased that were accompanied by these attributes. In the MH III–LH I Argolid, seals cut from hard semi-precious stones and gold signet rings were ritually deposited in elaborate graves containing male and female burials (Kilian-Dirlmeier 1986, 167–74, 180–92). The possibility that they circulated in an exclusive gift exchange network involving Cretan and mainland elites (Voutsaki 1999, 110) permits us to posit that they served as symbolically laden high-status insignia for the emerging mainland chiefs.

In the early LH II period, they were notably confined to selected shaft grave and tholos burials of the Peloponnese, each of them usually accompanying one deceased, worn on the wrist

6 On the Wine Magazine inscribed nodules and those constituting sets with multiple impressions from this building, see Palmer 1994, 143–65; 1996. The three inscribed nodules from the area of the Southwestern Building are inconclusive surface finds (Palaima 1988, 163 fig. 22, 166; Shelmerdine 1998–1999, 309 n. 4, 329–30).

7 Hieroglyphic sealstones form an exception to this rule. Those including standard two-sign formulae of possible administrative nature may have been institutional seals 'sufficiently personalized to allow the identification of the individual using them', see Weingarten 1995, 307.

or strung in necklaces.⁸ The principles of their emblematic and amuletic value, obviously recognizable to the early Mycenaean society, must then have been determined by limited ownership and use. The reconstruction of their suggested administrative use in the prepalatial mainland (Pini 1990, 109–12) is impossible for the time being, since the earliest documented sphragistic use of a Mycenae finger ring probably dates to the end of the LH IIIA2.⁹

A shift in deposition patterns occurred in the late LH II/IIIA period, when signet rings and hard-stone seals were more widely deposited in burials, even in chamber tombs of the Mycenaean periphery (Eder 2007, 87). Moreover, the presence of sets of LM I gold signet rings in the rich LM II–IIIA1 Knossian graves of the alleged ‘Mycenaeanization period’ probably signals new strategies of identity display and legitimation, grounded in the local Neopalatial tradition (Kilian-Dirlmeier 1987, 208–9, fig. 6; Dimopoulou 1999, 28 n. 11, 33; Dimopoulou and Rethemiotakis 2000, 39, 41). At the current state of archaeological and scientific research, it is inconclusive whether these strategies reflect a change induced by ethnicity (King *et al.* 2008, 212; Nafplioti 2008, 2315–16) or the establishment of a specific set of insignia associated with warfare and participation in the palace administration (Driessen and Langohr 2007, 188–9). Nevertheless, the use of hereditary emblems, such as the aforementioned heirloom signets, is generally promoted by unstable social conditions in stratified societies (Davis 1985, 152), a situation indicated by the LM II–IIIB mortuary dataset (Preston 2004, 321). This notion probably explains why in western Crete the tradition of the deposition of old sphragistic devices in graves persisted during the LM IIIA2–B.¹⁰

After the decline in the production of hard-stone seals at the end of LH/LM IIIA, soft stone and moulded glass seals invariably depicting animals or ornamental motifs were put in circulation. But many early finger rings and hard-stone seals continued in use as heirlooms for some generations, as indicated by the impressions on Knossian and mainland nodules (*MOPS*, 94; Müller, Olivier and Pini 1998, 6 Tab. 1).¹¹ This persistence was certainly enhanced by their symbolic decoration and, in many cases, by their religious connotations, an attitude also attested in the Iranian plateau (Dyson and Harris 1987, 85). In any case, the special role of gold signet rings carrying ritual scenes within Neopalatial burial assemblages in Poros tombs 5 and 7 encourages us to assume that these were associated with the office of their owner (Dimopoulou 1999, 33). It may also not be irrelevant that the office of the *ka-ra-wi-po-ro* / *klawiphoros* / ‘key-bearer’ priestess mentioned in the Pylian tablets has been

8 A notable exception is the ‘collector’ of seals that was buried in the LH IIA shaft grave of the Vapheio tholos, possibly a high-status official (Kilian-Dirlmeier 1987). Although a Cretan origin is generally postulated for many of the finger rings found in mainland graves, only **CMS I no. 219** from the Vapheio tholos and, also, examples **CMS VS.2 no. 106** and **CMS VS.3 no. 68** from later contexts (Elateia and Kalapodi respectively) can be safely identified as Cretan imports, cf. Eder 2007, 87 Anm. 34.

9 Even though the earliest Mycenae nodule is a stray, it must relate to the House of the Wine Merchant, cf. Müller, Olivier and Pini 1998, 7 n. 12, 41 Cat. no. **26**. The illegible clay label **Wq 4** (cf. Shelton 2002–2003, 394–5) from a contemporary deposit in Petsas House corroborates this hypothesis. A new hanging nodule from Kolonna/Aigina also comes from a LH IIIA context, but no seal impression or inscription is preserved (Gauss 2007, 166–7, 172 Abb. 6).

10 On a LM IIIB single burial in Chania with eight heirloom seals and a soft stone seal, see Karantzali 1986, 83, 86–7.

11 The catalogue numbers of the Pylian nodules discussed henceforward are those used in *MOPS*, while National Museum inventory numbers are given in parenthesis in the illustrations. The Pylian habit of using earlier seals may also have included LM II–IIIA soft stone seals of Minoan origin, as inferred from nodules nos. **11**, **46** and **60** (and possibly nos. **35** and **79A–C**), cf. Pini 2005, 206.

connected to female figures depicted in frescoes as wearing seals on their wrist (Younger 1992, 272–3 n. 43).

However, most of the sealstones from contemporary Late Mycenaean mainland graves belong to the standardized soft stone Mainland Popular Group, henceforward referred to as MPG. These seals are notably not represented among the impressions on nodules. Differences in the distribution and deposition of MPG seals in graves across the core and periphery areas of Mycenaean influence indicate no homogeneous pattern in their use (Dickers 2001, 109, 115–16, 119). The reassessment of their assignment to a usage by the lower classes (Dickers 2001, 116; Krzyszkowska 2005, 274–5) and their interpretation as a means employed to expand seal use to wider social strata (Eder 2007, 97) prompts new insights into LH III sealing practices. The recently recovered irregular string nodule **CMS VS.3 no. 373** (Thebes Mus. inv. no. 32723) from the Treasury Room of the New Kadmeion at Thebes (Fig. 19) also bears the first testimony to the sphragistic use of a MPG seal and its possible administrative function (CMS VS.3, p. 555). The nodule was found along with three inscribed hanging nodules (**Wu 429–31**) and two more irregular string nodules (**CMS VS.3 no. 370**); this implies that it formed an integral part of the administrative system. Besides, late soft stone seals of another class, produced on the mainland, have impressed the Pylian nodules nos. **4, 5, 13, 14A–C, 53, 69A–C, 71** and **81** (Pini 2005, 206). In parallel, an administrative function has been suggested for the moulded glass seals, with those bearing duplicated motifs representing a common authority (Müller 2003, 92).

