

HIEROGLYPHIC DOCUMENTS AND SEALINGS FROM MALLIA, QUARTIER MU : A FUNCTIONAL ANALYSIS *

One of the major results of the excavations in Quartier Mu at Mallia has been the discovery of documents with hieroglyphic signs (tablets, medallions, "cones") and of sealings and noduli¹ with hieroglyphic or non-hieroglyphic impressions. It has proved the existence of elaborate processes of economic control in some Minoan buildings which were not palaces; moreover it gives new information concerning scribal activities during the protopalatial period in Crete (2000-1700 B.C.), a period for which very little is known.

All these documents—with a few exceptions from recent excavations in the Seal Engraver's Workshop area—have been published : the whole corpus of the hieroglyphic inscriptions by J.-P. Olivier and L. Godard (*Mu I*), all the sealings and noduli by J.-Cl. Poursat (*Mu II*). Nevertheless these two publications make it difficult to understand how the whole administrative system worked : they separate elements which should be put together on a unique distribution map; there is something else lacking : the rooms in which the documents have been found are carefully indicated in both publications, but neither the exact nature of the contexts nor the possible function of the rooms have been explained. Therefore I will try to complete these descriptions and to examine what can be learned about the Minoan administrative system in the protopalatial period.

A. The Find-Places

We must pay attention first to the fact that the total number of documents is very small (and should not be compared with the thousands of tablets from Knossos or Pylos !) : 9 tablets, 13 medallions, 2 inscribed "cones", 16 noduli and sealings of different types. None of them has been found *in situ* : they represent only a very small part of the documents which were kept on the upper floor in different parts of the buildings and had fallen down at the time of the destruction.

We cannot be sure that we know all the places where documents were kept. However, a look at a distribution map (Pl. II) can provide us with significant information.

* References will be made to the Quartier Mu publications :
Mu I : J.-Cl. POURSAT, J.-P. OLIVIER and L. GODART, *Fouilles exécutées à Mallia. Le Quartier Mu, I* (1978) (*ÉtCrét*, XXIII).
Mu II : B. DETOURNAY, J.-Cl. POURSAT and F. VANDENABEELE, *Fouilles exécutées à Mallia. Le Quartier Mu, II* (1980) (*ÉtCrét*, XXVI).
The documents will be designated by their publication number in these volumes. For example, II/262 = no. 262 in *Mu II*.

1 The term "nodulus" is used here in the sense given by J. WEINGARTEN in *Kadmos* 25 (1986) 8 : nodules "without perforation or other means of attachment".

1. The Seal Engraver's Workshop Area

One inscribed medallion (as yet unpublished) was found in 1977 in the exterior drain on the East side of the workshop building. We can assume that it had fallen from the upper floor (it was associated with some unfinished seals in the lower part of a destruction layer) and probably came from the work place itself. Consequently it is the first medallion discovered in a building which does not have obvious "administrative" functions.

2. Building B, Room V 5

Two noduli (II/259 and 260) were found here in 1966 in the S-E angle of the room, near the surface, together with a lot of material from above. A third nodulus (II/274) found some distance away in the surface layer might have been part of the same deposit.

3. Building B, East Area (Rooms IV 4-5)

The following documents come from the East part of a single architectural complex :

- 2 inscribed "cones", of a type unknown on other sites (I/20 : room IV 4; I/21 : room IV 5); they must have been put on some kind of object, but they are not true sealings (they bear no string mark).
- 1 two-sided clay tablet (I/1 : room IV 5) and a fragment of another one (I/3 : room IV 4).

We should probably consider as part of the same deposit : a) another fragment (I/4) from the first excavations in the Workshop area; b) three new fragments of similar two-sided tablets discovered in 1988 by A. Farnoux in disturbed levels north of the Workshop ².

4. Building A, S-W Area (Rooms III 9, III 15-17)

This architectural unit is composed of several magazines; 10 documents have been found there, mainly in rooms III 16-17 :

- 1 two-sided tablet (I/7);
- 4 conical door sealings (II/281, 283-285);
- 4 crescents (II/276-279);
- 1 pithos sealing (II/286);
- 6 noduli (II/262-263, 270-273).

