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Little things in a big landscape; thoughts on the mobility of sealings and sealing practices in First and Second Palace Period Crete

ABSTRACT

During the First and Second Palace Periods, seals and sealings were widely used across Crete as one component of what Dickinson has called “writing-assisted administration” (1994, 305). A dazzling array of seal types and sealing forms are found, their use running parallel to or intertwined with that of the Cretan Hieroglyphic and Linear A clay administrative documents.

In this paper, I trace two paths of movement in these sealing practices – the first is that of sealings, which could be moved across the landscape attached to physical goods or by themselves as carriers of information, or created in one place to capture information about the movement of other objects. The second is the transfer of sealing practices, and how it might have taken place – this is particularly significant when considering sites that have yielded sealings but not examples of other written documents, and close attention must be paid to the potential for making choices.

Drawing these paths together, it becomes possible, firstly, to nuance the way we map changes in seal use and sealing practices onto changes in social, institutional or administrative spheres, particularly between the First and Second Palace Period, and secondly, to push beyond merely invoking the materiality of these objects or agency of their users to think through the life of seals and sealings as things made to be passed from hand to hand, scrutinised and discussed. Their small size made sealings ideal as travelling objects which could carry information much greater than themselves, but there is still much work to do to understand the practicalities of seal use.

KEYWORDS: Aegean Bronze Age, seals, sealings, administration, Cretan Hieroglyphic, Linear A, mobility, materiality, agency, processes of learning

INTRODUCTION

Reading through the call for papers for this conference, with its theme of mobility, and in particular, I quote, “the flow of goods, services and practices in relation to paths, routes, journeys and the exchange of both tangible and intangible forms of culture”, I was struck by how intrinsic the idea of mobility is to our reconstructions of seal and sealing use in the Bronze Age Aegean. Although sealings tend to be found at the end of their lives, as it were – being stored or having been thrown away – reconstructions of what happened before are all about movement, with sealings travelling about the landscape attached to agricultural produce and so on. How much of this is assumption, though, and how much observable in the material record?

In this paper, I review the evidence for the mobility of sealings and sealing practices in the First and Second Palace Period on Crete (Middle Minoan IB/1900 BCE to Middle Minoan III/1700 BCE and Middle Minoan IIIA/1700 BCE to Late Minoan IB/1470 BCE respectively), and the significance of these paths, but in a high level and somewhat tentative way, to try and unpick what can be said with certainty and what remains problematic. Seals and sealings are very much “little things in a big landscape”; a great deal of weight is placed on them as signifiers of things, be it identity, social status, economic or political control, but in doing so perhaps forgetting how small they usually are as objects. They were made by hand and they fit in the hand, and this smallness and portability was essential to their usefulness.

MOVING AROUND SEALINGS

How, then, can one identify movement in the archaeological record? There is a fundamental problem here that discarded or stored sealings have lost their original temporal and spatial context of manufacture and use. Furthermore, because Cretan Hieroglyphic and Linear A remain undeciphered, there are not necessarily the same pointers available as in the later Linear B texts that enable the identification of toponyms, transactional terms and so on, which can guide our understanding of documents' usage.

There are, of course, examples where visual or chemical analysis indicates that a sealing originated from somewhere other than its findspot, but these are rare – the work done on the *Päckchenplomben* (flat-based nodules) is one. These little packets of parchment documents folded tightly and sealed with high-quality gold rings, including four rings which were impressed on multiple sealings at different sites, have loomed large in discussions of the possible pre-eminence of Knossos in the Second Palace Period (Krzyszkowska 2005, 189-190). Goren and Panagiotopoulos' scientific analysis of the clay of the nodules indicates that they can be divided into three groups, two of which may be related with known non-calcareous fabrics from north-central Crete, making Knossos their possible source, while the third, a single sealing from Ayia Triada, has a different composition and may be connected with clay sources in the Mesara (2009, 257-258). These sealings indicate a long-lasting path of communications from Knossos across Crete and to Thera, although this probably had a different 'flavour' to the standard economic usage of sealings and tablets (Finlayson 2014, 192, and see Montecchi's paper in this volume).

Otherwise though, we, not unreasonably, make assumptions about how sealings were used based on comparisons with contemporary Near Eastern or Egyptian practices, and with later Linear B sealing forms; based also on what we think was going on socioeconomically, that is, what people might have needed from their sealing systems; and, most importantly perhaps, based on the sealings' size and shape, whether they were attached to anything, and if so, how they were fixed around strings or cords, and whether the string was knotted to prevent the clay from slipping or to tie two ends together (Krzyszkowska 2005, 2). The end result is a corpus of objects with a complex mix of labelling and securing functions, some of which are more certainly identified than others.