Turning to what the published examples from domestic contexts may tell us about seal ownership, it is suggestive that most of the MPG seals occur at the palatial centres or at second order sites such as Nichoria and Zygouries/House B (Dickers 2001, 75, 123–4 Liste 2). The recovery of the MPG seals **CMS VS.1B nos. 71** and **72** from LH IIIB2 contexts of the area next to the West and the East Gate of the Midea citadel, respectively, suggests their possible use for the management of incoming goods from the latter's territory (cf. Dickers 2001, 162–3 on their findspots). The four bone styli from the LH IIIB2 destruction deposit of Room II of the Northeastern Slope complex (Walberg and Giering 1998, 81, pl. 55) and the stylus from the region of the Eastern Gate itself (Whitley 2004–2005, 25) also support the on-spot recording of incoming goods.¹²

In addition, six out of seven seals from the Nichoria settlement come from mixed deposits excavated above the road and in the vicinity of the LH IIIA2/B domestic Unit III-2 (Aschenbrenner *et al.* 1992, 387–8 figs. 7–11; Wilkie 1992, 625–6). Since the site has been reasonably conjectured to be the Further Province capital *ti-mi-to-a-ke-e* (Shelmerdine 1981, 319–25), these seals are consistent with the probable outreach of the Pylian administrative system into outlying communities (Palaima 1987, 265). Consequently, the use of the MPG seals may be connected to regional elites that initially emerged alongside the palatial ones possibly via the strategies of negotiation developed by the latter. It has been suggested that the status of their bearers is reflected by their clear demarcation from the heirloom-owners, who have been tentatively linked with old elites (Dickers 2001, 116). But rather than as means of emulation, the MPG seals should, in my opinion, be seen through the prism of heterogeneity. Their presence in LH IIIC settlements, e.g. at Lefkandi and Koukounaries, also seems to corroborate that their institutional value was independent of the palaces.

12 Unless sets of tablets are excavated in the future they should rather be considered as belonging to travelling bureaucrats representing the palace at Mycenae.

PYLIAN SEAL-USERS IN ACTION: A FOCUS ON ARCHIVES COMPLEX AND NORTHEASTERN BUILDING ASSEMBLAGES

The evidence of seal ownership, as discussed, may be conceptualized through Younger's approach to the emblematic function of Aegean seal devices. According to him, the material and shape of the sealstones reveal the social position of the seal-owner, whereas the iconography symbolized his (or her) administrative status or office (Younger 2000, 349, 355).¹³ An analogy corroborating this notion is provided by the inference that the standardized motifs on the inscribed Ur III cylinder seals served to 'demarcate the place and/or authority of the seal-owner within the administrative hierarchy' (Winter 1987, 60).

Following this model, Panagiotopoulos has recently discussed the imagery of the Pylian seal impressions and concluded that they show no meaningful pattern of distribution in different rooms or sectors of the Ano Englianos complex (Panagiotopoulos 2002). In terms of their iconography, he has recognized two homogeneous groups. The first consists of intact nodules bearing elaborate motifs of 'palatial' character, the majority of which had been impressed by metal signet rings. The second group includes fragmentary nodules with non-representative and poor quality 'bucolic' themes, usually the outcome of 'low or average quality sealstones'. Based on the fact that all inscribed examples coincide with the first group, Panagiotopoulos proposed that this pattern corresponds to the official rank and location of the seal-owners. Specifically, the seal-users of the 'palatial' group must have been resident bureaucrats, who had provided goods stored in the palace magazines with the relevant labels, in order to be inventoried. On the contrary, the group with the 'bucolic' subject matters represents 'a "provincial" bureaucratic milieu' shipping goods off to the centre. In the following, these compelling points will be examined by studying the seal impressions of relevant Pylian case-study groups in their specific context, and by establishing analogies with the use of sealed documents in Mycenae, Thebes and Midea.

First of all, none of the seal impressions of the Pylian corpus can be correlated with any of the few sealstones recovered so far in contemporary contexts from the Ano Englianos tombs. In the palace complex itself two MPG seals have been found, one of them notably in corridor 95 of the Northeastern Building (Blegen and Rawson 1966, 308, figs. 311, 312 no. 1; **CMS I, no. 297**). This reminds us of the conjectured use of the two aforementioned Midea MPG seals for the management of goods coming into the acropolis.

A starting point for the study of the seal impressions results from the observation that collections of nodules impressed by the same seal device are grouped either in specific rooms of the Main Building or in various rooms of the Northeastern Building. This consistency in seal use contrasts sharply to the situation at Knossos, where impressions of the same seal device occur on nodules or sealings from distanced zones of the palace (Palaima 1987, 263; Weingarten 1997, *passim*). In some cases, the same Pylian seal impressions are represented on both direct object sealings and hanging nodules and, thus, they can provide an overview of the attested activity of specific seal-users.

Studying the group of sealed documents from the Archives Complex, the following interesting points arise (Table 1). All of the direct object sealings and the combination nodules bear the impressions of heirloom metal – possibly gold – rings with 'palatial-style' motifs (nos.

13 Also cf. Gorelick and Gwinnett 1990, 45–7, 51 on Mesopotamian hard-stone cylinder seals.

TABLE 1
Sealed documents from the Pylian Archives Complex

Cat. no.	Room	Sealed document type	Seal device	Seal impression
11	7–8	–	soft stone seal (unknown type)	griffin surrounded by two persons and quadruped (?)
22	7–8	combination nodule (prismatic)	signet ring, metal	duel man/lion, chariot scene
23A	7	combination nodule (?)	signet ring, metal	bull-leaping scene
8	8	hanging nodule	signet ring, metal	duel, three persons preserved
23B	8	hanging nodule	signet ring, metal	bull-leaping scene
23C	8	hanging nodule	signet ring, metal	bull-leaping scene
3	7–8	hanging nodule	signet ring, metal (?)	procession
56	8	hanging nodule	signet ring, metal (?)	griffin or sphinx on quadruped
84	8	hanging nodule (?)	seal of unknown type	front leg of a quadruped (?)
93	8	hanging nodule (?)	soft stone seal (unknown type)	quadruped
32	8	hanging nodule (gable-shaped)	amygdaloid, hard stone	dog and deer in flying gallop
75	8	hanging nodule (gable-shaped)	lentoid, hard stone	standing bovid
20	8	hanging nodule (pyramidal)	signet ring, metal	two antithetic duels of man with lion
28	8	hanging nodule (dome-shaped)	lentoid, hard stone	lion and goat
38A	8	hanging nodule (dome-shaped)	signet ring, metal	four griffins of different size
38B	8	hanging nodule (dome-shaped)	signet ring, metal	four griffins of different size
21A	8	object sealing	signet ring, metal	two antithetic duels of man with lion
21B	8	object sealing	signet ring, metal	two antithetic duels of man with lion

21A–B, 23A, 22).¹⁴ This fact would seem to support the first part of Panagiotopoulos' reconstruction regarding resident bureaucrats.¹⁵ However, matters are not so straightforward once typological details are considered. Sealings **21A** and **21B** – the latter with a unique discoid shape – were conceivably applied to boxes containing documents (Bennet 2001, 30), given the indeterminate impressions of bands on a flat surface visible on their reverse (cf. *MOPS*, 67, Taf. 39); but this is a mere hypothesis. The combination nodule **22** not only tied the cover of a wickerwork basket (?) through the double string embedded in it, but also was attached to it (*MOPS*, 62, Abb. 2; *MOPS*, 69). Although it is, again, possible that the basket contained documents, we recall that the 19 filing basket labels **PY Wa** did not bear seal impressions.