5. Building A, S-E Area (Rooms III 3, III 5, III 11-14)

This is a very large area, which may be composed of smaller units. The documents come from five rooms :

- III 3b : 12 medallions (I/8-19) + 4 noduli (II/261, 267-269) + 1 two-sided tablet (anepigraph : I/5);
- III 5 : 1 four-sided clay bar (I/2);
- III 11 : 1 conical door sealing (II/282);
- III 13 : 1 two-sided tablet (I/6);
- III 14 : 1 crescent (II/275) + 3 noduli (II/264-266).

Another crescent (II/280) found nearby in the surface layer of the "Remblai Est" (square H 6) comes probably from the same area.

2 BCH 113 (1989) 97-100.

B. The Find-Contexts

All the documents have fallen from an upper floor. There is no doubt about it for the documents from areas 3 (room IV 4) and 5 : they have been found in basements. In the other areas, the documents are clearly mixed with material fallen from above.

In spite of the uncertainties of this kind of research, we must attempt to identify the nature of the contexts and the possible functions of the rooms where the deposits were kept.

1. The Workshop

As said above, the medallion comes probably from the room where the craftsmen worked.

2. Building B, Room V 5

Many objects found in the destruction layer above the floor of this room have already been published³. Their study has led to the conclusion that there was on the upper floor a deposit of sacred material (stone figurines, faïence beads, etc.), similar to deposits in the palace at Knossos (Vat Room deposit, Temple Repositories). We must notice that the documents found there are noduli, and we must look for a common explanation of the noduli from all these deposits.

3. Building B, East Area

This unit is composed of two main parts separated by a very large hall; the plan of the upper floor must have been the same. The North part shows the usual plan of a row of magazines. The South part, above the basement IV 4, has yielded a lot of precious objects : stone and metal vases, Camares sherds, bronze tools. This heterogeneous material makes us assume that there were storage compartments in that part of the building.

4. Building A, West Area

This is the most important storage area in Quartier Mu, with very large magazines, on the ground floor as well as on the upper floor.

5. Building A, S-E Area

This area is quite different, because there are no pithoi magazines at all in it. There was a direct access from outside through a staircase (III D) and a vestibule (III 12) to the upper floor, built above large basements. The material fallen in the basements III 3 and III 11 has many similarities with the material from IV 4 : fine decorated pottery, stone vases, a figurine. Thus we may perhaps assume that this part of Building A was also intended for storage of goods.

Another set of rooms cannot however be explained in the same way. Rooms III 5, III 13 and III 14, which have produced 3 noduli, 1 crescent (III 14) and the only two accounting tablets found in Quartier Mu (III 5 and III 13) are characterized by their almost complete lack of other objects. In spite of the very small number of documents, they present some of the features which could characterize archives rooms : located near a main entrance, related to activities in

3 *Mu II*, 232-233.

other areas (a crescent from III 16 has been impressed with the same seal as the crescent from III 14), containing tablets with high totals (7000 on the tablet from III 13).

Thus it seems that most of the documents come from ordinary deposits : they were inscribed or impressed and left in the storage rooms which scribes and officials had to control. But an administrative office, a kind of archives complex, was probably located near the East entrance to Building A.

C. The Administrative Organization

C.1 "Scribes" and officials

a. The inscribed documents

Unfortunately we cannot carry out a precise study of scribes in Quartier Mu due to the small number of documents. We can only notice that the 12 medallions from room III 3 have probably been inscribed by 2 or 3 scribes only ⁴. No relation between the different areas defined above can be deduced from the inscribed documents.

b. The sealings

The sealings provide further information :

1) some seal impressions, found together in rooms III 3 and III 16, were made with the same seal. As for the crescents from III 16, we can assume that the same object was sealed four times by the same official.

2) two crescents from two different areas were impressed with the same seal (II/275 and 276). Two hypotheses can be proposed : *either* one official was in charge of two different storerooms or offices; *or* one of the two crescents (the one from III 14) may have been transferred from the initial deposit to the archives, if our interpretation of area III 13-14 is correct.

3) sealings with different impressions might however have been impressed with the same seal. This is the case for the impressions of prisms, four-sided prisms in particular. We have already noticed ⁵ that there is a high probability that the crescents from room III 16 (II/276-279) and the conical sealing from the same room have been impressed with the same four-sided prism. On that assumption, the same official would have used two different sides of his hieroglyphic prism for two different functions. If it were the same for noduli II/264 and II/272, we would have another case similar to case 2.