Additionally, for some sealing types, their findspot is also used to define their purpose. This can create something of a tension between the relative significances of these two factors of

form and findspot. Caches of Linear A single-hole hanging nodules, for example, have been found in spatially restricted areas at Haghia Triadha, Zakros and Khandia alongside groups of valuable stone or bronze objects (the “Harvesters vase” and “Boxers rhyton” at Haghia Triadha, for example, and at Tyllissos, which yielded only one single-hole hanging nodule, cauldrons, bronze pins and hinges for boxes and other precious items), and this feeds into the idea that these sealings might have been hanging from something similarly precious, such as papyrus rolls (Schoep 1995, 62).

I have chosen three sealing types which could represent different kinds of mobility. The first is perhaps the most obvious, in which sealings could be used to accompany goods into the central place. Cretan Hieroglyphic crescents, for example, known from Middle Minoan IIB levels at Knossos, Mallia and Petras, were formed on a knot which held the clay in place, so they are more like labels than for security, and show seal impressions on one face with incised Cretan Hieroglyphic text on the others; the inscriptions contain logograms and sign-groups, and the logograms for GRAIN, OLIVES and WINE can be identified (Krzyszkowska 2005, 101, Weingarten 1995, 303). By analogy with the form and function of the later Linear B gable-shaped hanging nodules, the crescents are thought to have accompanied agricultural produce from the hinterland into the central place as primary authenticating documents, carrying information about the goods and/or their sender (Schoep 2001, 91). The Linear B gable-shaped hanging nodules can carry incised text and a seal impression in a sort of formula which is equivalent to that recorded on the “palm-leaf” tablets (Piteros *et al.* 1990: 183). Both the Cretan Hieroglyphic crescents and the Linear B gable-shaped hanging nodules were ideal for attaching to goods, livestock *etc* to be transported into the central place – they were small, robust and secure on their strings.

One could also include the First Palace Period direct object sealings here, at least those that sealed portable jars, chests or boxes and so on; direct object sealings are “proper” sealings in the sense that they secured the object physically, being applied to pegs holding boxes closed or over the mouths of jars *etc*. These occur widely as part of both Linear A and Cretan Hieroglyphic administrations, and appear in all the major sealing deposits of this period, Phaistos, Monastiraki, Mallia *Quartier Mu* and Petras (Krzyszkowska 2005, 99). One cannot distinguish between sealings from pegs closing doors (indicating control of storerooms) and those sealing chests (control of movable property) (Krzyszkowska 2005, 28), but all these sealings operated at “a slight degree higher than the merely practical action of closing”, securing an object physically, but also authenticating it, and identifying a responsible party (whether role or individual) by means of the seal impression (Palaima 1987: 257, Finlayson 2013, 129).

In both these examples, the sealed object itself and the sealing must be taken together as a composite portable message, as it were; the Cretan Hieroglyphic crescents did not have numerals incised on them, presumably because that information was supplied by the goods themselves, and the direct object sealings, which were stuck onto their object, actually took its shape on their underside (Knappett 2008a, 150, and see Fiandra 1968, 382-397 and 1975, 1-25 for analysis of the backs of the Phaistos sealings and to what they were attached).

The second group is a very long-lived and widely-distributed sealing form; these are *noduli*, very simple little pieces of clay with a seal impression, and very rarely an inscription. Their primary function seems to be carrying a seal impression – they are almost the essence of a sealing. Comparison with Old Babylonian practices suggests a range of functions that all hinge on the certifying or legitimating potential of a seal impression, so they could be dockets, receipts for work done, tokens to be exchanged for goods or services, or *laissez-passer* to identify the carrier as legitimate (Weingarten 1986, 18 and 1990a, 19-20). The physical sealing itself is very basic, but it represented something much bigger, an entitlement or legitimacy. Given the possible range of uses, this would presumably need to be verbalised by the person who carried it, and/or used within a community who understood how it worked, because this information was not obviously encoded in the sealing.

As a contrast, in the third group, the Linear A roundels, which are primarily a Second Palace period shape and widely distributed, the sealing does not seem to have traveled, but was instead held centrally. The largest cache, 112 roundels, was found jumbled with other documents in Late Minoan IB destruction debris in Khania, and might originally have been part of an archive (Hallager 1996, 50-51, Krzyszkowska 2005, 173). Interpreted as a record of the disbursement of goods, the recipient would impress his/her seal around the edge of the sealing to confirm the number of units of livestock, agricultural produce, cloth *etc* received, and this quantity could also be recorded in the inscription (Hallager 1996, 100-101, 108-111, 113, 116-118). The significant point here is that, while the sealing and the information it captured were owned, as it were, by the central authority, the seal-user went away with his or her seal, the allotted quantity of goods and the knowledge that everything had been settled properly (or at least to the satisfaction of the central authority).