The finger rings represented in the Archives Complex by pairs or triplets of impressions on different types of sealed documents (**21A–B, 38A–B, 23A–C**) and, also, by the single example **22** (Fig. 3) were among the largest and most elaborate ones attested in the Pylian corpus. The very similar seal impressions on the pair of object sealings **21A** and **21B** and on the pyramidal nodule **20** have been made by two 'look-alike' signets of almost the same dimensions, which supposedly marked the activity of two administrators with supplementary tasks (Younger 1999, 954–5). Alternatively, I would like to suggest that these 'look-alike' rings served as a departmental attribute that designated two functionaries of the same rank, but with supplementary duties. Physical examination of nodule **20** (Fig. 4) showed that it hung from a thick cord. Could this cord have been fastened around a batch of tablets?¹⁶ Or, rather, did the nodule hang from the edge of a cord that ran through a set of contiguous leaf-shaped tablets, such

14 The rings that produced these impressions can all be dated to the LB II–early IIIA period, see *MOPS*, 87, 89.

15 For the first attempt to trace officials on the basis of Knossian signet rings and of the combination nodules, see Weingarten 1997. No. **23A** is classed by *MOPS*, 58 as a direct object sealing, but could possibly be a kind of a combination nodule.

16 I owe this suggestion to Dr J. Weingarten.



Figure 3
Combination nodule 22 (NM 8472): reverse.

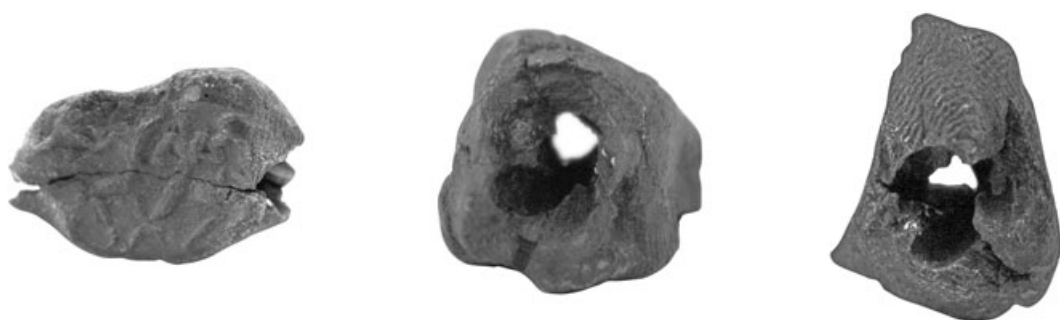


Figure 4
Nodule 20 (NM 8477): obverse with ring impression and cross-sections.

as those studied by Palaima (1996, 38–42)? In that case, the functionary that impressed it may also have been working outside the Archives Complex, supervising the requisition of goods.

The combination nodule (?) **23A** (Fig. 5), which had allegedly sealed a folded ‘parcel’ of leather or parchment (*MOPS*, 13, 68), and the hanging nodules **23B** and **23C** (Figs. 6 and 7) with very large string-holes share the impression of the same signet ring with a bull-leaping scene. Owing to the possible mobility of both types of documents, it cannot be suggested that they are the product of an administrator working exclusively inside the palace.

The identity of the seal-owner of the heirloom hard-stone amygdaloid that impressed nodule **32 (Wr 1457)** from Room 8 is rather inconclusive. It probably dates to the LB I (*MOPS*, 88) and it depicts a hunting scene composed of a galloping deer (or a goat, cf. *CMS I*, 308) being run down by a dog (Fig. 8). The nodule inscription records an *a-pu-do-si / apudosis* / ‘delivery’ relating to commodity *152. The latter designated oxhides and occurs elsewhere only on tablet **Mm 11** and in the **Ma** set from the same room. We may assume that the nodule had been used in order to prove that one of the **Ma** tax-districts had fulfilled their obligation to supply oxhides (Palaima 1988, 67).¹⁷ The possibility should, thus, be considered that Hand 2, who had also

17 Olivier in *MOPS*, 71–2 n. 9 argues that it had probably accompanied one oxhide, while Perna (2001–2002, 227) suggests that it was hanging from a box or basket containing the relevant tablets. However, a **Wa** label would have been more appropriate in the latter case.



Figure 5
Combination nodule (?) 23A (NM 8475α): reverse.

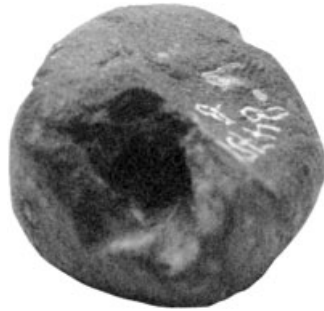


Figure 6
Hanging nodule 23B (NM 8475β): cross-section.

compiled the **Ma** tablets (Palaima 1988, 67–8), was present during the transaction. Accordingly, the seal impression may have represented either the palace official charged with collecting the tax-assessments and responsible for their delivery to the palace or, more plausibly, the contributing district.¹⁸ We can, then, postulate that **Wr 1457** had been transferred to the archives from the Southwestern Building department (Shelmerdine 1998–1999), where the annual collection of the *146 *we-a₂-no* type fabrics from the **Ma** tax districts, as well as their subsequent storage and distribution, may have been managed.

The second largest group of Pylia nodule comes from the Northeastern Building, whose function as an administrative department with polity-wide concerns has been recently established (Flouda 2000; Hofstra 2000; Bendall 2003). The use of the building for the specialized management of various resources is, primarily, supported by the large number of nodule- and tablet-inscriptions that denote institutionalized obligations (Flouda 2000, 215, 231,

18 According to Palaima (2000a, 228), it might also have represented a scribal administrator connected with the central archives.

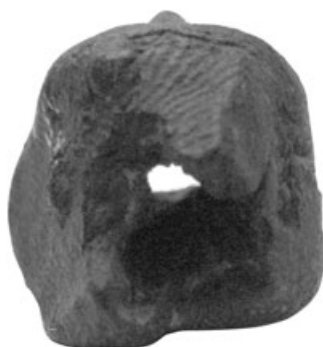


Figure 7
Hanging nodule 23C (NM 8475γ): cross-section.



Figure 8
Hanging nodule 32 (NM 8553): seal impression with ideogram *supra sigillum* (Wr 1457).

235–6). What emerges as striking is the lack of one-to-one correspondence between the seal-users and the scribal hands involved in the making of the inscribed nodules (Table 2), which implies that the two groups are not identical.¹⁹ It also contrasts with the homogeneity of the nine distinct sets of the Theban **Wu** nodules, which has led to the notion that the users of the seal devices were generally the ones making the nodules as well (Piteros, Olivier and Melena 1990, 166, 170).

Nevertheless, the palaeographically and typologically homogeneous group of gable-shaped nodules **42** (Wr 1325), **40B** (Wr 1330), **39F** (Wr 1331), **39D** (Wr 1332), **39C** (Wr 1333) and **39B** (Wr 1334) from Rooms 98 and 99 (Table 2) testifies to the activity of the elsewhere unattested Stylus group S1331-Ci (Palaima 1988, 116–17, 156, 218).²⁰ The identical modelling

19 This provides an analogy to LM IB Ayia Triada, where ‘the same hands appear on nodules stamped by several different seal owners, not neatly clustering’, cf. Weingarten 1986b, 288.

20 On the hand attributions, I have followed Palaima 1996; 2000b. **Wr 1326** has been attributed to S1272-Ciii (cf. Palaima 1988, 130–1, 156) and, alternatively, to Ciii (Palaima 1996, 49). My source for the **Wr** inscriptions that have been revised is Bendall 2003, 204–5 Table 4, 214–15, 225. For the reclassification of nodule **Wr 1327**, which is inscribed despite its dome-shaped ridge as **Wp 1327 (10)**, see Bendall 2003, 215. Its ring impression occurs only once.