C.2 Functions of the documents

From the contexts we can get a more precise idea of the documents used for different functions in each area :

1) the long two-sided rectangular tablets have been found exclusively in the storage areas; thus they were primarily working documents in the magazines or storerooms.

2) the same could probably be true of the medallions (from the Workshop as well as from room III 3).

3) all the conical sealings (of doors or chests) have probably been found near their original positions, i.e., they have not been displaced since Minoan times.

⁴ See *Mu I*, 56.

⁵ *Mu II*, 222.

4) some crescents come from a magazine (room III 16). This excludes (as Aravantinos has remarked about sealings from Thebes)⁶ the assumption that they were intended to seal documents; they were more probably associated with commodities brought into the storerooms.

5) the noduli, which are the most frequent shape in the deposits, seem to have been related to deliveries of goods, as suggested by Weingarten⁷.

C.3 Seals and sealings

The fact that most of the seals found in Quartier Mu come from areas where inscribed documents or sealings have been discovered is probably not fortuitous. We can observe that four seals come from one room (III 11) situated next to the East entrance to Building A. We can also observe, although we cannot draw any conclusion from it, that the three hieroglyphic seals found in Quartier Mu all come from Building B.

The most important remarks concern possible rules of use for hieroglyphic seals :

- 1) crescents were normally impressed by hieroglyphic seals;
- 2) the different faces of four-sided prisms may have corresponded to different functions of a single official.

Quartier Mu is at present the only architectural complex in Crete that affords us an insight into the Minoan administrative practices during the protopalatial period, with "deposits" of documents in the storage areas and also what seems to have been a kind of archives rooms. It may, however, be useful to compare our documents to those preserved in the remnants of "hieroglyphic deposits" from the palaces at Knossos and Mallia. The documents are very similar in type; but we have to notice that numerals never occur on medallions or two-sided tablets in Quartier Mu, as they do in the other deposits. The Knossian crescents are much more frequently "countermarked" (i.e., impressed with two different seals); and, in addition, they often bear graffiti inscriptions, a phenomenon which never occurs in Quartier Mu. These differences may reveal a more complex administrative system in the palaces as compared to Quartier Mu; but, in their general features, all these systems were undoubtedly very similar.

Jean-Claude POURSAT

6 In *PCA*, 48.

7 WEINGARTEN (*supra* n. 1) 18.

Response by Enrica FIANDRA

I want to stress the fact that the exactness, prudence, and strictness so characteristic of the research of Prof. Poursat are also present in this work.

It is an attempt—and according to me a successful one—to reconstruct the function of the Minoan administration during the period of the Early Palaces in non-palatial quarters. This is done by examining all the documents with provenience in the zone of the Atelier de Sceaux and Quartier Mu at Mallia.

The majority of these documents have already been published, but separately by category. It is known that in these cases a great part of the general significance they have in common is lost because such a treatment ignores the relation between the various finds.

The study of Poursat, which takes into consideration the distribution, the provenience, and the category of the documents, has provided useful elements for the understanding of the administrative use of these documents. This way of proceeding has made it possible to reach important conclusions in combining the administrative function with architectural structures in other ways not easily recognized. Consequently this possibility of recognizing offices and administration archives in architectural structures is also a contribution to our knowledge in the urbanistic field. From this point of view it seems to me possible to find similarities in the Quartier Mu, a case comparable to one in Chantier A at Mari. Also in this case we have administrative buildings placed in a peripheral position in relation to the palace.

In the same way Poursat has at Mallia reconstructed the function of the Minoan administration through the various tools used in administrative buildings outside the palace. Of course, at Mari there is the conclusive contribution of the tablets which presents us with a direct verification.

Still comparing Mari and Mallia, we may further stress the parallels between the two centers by using the evidence of the characteristics they have in common : at Mari we have an architectural entity with storerooms and archives well defined and placed outside the palace. Here the administrative activities took place in quite the same way as they did in the palace where copies of the tablets from the archives of Chantier A were placed. The Quartier Mu and Atelier de Sceaux are also non-palace buildings used for administrative purposes—storerooms and related archives—with documents which testify to an activity—as Poursat says—very likely similar to or closely similar to that of the palaces.

In the light of the results which have been reached in Mallia as well as in Mari, it will be interesting to consider also the buildings outside the palaces of Crete as well as of the Orient, which often have the appearance of domestic structures. In this way it may be seen if we—as in these two cases—also in other cases as, for instance, Tell-i Maliun in Iran—have peripheral buildings managed in a way similar to the palaces and connected with the palaces through archives.