Much of how these sealing processes might work is still up for debate; what exactly did the seal impression represent, for example? How much could be encoded in a seal impression versus the shape of the sealing, and when was the information that the sealing represented crystallised – at the moment of its manufacture or when it was read and processed? Nevertheless, we can separate out different possibilities here; sealings could be used to fix and carry information that accompanied the movement of goods, as with the crescents; or to act almost as proxy for a greater authority or to key someone in to established processes, as the *noduli* did; or to represent a moment of the fulfilment of obligations, like the roundels. In each case, the sealing potentially captured only a portion of the total possible information for the transaction, but this presumably did not diminish the effectiveness of the process.

THE MOBILITY OF SEALING PRACTICES

Although there is considerable variation between sites and through time, the way different sealing types were made and used appears sufficiently uniform to require comment. It is likely that seals were used in local, probably domestic, administration long before the palaces were built; although the majority of Cretan Prepalatial seals come from tombs, and they seem to have been deposited with bodies from the Early Minoan II period, if not earlier, most of them have a hole for suspension around the neck or elsewhere on the body, suggesting they were

“lifetime possessions” rather than having been manufactured specifically for the grave (Alexiou and Warren 2004, 34, Sbonias 1995, 128). Seal distribution is uneven across Crete and largely a reflection of where tombs have been excavated, whereas sealings and impressed objects are found across much of the island, and in a variety of contexts (Weingarten 1994a, 171, Krzyszkowska 2005, 78, majority listed in Vlasaki and Hallager 1995). A *nodulus* from Mallia is significant for its early date, and its findspot, a Middle Minoan IA building lying underneath the Protopalatial palace (Hue and Pelon 1992, 31-32). The walls of this building are oriented almost identically to the later palace, and it could represent some sort of Prepalatial central building (Schoep 1999, 270).

The Mallia *nodulus*, by dint of its form and non-domestic findspot, provides a sort of bridge from the predominantly domestic seal use of the Prepalatial into the First Palace Period, when sealings are sufficiently common to enable our reconstructions of administrative systems, which focus on the upward mobilisation of goods and services with the assumption that these processes were defined and driven by the palaces (as per the discussion following Pini 1990, for example). These sealings did not operate in isolation though; they were now components of bigger administrative processes, probably mostly used at the beginning for information gathering, but still related to other document formats through which information could be managed and stored (and see Schoep 2002, 197 and Militello 1991, 343-346, 347 Figure 2 for examples of complementary or parallel paths of sealing and document usage).

The nature of Prepalatial administration remains poorly understood, and there is still work to do to unpick what was happening sociopolitically within the First and Second Palaces to prompt the creation of administrative systems, but surprisingly little attention has been given to establishing a framework for identifying and understanding these implied processes of organising and establishing practices, of teaching and learning. Who managed it? Did the palaces co-opt pre-existing smaller-scale practices or networks (particularly the Prepalatial patterns of seal and sealing use, which were presumably developed according to the needs of households or small communities) and expand on them, or were they created anew? Either way, how were people persuaded or drawn in to being part of these processes? We know from the Linear B documents at Pylos, that administrators could go out into the hinterland - *a-ko-so-ta*, one of the principal Pylian administrators, is recorded as going out on a tour of inspection (tablet Eq 213) – so perhaps we should posit palatial administrators visiting settlements to establish the way things must be done, or the headman or woman of a village being made responsible.

There is an additional complicating factor, well illustrated by the First Palace Period site of Monastiraki; direct object sealings were used in this settlement, in a system very much like that at its larger neighbour Phaistos. In fact, similarities in pottery, including plain domestic wares, and architecture have been taken to indicate a close relationship with Phaistos, even that Monastiraki was its dependency (Kanta 1999, 388-389, 2014, 134). No written documentation has been found at Monastiraki though, only the most meagre traces of script use (Kanta 1999, 391). Did Phaistos impose its system of sealing administration but not the broader use of administrative writing on Monastiraki, or did the inhabitants of Monastiraki choose specific areas in which to follow their neighbour? The Monastiraki sealings do show significant differences,

such as the objects sealed and the prevalence of multiple-sealing (Kanta and Tzigounaki 2000, 203), but it is very difficult to work out how much might be down to preservation biases, or be a reflection of deliberate choices, and who might have been making those decisions.

Running alongside these large-scale variations in practices, it is also entirely possible, given that the different sealing forms had different purposes, that people might interact with certain kinds of sealing depending on where they were, what they did (farmer versus weaver versus potter, for example), and what dealings they had with the central authority. This could potentially create highly restricted or specific paths of knowledge and practice; using the example of *noduli*, if a messenger brought a *nodulus* entitling him to bed and board in your gatehouse, then you would need to be able to 'read it' and know what it signified, and perhaps then keep it safe in order to claim your own reimbursement for your troubles, but you might never produce the kind of goods that would require you to use another sealing form.