TABLE 2
Inscribed nodules from the Pylian Northeastern Building

Seal-impression no.	Inscription	Scribal hand	Nodule type	Seal device	Room
42	Wr 1325	S1331-Ci	Gable-shaped	lentoid seal	98
40B	Wr 1330	S1331-Ci	Gable-shaped	metal signet ring	99
39F	Wr 1331	S1331-Ci	Gable-shaped	metal signet ring	99
39D	Wr 1332	S1331-Ci	Gable-shaped	metal signet ring	99
39C	Wr 1333	S1331-Ci	Gable-shaped	metal signet ring	99
39B	Wr 1334	S1331-Ci	Gable-shaped	metal signet ring	99
10	Wp 1327	Ci	<i>Dome-shaped</i>	metal signet ring	98
51	Wr 1328	Ci	Gable-shaped	lentoid seal	98
45	Wr 1329	—	Gable-shaped	lentoid seal	98
40A	Wr 1326	S1272(?)—Ci ⁱⁱⁱ	Gable-shaped	metal signet ring	98
39G	Wr 1458	—	Gable-shaped	metal signet ring	99
39E	Wr 1459	—	Gable-shaped	metal signet ring	99
37C	Wr 1480	—	Gable-shaped	metal signet ring	?

of these nodules around thin string identifies them as the product of the same person.²¹ They had probably accompanied rams (OVIS^m) and male goats (CAP^m) fattened for butchery in fulfilment of the *o-pa* obligation (MOPS, 75–6; Killen 1999, 333–4) as a means of identification.²² Whether nodules **Wr 1458 (39G)** and **Wr 1459 (39E)** that share the same ring impression, and are unassigned to scribal hands, should also represent an *o-pa* transaction relating to animals (Palaima 2000b, 265) is ambiguous (Bendall 2003, 215–16, n. 189). Only nodule **Wr 1332 (39D)** must have represented an oxhide, as hinted by the acrophonic abbreviation *WI* possibly meaning *wi-ri-no* / *wrīnos* / ‘oxhide’ (Palaima 2000b, 265). An analogy can now be established with the New Kadmeion Treasury Room nodule **TH Wu 429 (CMS VS.3, 2 no. 369)**, which documents that the *o-pa* obligation regarding a processed animal skin was fulfilled.²³

The *opa*-related coherent set of Theban nodules **Wu 46, 56, 58, 76** and **88(?)** and the relevant Pylian and Knossian *o-pa* tablets imply that a prerequisite of the *o-pa* obligation was stating the personal name of the individual performing it (Killen 1999, 339–41 Appendix). Since the specific **Wu** examples bear the names of five different individuals but share the same seal impression C, the first should denote the palace intermediaries and the latter the individual or entity that had provided the fattened animals or had taken responsibility for the fattening (Palaima 2000b, 267–8; 2004, 227).²⁴ A parallel concerning the *o-pa* of an unknown delivered commodity could be established by nodule **MI Wv 6** found in an open space next to the southern building of the Midea Southwest Slope sector (Demakopoulou *et al.* 2002, 52–4, figs. 85–7; Del Freo 2008, 217). The allative *me-ka-ro-de* / *megaronde* / ‘to the megaron’ specifying destination

- 21 Homogeneous gable-shaped nodules made as a set tend to have thin string tied with a square knot, around which the maker rolls and pinches the clay (R. Palmer, pers. comm.). The presence of string knots has been secured for nodules **40B**, **39F** and **39C** of this specific group, cf. *MOPS*, Tabelle 3.
- 22 The animals were destined either for consumption in a ritual feast (Bendall 2003, 217; Weihartner 2005, 169–70, 227) or for a different ultimate purpose (Palaima 2000b, 264).
- 23 Cf. Aravantinos, in *CMS VS.3*, p. 551. The nodule Thebes Mus. inv. no. 32718 was hanging from a medium-sized cord and was stamped by a hard-stone lentoid displaying a bull-leaping scene. This image is only once represented among the Theban sealing corpus.
- 24 For an interpretation of the Theban seal-users as officials/scribes collecting the animals rather than people originally supplying them, see Palmer 1994, 161.



Figure 9

Nodule 42 (NM 8488): seal impression with ideogram *supra sigillum* (Wr 1325). Courtesy of CMS.

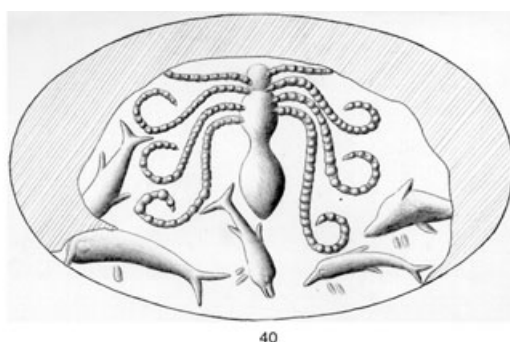


Figure 10

Nodule 40A (NM 8478α): obverse with ring impression and drawing of the latter. Courtesy of CMS.

and the term *o-pa* inscribed *supra sigillum* imply that the item was sent to the citadel in fulfilment of an *o-pa* transaction by *a₃-so-ni-jo*, possibly a palace intermediary mentioned on facet γ. Consequently, in the absence of personal names from the aforementioned Pylian nodules **Wr 1325** and **Wr 1330–4** we can assume that the persons or entities taking responsibility for the *o-pa* goods were signified by the seal impressions. Stylus 1331 had, then, interacted with the users of the following seal devices that bear ‘palatial-style’ iconography: a lentoid sealstone displaying two lions flanking a central element (42: Fig. 9) and two metal signet rings (40 and 39: Figs. 10 and 11). The last two are the second and third most intensively used seal devices of the preserved corpus. Moreover, they are visually related and are *not* represented among the nodules from the other Ano Englianos buildings.

The signet impressed on nodules of the group no. 39 was also the second largest used, since its original length and height exceeded the preserved dimensions of its impressions (*MOPS*, 22). Owing to a slight difference in the lower frieze of nodules **39F** and **39B/39E** (Fig. 12), it has been suggested that the owners of two ‘look-alike’ rings have been involved in impressing them (Younger 1999, 954 n. 8). Nevertheless, the difference is very difficult to establish, since the impressions of **39F** and **39B** have been distorted by the *supra sigillum* ideogram. The eclectic composition of the signet is distinguished by the unique arrangement in two friezes separated by a running spiral dado, which may imply an architectural setting. Its



Figure 11

Nodule 39A (NM 8490ε): obverse with ring impression and cross-section. Courtesy of CMS and photo by the author.

upper frieze depicts a reclining lion surrounded by a winged griffin on the left and possibly a wingless griffin on the right, thus recalling their combination in the frescoes of both the Megaron (Room 6) and the Queen's Hall (Room 46) of the Main Building (Lang 1969, 99–101, 110–12).²⁵ It is in a part of Hall 46's frieze that our motif finds its closest parallel (Shank 2007, 160–1, pl. 19.1). But in difference to the aforementioned frescoes, the creatures of the ring are also surmounted by a sun disk, reminiscent of a recurring Aegean symbolic imagery (Goodison 1989, 80–2).²⁶ The lower frieze of the ring featured dolphins accompanied by four double argonauts, creatures that also appear in friezes of the Main Building Rooms 2, 16 and 20 and in Hall 64 of the Southwestern Building (Lang 1969, 147–9, 42–3).

What are the implications of this particular combination? Let us approach it against the backdrop of symbolism associated with its production, along the lines set by iconological research (Aldhouse-Green 2004, 7). The Minoan griffin was a monster with clear religious and/or political connotations, whose appropriation to the eastern Mediterranean is evidenced mainly by the full-scale fresco griffins from the reception room of palace F at Tel el Dab'a/Avaris (Bietak 2005, 88–90, pl. 14.1; 2007, 40–2, fig. 36). Its adoption by the Messenian elites as a symbol of power has allegedly taken place in the early Mycenaean period (Rehak and Younger 2000, 293). The large gold ring that produced the aforementioned nodules probably dates to the late LB II–early LB IIIA period on stylistic grounds (*MOPS*, 90).²⁷ Thus, this ring was an heirloom that preceded the LH IIIB frescoes which were devised for the legitimation of the official function of Pylian Halls 6 and 46 (Niemeier 1986, 95; McCallum 1987, 134–8, 142, 148; Bennet 2007, 12–13). These frescoes could have been intended as a possible political statement, since they combine the two heraldic creatures that are adopted individually at Knossos and Mycenae – the griffin and the lion (Rutter 2005, 32). With regard to the marine creatures featured on the ring, although the presence of dolphins, argonauts or octopuses at the edifices of Pylos,

25 The griffins of the Pylian frescoes are wingless. Nevertheless, winged griffins may have flanked the Knossos Room of the Throne (Shank 2007, 162–4, fig. 19.5), forming part of a synthesis that can be dated to LM II (Macdonald 2005, 116; Driessen and Langohr 2007, 183–5).

26 For a very similar sun disk, parallel the ring **CMS I no. 17** from the Mycenae citadel, datable to the LH II–early LH IIIA period (*MOPS*, 87 n. 48). A slightly different sun disk and griffins appear on the Knossian nodule **CMS II.8 no. 192**, which was impressed with a ring datable to LM IIIA2, cf. *CMS II.8*, p. 13.

27 Its dating to the LB II period by Younger (1985, 73; 1989, 109) and Tamvaki (1985, 284–5) would provide a possible link with the Knossian Throne Room griffins.



39



39B



39F



39E



39E

Figure 12

Reconstructed ring impression of nodule no. 39 and photos of nodules 39B (NM 8490β), 39F (NM 8490δ) and 39E (NM 8490α) from left to right. Courtesy of CMS.

Tiryns and Glas may result from peer polity interaction in architectural display, it is not necessary to attribute the Englianos floors to itinerant painting specialists (Rutter 2005, 31–2 n. 55). Hence, their possible symbolic value cannot be accidental. They have even been projected as probable symbols of the Pylian naval power (Davis and Bennet 1999, 111 n. 24).²⁸

In this framework, the synthesis of the two friezes on the signet ring that produced the impressions on nodules **39A–G** (Fig. 12) may have had an emblematic character, as the one suggested for Near Eastern cylinder seals (Gorelick and Gwinnett 1990, 49). If the juxtaposition of the griffins, the lion and the sun disk reflects supernatural and religious tasks and the lower frieze implies power on sea, the ring may have been the attribute of a Pylian official with religious and political power.²⁹ Following Younger's premise that iconography refers to the seal-owner's administrative function (Younger 2000, 349) and on the possibility that ring no. 39 was an heirloom, I tentatively suggest that the contributor of the *o-pa* animals was a distinguished office-holder. The ring had presumably been transferred to him by the office-holder of the previous generation as a hereditary emblem, which should have been recognized by the central administration. This supposition does not exclude the possibility of achieved versus inherited/family status. The particular combination of specific symbols of royal Pylian power possibly pointed out the official's affiliation with the wanax, thus negotiating his identity. Although any of the major titles mentioned in the tablets could be proposed, it is noteworthy that the *ra-wa-ke-ta* / *lawagetas* / 'military leader' or 'assembler of the host' is referred to in **PY Un 718** as among the parties who should contribute animals and other commodities for a commensal ceremony in honour of Poseidon (Palaima 2004, 230–1).³⁰

On the other hand, a scene combining octopus and dolphins was the theme of another ring datable to the late LB II–early LB IIIA period (*MOPS*, 90), which impressed nodules **40A–K** (Figure 10).³¹ Its user had possibly interacted with the aforementioned scribe S1331-Ci and also with S1272(?)–Ciii, as shown by examples **Wr 1330 (40B)** and **Wr 1326 (40A)** respectively, both inscribed hanging nodules of the gable-shaped variety (Table 2). The latter, bearing the neuter singular nominative *de-mi-ni-jo* / 'δέμνιον' / 'bed', indicates the delivery of a bed or parts of it to the Northeastern Building department (Hofstra 2000, 286–7). The difference in the thickness of their strings is telling: **40B** hung from a thin string with an angular knot and **40A** from a medium-sized string with a rounded knot (*MOPS*, 38). Noteworthy also is the total lack of homogeneity in the shape, size and string thickness of the uninscribed hanging nodules **40C–K** that share the same ring impression. It shows explicitly that they were not made as a set by an official, but they rather conformed to the size of the goods they were hanging from. Owing to the presence of the transaction term *o-pa* on nodule **Wr 1330 (40B)**, we can tentatively assume that the ring impressions on all these nodules signified the person who supplied the commodities.³²

28 In this context, it is noteworthy that at an earlier phase the north-west wall of Hall 64 at Pylos possibly depicted a naval scene, cf. Shaw 2001.

29 For the belief that 'the message that the owner/user of the seal/ring wished to publicize, determined the subject of the representation, but the composition of the scene was the responsibility of the craftsman and depended on his abilities' cf. Lebesse, Muhly and Papasavvas 2004, 24.

30 On the role of the *ra-wa-ke-ta* see Nikoloudis 2007, 590–3; Bennet 2007, 16.

31 Tamvaki 1985, 271 suggested a LH IIIA1–2 dating for the ring.

32 This is also supported by their different findspots. Nodules **40C–D** are not gable-shaped as stated in *MOPS*, Tabelle 3, p. 98, but dome-shaped and slightly cylindrical respectively.

PYLIAN UNINSCRIBED AND OPEN IRREGULAR STRING NODULES: MODES OF SEAL USE

The evidence of the nodules with the 'palatial style' representations discussed so far supports the activity of two scribes responsible for supervising the collection and/or consignment of various goods to the palace and interacting with the seal-users involved. No conclusive evidence exists in order to deduce whether the latter were resident in the palace or not. A similar case has also been advocated by Palmer (1994, 161–3; 1996, 282) for the Wine Magazine groups of nodules **31A–E** and **1A–B**: the first shares the impression of a hard-stone lentoid depicting what seems to be a hunting scene (**CMS I 363**) and the second the impression of a signet ring bearing a cult scene (**CMS I 361**).

With regard to the numerous uninscribed hanging nodules from the Northeastern Building, the Southwestern Building and the Wine Magazine, it has been argued that the related transactions must have been limited in number or kind and committed to memory (Palmer 1994, 164; Palaima 2000a, 222). Only in the case of unusual or unexpected transactions would the administrators use writing as a resource. A *non-intensive* pattern of seal use is observed, whereby most of the singly represented seal impressions could have identified non-resident seal-users responsible for single transactions within a given administrative cycle (Weingarten 1988, 13–14).³³ A notable exception is provided by the hanging nodules of group no. **41**. These have been impressed with the most commonly used seal on the site, a hard-stone lentoid seal carrying an elaborate motif with goats. This top active user accounts for 13 examples out of the total of the Pylian nodules. Since they all come from Rooms 95–8 of the Northeastern Building and most of them are broken along the line of the cord, it is possible that they are the product of internal storeroom administration by a bureaucrat of the Northeastern Building administrative department.