At the same time, sealings could be visible in a way that the other clay documents perhaps were not. The most widely distributed documents – tablets, *noduli* and direct object sealings – are those which could occur on their own in single type deposits, often in storage room contexts, whereas roundels and hanging nodules are almost exclusively restricted to full combination deposits within central buildings, and their use may well have been monopolised by the central administration (Schoep 1995, 62-63, 1996, 79-81). It is certainly possible that for many people outside of these central places, travelling sealings were the only component of much bigger administrative systems, palatial or otherwise, which they saw, interacted with, or understood.

This is largely hypothetical, of course, but it is important; from a methodological point of view, these sealings did not make and move themselves but were the result of decisions and actions by all sorts of people across the landscape, but also because of the way the sealing evidence is used to reconstruct sociopolitical change.

THE BIGGER PICTURE

Changes in sealing practices are one component of a sweep of changes visible in the material culture between the First and Second Palace period, and they feature in our reconstructions of the sociopolitical upheavals thought to be taking place at this point. The transition between the geographically differentiated use of Cretan Hieroglyphic and Linear A in the First Palace Period, to the use of only Linear A, together with its dramatic expansion, in the Second Palace Period, is viewed as one very visible aspect of a struggle in which groups at sites which used Linear A became dominant and enforced (or made attractive) a change in writing and sealing practices (Schoep 2007, 58-60). This is not unreasonable, given the accumulation of other material evidence for important changes between these two periods (the rebuilding of some palaces, the appearance of "villas", processes of "Minoanisation" and so on), as well as what seems to be a link between the use of writing and elite identity (Knappett 2008b, 130, Younger and Rehak 2008, 140, Schoep 2007, 56-58).

However, sealing practices were not developed solely in order to be a resource that could be manipulated for sociopolitical reasons; while administrative practices may very well have been

a part of elite identity to be shaped and used for political gain, they had their own history and path of development and internal reasons for things being done in certain ways. It is difficult, though, to weigh up the extent to which individual changes in practice were motivated by utilitarian reasons, for example changes in production or storage strategies, versus large scale sociopolitical forces, and likewise to untangle the spectrum of possibilities between deliberate decision making and an almost unthinking commitment to one way of doing things. Between the First and Second Palace Period, direct object sealings ceased to be used; this sealing type was really very common during the First Palace Period, and used in both Cretan Hieroglyphic and Linear A administrative systems, which makes its disappearance harder to pin on Linear A's 'conquering' of Cretan Hieroglyphic. What it might suggest is that, firstly, the security of stored items was being managed differently, and, secondly, that people were now more interested in managing the movement of information through hanging nodules (such as the Linear A single and two-hole hanging nodules) and tablets than the movement of the goods themselves with their sealings attached (Finlayson 2013, 138, Knappett 2001, 86 and Weingarten 1990b, 107-108). The use of seals and sealings certainly became much more dominant in the Second Palace Period Linear A administrations (Hallager 1996, 42), which suggests to me that their usage was deliberately expanded, but how this might relate to sociopolitical changes ought to be left open.

Nested underneath the big ideological changes there must have been multiple levels of very mundane work, and possibly a great deal of upheaval, in ensuring that all the little people enmeshed in these administrative processes knew what to do and were prepared to do it, and again we come back to the question of how this might have been managed and by whom. There is a danger that the full significance of these changes gets lost in their role as a visible proxy for invisible social or political change. Oddo, in a forthcoming paper, makes the important point that different components of material culture could reflect different social mechanisms, with not everything suitable to be mapped one-to-one onto sociopolitical change; some classes of artefact might, in fact, be considered more meaningful than others to display socially significant messages. In this light, I wonder to what extent we privilege administrative practices, and particularly writing, because they speak to us of structures and systems and organisation – of a consciously planned and functional whole, rather than the potentially messy, unpredictable painfulness of social change.

CONCLUSIONS

To conclude, much of this discussion has been both brief and hypothetical, but there are two points to pull out. The first is specific to the writing-assisted administrations of the Bronze Age Aegean; I have suggested that sealings might well have been the most visible component of palatial or elite administration for many people, and certainly something that they were more likely to make and use than a tablet. This possibility needs to be factored into the way we conceptualise administration, seal-use and writing practices more generally; it affects how we define literacy in this period, how rooted we think administrative practices were in society and thus how sustainable they could be, and, perhaps most importantly, how those who were entangled in these systems thought about what they were doing.

The second point is the question of how we talk about mobility in the ancient world; we can identify the material traces of it, with greater and lesser degrees of ease, but that is not the same as explaining how it happened or why it happened. These hows and whys are inevitably going to be conjectural at times, but a starting point could be to acknowledge the possibility of the layers of decision making, the teaching and learning of new skills or ways of doing things that must have lain underneath the relatively simple action of making and impressing a small sealing and sending it off across the landscape.

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