Thus, the majority of the Pylian uninscribed nodules could be explained as the work of individual seal-users, officials and/or representatives of collective groups outside the centralized administration. The most plausible inference is that the shape and type of the nodules elucidated their purpose and the seal impression signified the person or group delivering or handing in commodities.³⁴ This is supported by the fact that the Mycenaean string nodules were never counterstamped with different seals as some of the corresponding Minoan sealed documents, for example the Hieroglyphic crescents that labelled transacted commodities (Weingarten 1995, 306–8).

Could a case for the activity of resident Pylian seal-users be made on the basis of the open irregular string nodules, as suggested by Hallager (2005, 254–8, fig. 2.5d–e) owing to their initial fragile character? Unlike the hanging nodules, they were not shaped over knots. Many of the numerous examples from the Northeastern Building, the Southwestern Building and the Wine Magazine belong to the '*Wickelband*' subtype (e.g. nos. **82**, **12A**, **50**, cf. Figs. 13, 14 and 16). Modelled around a broad flat band of leather, parchment or gut, which was twisted over other cords of the same or a different material, or around the two intertwined ends of the same cord, they must have prevented the unauthorized access to goods (*MOPS*, 60; Müller 2002, 64).

33 In the case of the Wine Magazine assemblage, it has been argued that multiple sealings sharing the same impression hint at repeated deliveries by the same seal-owner (Palmer 1996, 281, Table 17.1).

34 On the shape as a criterion of function, see also Weingarten 1986b, 294 regarding the 'geometrically-varied' LM I B sealing shapes of Ayia Triada.



Figure 13
Nodule 82 (NM 8518, Wickelband) from Southwestern Building (OSW 6-10): cross-section.

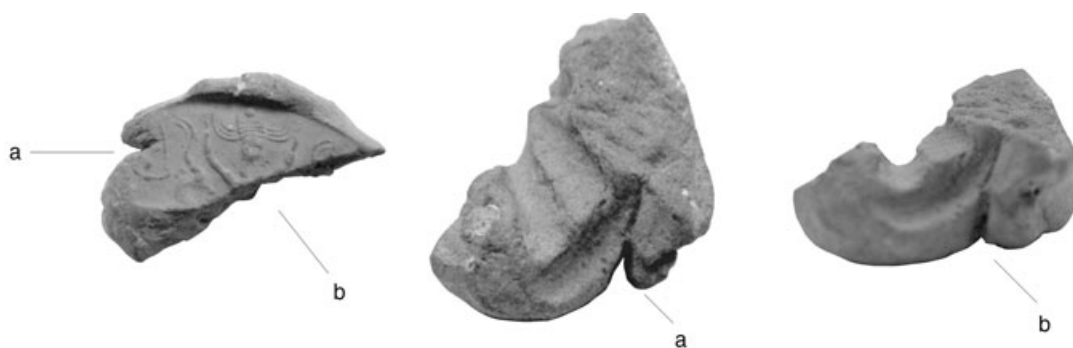


Figure 14
Nodule 12A (NM 8552α, Wickelband) from Southwestern Building (OSW 6-10): obverse with ring impression and cross-sections a-b.

On typological grounds, two observations can be made. Some of the irregular string nodules with finished edges, for example **14B** from the Wine Magazine and **69A** from Room 95 of the Northeastern Building, bear one curving and one straight side (Figs. 17 and 18).³⁵ First-hand examination of the Knossos group showed that the same characteristic also occurs in the Knossian assemblage. Moreover, an example of this type can be identified in the Theban assemblage of the Room of the Treasure (**CMS VS.3 no. 373**, cf. Fig. 19), a fact that points to a distinct typological subcategory.

On the other hand, some of the Pylian irregular string nodules can alternatively be classed as broken pyramidal nodules. This is supported by the preserved straight lateral sides and by their broken edges caused when the nodules were detached from the commodities. The fracture is visible on both sides of the string-hole, as in the case of examples **12A**, **50** and **16** from the area of the Southwestern Building (Figs. 14, 16 and 20). The first nodule is one of the three examples impressed by the largest Pylian signet ring (**12A–C**), which bore a cult scene (Figs. 14

35 These probably correspond to Palmer's Type III nodules. Weingarten's term 'molars' seems the most suitable for them. No. **69A** was pressed on a wide band without a knot.



Figure 15

Nodule 12B (NM 8552γ) from Southwestern Building (OSW 6-10): obverse with ring impression and cross-section.



Figure 16

Nodule 50 (NM 8545, Wickelband) from Southwestern Building (OSW 6-10): fractures visible in the cross-section (left) and on the reverse (right).

and 15);³⁶ all three of them (**12A**, **50**, **16**) must, then, belong to the hanging nodule type and not to the one with open reverse.³⁷

The contextual associations of the Pylian irregular string nodules reinforce the inference that they were attached to commodities not after but prior to their delivery to the storerooms. Seven examples were among the group found by the doorway of the entrance of the Wine Magazine indicating that they had rather been detached from consignments (Palmer 1994, 156).

36 This ring (CMS I no. 379) has been assigned to a stylistic group of the fourteenth century (Younger 1989, 109, cf. Rhodian Hunt group) and was also an heirloom.

37 Autopsy indicated that Pylian nodule no. **16** (NM 8547) bears the imprint of a small-sized thumb (Fig. 20), perfectly fitting the author's thumb. It must, then, be a woman's (or a child's?) fingerprint. For an analogy, see Ward 1989, 36–7 on female seal-owners in Egyptian 'households'.



Figure 17

Nodule 14B (NM 8521β) from the Wine Magazine: obverse with the ring impression and cross-sections.

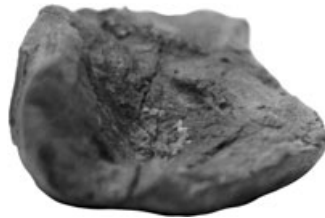


Figure 18

Nodule 69A (NM 8508α): cross-section.

The same possibility could be suggested for many of the examples recovered in the Northeastern Building.³⁸ Thus, it is not impossible that the impressions of mostly hard-stone lentoids with a ‘bucolic’ imagery on most of the Wine Magazine and Northeastern Building irregular string nodules signified deliveries by provincial bureaucrats, as suggested by Panagiotopoulos. The lack of morphological uniformity noted and their careless modelling may stem from the thickness of the cords, ropes or leather twisted bands used in tying up bulkier goods. Alternatively, both qualities could be explained by the assumption that they were made by semi-specialized or non-trained individuals in order to accompany goods destined for storage in the palace (Palmer 1994, 149-150, 158).

In conclusion, it is doubtful whether the Pylian irregular string nodules conform to a uniform type, as the one specified by Hallager (2005). With regard to the uninscribed nodules, if tallying up indeed occurred when accompanied deliveries were checked in, it obviously required either that specific resident Pylian scribes were responsible for external transactions or that the provincial seal-users/contributors were present during the transaction. Otherwise, the presence of personal names was required so that responsibility for the transaction would be acknowledged, as in the case of the unimpressed string tags **Wo 1199** and **Wo 1247** from

38 The irregular string nodule **23** from Mycenae, which had initially been pressed against two parallel leather bands, was also found by the doorway of Room 1 of the House of the Sphinxes (Müller, Olivier and Pini 1998, 33, 44 Abb. 12 no. 23). Irregular string nodules **12A**, **16**, **50** and **64** are assigned to trenches of the wider area of the Southwestern Building.



Figure 19

Nodule CMS VS.3 no. 373 (Thebes Mus. inv. no. 32723): open reverse. Photo by the author (courtesy Dr V. Aravantinos).



Figure 20

Nodule no. 16 (NM 8547): cross-sections and thumb imprint.

storerooms 24 and 32 (Palaima 1987, 261; *MOPS*, 80–1; Palaima 2000a, 231–3). It is, though, conceivable that the latter may have indicated another type of transaction relating to the internal movement of goods.

PYLIAN NODULI AND SEAL-USERS

So far we have examined categories of Pylian nodules which were used as devices documenting incoming commodities and possibly the storage or internal movement of goods. Another enigmatic Pylian class is that of noduli, namely documents without a string-hole or other means of attachment to objects, but with a single seal- or ring impression. Their Minoan predecessors with one to three seal impressions may have documented the movement of goods between the central administration and external parties. The general lack of inscriptions or indications of quantities on these noduli and their association with storage contexts support their interpretation as ‘dockets, handed out in return for occasional work, to be later exchanged

for rations or other payment' (Weingarten 1986a, 18; Weingarten 2007, 135).³⁹ Their seal impressions, then, must have symbolized the party recognizing the obligation.

The two inscribed Knossian noduli **Wn 8713** and **8752** from the final destruction horizon of the palace support the belief that this class of documents was also employed in literate Mycenaean administration. Nonetheless, all noduli found in mainland contexts are uninscribed. The unique example from Mycenae comes from the unstratified deposit of the Rhyton Well and was notably impressed by an heirloom signet ring with palatial-style iconography (Müller, Olivier and Pini 1998, 17–19, Abb. 19 no. 2). The seven Pylian noduli were found in the Wine Magazine (Cat. nos. **81, 52, 55, 73, 67**) and in the Northeastern Building (Cat. nos. **19, 76**, cf. *MOPS*, Tabellen 4, 5), namely a complex devoted to storage and an administrative department dealing with the redistribution of goods respectively. But there is no overlapping of seal impressions between the examples from these two assemblages. Although they share the same shapes with the hanging nodules (gable-shaped, pyramidal and dome-shaped), none of the noduli carries the same impression as any of the latter, for inferences on the identity of the parties impressing to be made. Six out of seven noduli were impressed with lentoid seals bearing animal motifs. Their poor state of preservation and the low legibility of their motifs do not support the view that they might have functioned as model-impressions (*MOPS*, 59, Tafel 37, 38).

The key to their interpretation may lie in the gable-shaped nodulus no. **19**. That carries the impression of a signet ring with representational subject matter, possibly an old gold ring, deformed on its upper edge (*MOPS*, 11). The large size of the nodulus, its carefully modelled shape and its ring impression, all conform to nodules nos. **20** and **21** from the Archives Complex, which were impressed with the two look-alike rings. Does this possibly support the activity of a central administrator in the Northeastern Building? If they had indeed functioned as dockets, we can hypothesize that those left in the aforementioned storerooms denoted the completion of redistributive transactions and were kept by the administrators in charge as proof of the outgoing commodities. The seal impressions would, then, evidently indicate functionaries of the central administration acknowledging an obligation towards the receivers.

GLYPHTIC IMAGERY AND QUESTIONS OF AGENCY: SEAL-USERS WITHIN PYLIAN ADMINISTRATION

The main focus of this paper has been to provide insights into the patterns discernible in the Pylian sealing practices with regard to the identity of the seal-owners involved. The study of the Ano Englianios sealed documents, rich both in typological and iconographical terms, demonstrates that the approach to the interpretation of the seal impressions has to be manifold. The attempt to infer the representational value of the seal devices using their imagery and their material as an exclusive criterion has proved problematic. This is especially clear in the case of the Northeastern Building administrative department, where no coherent or closed group can be defined solely on the basis of the seal impressions.

Sealed documents – object sealings, nodules and noduli – formed part of a system of symbolic order, since they functioned according to pre-determined underlying principles. The formation of these principles was bound up with the practices of human agency, but it can only

39 On their interpretation as receipts symbolizing services offered or commodities given, see Hallager 1996, 124–5, 237. The earliest Minoan noduli found in the MM IB Deposit A at Knossos could have served as *laissez-passer*, cf. Weingarten 2007, 135.

be studied in abstraction, divorced from the conditions that brought these principles into being. In particular, the value of Mycenaean hard-stone sealstones and metal signet rings as objects of elite ownership is established not only from Early Mycenaean burial contexts but also from the sphragistic use of many heirlooms in LM/LH IIIA2–IIIB. Our understanding of the motivations of elite individuals for choosing to be represented by specific seal devices can, at best, rely on hypotheses based on the analysis of the iconographical principles of glyptic imagery. Since no personal names and titles were engraved on the seals, we cannot unambiguously test the possibility proposed on Near Eastern analogy that each Mycenaean official used more than one seal device (Palaima 1987, 256–7 n. 34).

From the analysis of the impressions on Pylian sealings and nodules we deduce that their symbolic meaning has mainly to be determined by the contextual associations. Specifically, the high occurrence of ring impressions among the assemblage of direct object sealings and combination nodules from the Archives Complex supports the interpretation of the gold rings as insignia denoting distinct institutionalized offices within the administration rather than hierarchical attributes. This notion is corroborated by the study of the Messenian burial assemblages, which does not explicitly indicate an eventual distinction of degrees of hierarchy in the status of the owners of the seal devices (Laffineur 1990, 140). As institutional/administrative attributes the signet rings could conceivably be hereditary emblems passing from each office-holder to his/her successor. This hypothesis is also supported by the situation at Knossos, where the proportion of heirloom seals was far higher than at Pylos (Krzyszowska 2005, 229 n. 126).

The active maintenance of this tradition of knowledgeability that is embodied by the sealing practices obviously relied on the agents' ability to reproduce or transform their own identities (Barrett 2000, 65). It is suggested that this is clearly manifested in the choice of the owner of the signet ring with the griffins and the lion to use this heirloom as a means of identification, while fulfilling his *o-pa* obligation to the central administration. The choice not to withdraw this specific heirloom as a burial gift, but to prolong its functional use, had been made by a series of successive owners, thus revealing a collective agency. If the griffin was a signifier already from the Early Mycenaean period, when Messenia was probably organized in chiefdoms, then the first owner probably acquired or commissioned the ring in an attempt to consolidate an identity. By the end of the LH IIIB2 period, when nodules **39A–G** were impressed, the ring had probably become the attribute of a high-ranking official, such as the *lawagetas*. Although this proposal must remain a tentative one, the affiliation of this official with the central administration seems secure.

Choices made by individual Pylian scribes, regarding the transactional details inscribed on the nodules, have been extensively analysed by Palaima (2000a, 2000b). Destination designations, such as those encountered on the Theban group of nodules and the even more impressive allative *me-ka-ro-de* of the Midea nodule, do not occur among the Pylian examples. This may partly be explained by a more active involvement of the Pylian palace bureaucrats in the requisition process. We can safely posit that travelling administrators would regularly interact with regional officials, such as the *da-mo-ko-ro*, *ko-re-te-re* and *po-ro-ko-re-te-re* of tablet **Jn 829**, and probably also with the local leaders *qa-si-re-we*.

In the cases where inscriptions reinforced the 'contractual' character of the hanging nodules by specifying the kind of institutionalized obligations that were met, it is argued that the individuals or parties fulfilling the latter were signified by the seal impression. Thus, the taxation-related nodule **32 (Wr 1457)** from the Archives Complex may reflect the interface of

palatial and second-order administration, namely a transaction of a palace scribe with a specific second-order district mobilizing goods from its wider subregion. It is conceivable, but not clear, whether the seal impression should have designated a district official, the district centre or even a tax-contributing corporate group, such as the *ka-ke-we* / 'bronzesmiths'. On the other hand, examples where the seal impressions were rendered unreadable owing to the *supra sigillum* inscriptions indicate that the function of the nodules as primary documents could not be prolonged. The scribe involved should either memorize the person involved in the transaction or immediately transfer the transaction details into another medium.

In terms of the Pylian open irregular string nodules that mostly carry animal imagery, their typological traits indicate that these should not be assigned to a uniform category. The context of some examples from the Wine Magazine further supports the idea that they cannot exclusively represent the activity of resident bureaucrats labelling the goods in storerooms. The case should be considered that they were rather created by travelling palace functionaries, extra-palatial contributors or district officials, in order to secure consignments to the palace.

With regard to the uninscribed nodules bearing unique hard-stone seal impressions that mainly reproduce stereotypic representations borrowed from nature, only speculations can be made about the identity of the seal-owners and the nature of the transaction involved. This happens, particularly, because we lack, so far, indisputable evidence for the use of nodules in second-order centres or in individual households. We may, though, assume that the standardized character of these continuously reproduced nature motifs denoted distinct social institutions such as *wo-ko* / 'oikos' or, more possibly, kin or descent groups within the communities of the Pylian polity.⁴⁰ An obvious prerequisite was that specialized bureaucrats be able to recognize the corresponding emblems along principles that remain obscure to us. Otherwise, the presence of the specific seal-owners during the check in of goods would be required. Whether seals were used as markers of the aforementioned entities and of individuals, substituting contractual documents made by palace scribes, cannot be established by the evidence available so far. One indication towards that possibility is the suggested use of noduli, the seal impressions of which would function as authorizing elements.

The decision not to use Mainland Popular Group seals sphragistically as representational means in the context of transactions with the Pylian palace is reminiscent of the very rare use of talismanic seals in Minoan administration. If not determined by find circumstances, it presumably reflects intentionality. A possible explanation is an adherence of the various social agents to an administrative system that was probably established in the formative period of the Englianos polity. From that perspective, we can explain the presence of a Mainland Popular Group seal in the Northeastern Building, which according to the material available has left no any trace of its sphragistic use. It cannot, though, be excluded that seals of this type had a functional use within the framework of the individual second-order centres (Eder 2007, 93, 95), as implied by the Nichoria and, perhaps, by the Midea settlement as well.

In general, this study has highlighted some practical aspects of tracing agency in sealing administration on the basis of find context, typology, imagery and inscriptions. Overall, no consistent patterns linking Pylian seal and ring imagery with seal- or ring-users can be detected. Nevertheless, it can be suggested that certain symbols embedded in the composition of

40 A focus on the distribution patterns of seals in the LH settlements of the Pylian polity and their respective cemeteries may prove fruitful in the future. On the Messenian kin and descent groups, local communities, community leaders and councils of elders, see Deger-Jalkotzy 1998–1999, 76–7.

the imagery signified social status.⁴¹ These visual signifiers did not acquire their meaning coincidentally (Younger 2000, 350), or by resemblance as in the Near East, but rather by convention, as supported by the Ano Englianos wall painting tradition discussed elsewhere. This is certainly a working hypothesis that does not explore how such a system would work as a code. The material of the seal devices also determined their representational value according to rules that were probably set by the palatial elite. In this respect, it is very unfortunate that no analysis of the imagery and the material of the seals that stamped the Theban nodules from Liangas plot is possible, owing to publication restrictions. Hence, our hypotheses need to be tested against the patterns emerging from the rich Knossian sealing corpus, which may also help to elucidate questions of Late Bronze Age seal ownership.

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APPENDIX. THE OCCURRENCE OF RING AND SEAL IMPRESSIONS AMONG THE DISCUSSED INSCRIBED NODULES FROM THE NORTHEASTERN BUILDING

Wr 1331 [39F] S 1331-Ci Room 99

.α CAP^m *supra sigillum*
.β *vacat*
.γ o-pa

Wr 1332 [39D] S 1331-Ci Room 99

.α *WI supra sigillum*
.β o-pa
.γ *vacat*

⁴¹ This case would then parallel that made by Pittman 1994, 191–2 for Mesopotamian sealings and, also, that made by Weingarten 1995, 307 for Hieroglyphic seals.

Wr 1333 [39C] S 1331-Ci Room 99

.α *vestigium (?) supra sigillum*
 .β *mutila*
 .γ *o-pa*

Wr 1334 [39B] S 1331-Ci Room 99

.α *CAP^m supra sigillum*
 .β *vacat*
 .γ *vacat*

Wr 1458 [39G] () Room 99

.α *]E[supra sigillum*
 .β *vacat*
 .γ *deest*

Wr 1459 [39E] () Room 99

.α *sigillum*
 .β *vacat[*
 .γ *e-ri[*

Wr 1325 [42] S 1331-Ci Room 98

.α *CAP^m supra sigillum*
 .β *vacat*
 .γ *o-pa*

Wr 1330 [40B] S 1331-Ci Room 99

.α *sigillum*
 .β *vacat*
 .γ *o-pa*

Wr 1326 [40A] S 1272-Ciii Room 98

.α *sigillum*
 .β *-jo*
 .γ *de-mi-ni-jo*

ABBREVIATIONS

MOPS = MÜLLER, W., OLIVIER, J.-P., PINI, I. and SAKELLARIOU, A. 1997: *Die Tonplomben aus dem Nestorpalast von Pylos* (Mainz, Akademie der Wissenschaften und der Literatur Mainz).

CMS I = SAKELLARIOU, A. 1964: *Corpus der Minoischen und Mykenischen Siegel. Band I Die Siegel des Nationalmuseums in Athen* (Berlin).

CMS II.8 = GILL, M.A.V., MÜLLER, W. and PINI, I. 2002: *Corpus der Minoischen und Mykenischen Siegel. Iraklion Archäologisches Museum. Band II Teil 8,1 Die Siegelabdrücke von Knossos* (Mainz am Rhein).

CMS VS.1B = PINI, I. (ed.) 1993: *Corpus der Minoischen und Mykenischen Siegel. Kleinere Griechische Sammlungen. Supplementum 1B Lamia-Zakynthos und weitere Länder des Ostmittelmeerraums* (Berlin).

CMS VS.2 = DAKORONIA, P., DEGER-JALKOTZKY, S. and SAKELLARIOU, A. 1996: *Kleinere Griechische Sammlungen. Supplementum 2 Die Siegel aus der Nekropole von Elatia-Alonaki* (Berlin).

CMS VS.3 = PINI, I. (ed.) 2004: *Corpus der Minoischen und Mykenischen Siegel. Supplementum 3 Kleinere griechische Sammlungen. Neufunde aus Griechenland und der westlichen Türkei* (Mainz am Rhein).

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