In the Cretan area it might be possible to find similarity with Monastiraki and its sectors of storerooms for distribution—administered and controlled through clay sealings, a system substantially identical to that of the palatial centralized management found in Phaistos. In the

case of Monastiraki some categories of documents are missing, for instance the inscribed tablets, while others, such as the clay sealings on knobs or containers, are identical.

Also at Phaistos some of the storeroom complexes are outside the proper perimeter of the palace. There also existed perhaps a relation between the palace and the external sectors; anyway, the preserved architectural remains are made in such a way that there is no other possibility than that it must be a deposit of pithoi in regular adjoining rooms belonging to the MM II. This complex is placed SW of the palace not far from the south wall but also completely independent of this in orientation.

It will be interesting to widen the argument by taking into consideration also the magazines of production and of distribution placed at various points of the palace and to try to find out if there should be a relation with the nucleus of the deposits outside the palace.

I find it correctly interpreted by Poursat that the rooms III 13, III 5-III 14 are archive areas. The poverty of preserved objects of administration, underlined by the author, does not prejudice, in my opinion, the understanding of their significance and their place in the area of administration. I actually believe that we are dealing with material essentially connected to the initial period of the annual or periodic gathering of documents placed little by little in the archives. Especially indicative is the variety of administrative documents found in the building A—not in abundance, but representative of the various categories.

Furthermore, in relation to sector B, I think on the basis of the cases so far examined that we may recognize here storerooms or deposits of the same type as those of conservation. In these, of course, the clay sealings are less frequent in comparison to those in which the withdrawals are sometimes daily.

Another point of merit to be added to the present study is that it has drawn attention to the fact that the administrative use of the seal has a direct relation to the decoration of the seal proper. This relation between the design of the seal and its function has already been stressed by others, among them Dittman, for the clay sealings of Susa. A more complex significance is offered by the seal with four faces, which has probably been used by the owner for different functions, each face for one function.

Continuing in this way we shall reach a much greater knowledge of the complex part the administrators and employees played in relation to administrative and bureaucratic responsibility.

Of major interest are the results obtained : the demonstration of how the palace administrative system was used also in peripheral sectors, and the presence of archives placed in these storerooms.

It has already been noted that the method of control of the distribution of goods by means of clay sealings and other means has been widely used in the Orient, while much less is known of the ways of administration used in the West. The presence in Thessaly and the Balkans of seals which may have had an administrative use calls for an intensified research in this direction.

Among other things much greater attention must be paid to the so-called "enigmatic tablets" in Northern Italy, which have the aspects of real documents of account.

The areas less known at present in the research of ancient administrative systems are Europe and the Far East. In the latter area a member of our own group, Dr. Gianni Poncini, has recently started promising research especially in relation to China and Japan.

Discussion

S. Smith :

Fiandra has pointed out that there is a pattern of having archives stored with other materials. In regard to the room which Poursat suggests could be an archives room, is it possible that perishable goods were stored there which might have been destroyed during the destruction of the complex, leaving just the tablets ?

Poursat :

Of course it is *possible* that there were perishable goods here which have entirely disappeared. However, I do not think it likely because the entries on the accounting tablets in this area are quite different from those on tablets from all the other rooms or storage rooms we have. In the area where we found the medallion, we do not have a great quantity of material remains. So I suppose this part of the building did contain perishable materials at the time of its destruction. But we must stress caution. All that I say is hypothetical.

Palaima :

But we should not ignore the fact that this interpretation conforms to the general pattern found in later Linear B administration. I find it persuasive as a suggestion, even if the data base so far is limited.

Kopcke :

I am somewhat skeptical of the identification of an archives near the eastern entrance, precisely because there is a danger that such a hypothesis will be accepted more or less as a fact. Considering the magnitude of the conflagration, should one not expect that an archives would leave more evidence than we actually have from this area ?

Poursat :

I am not quite sure because I think that in other sectors, too, where there must have been originally many sealings or tablets, we have found only one or two. For example, in building B, the noduli were all found on the surface, not in the ground. They were found about one meter on average above the floor. So they were really very high in the destruction debris.

J. Davis :

I thought you elsewhere had suggested that the "7000" might refer to sheep ?

Poursat :

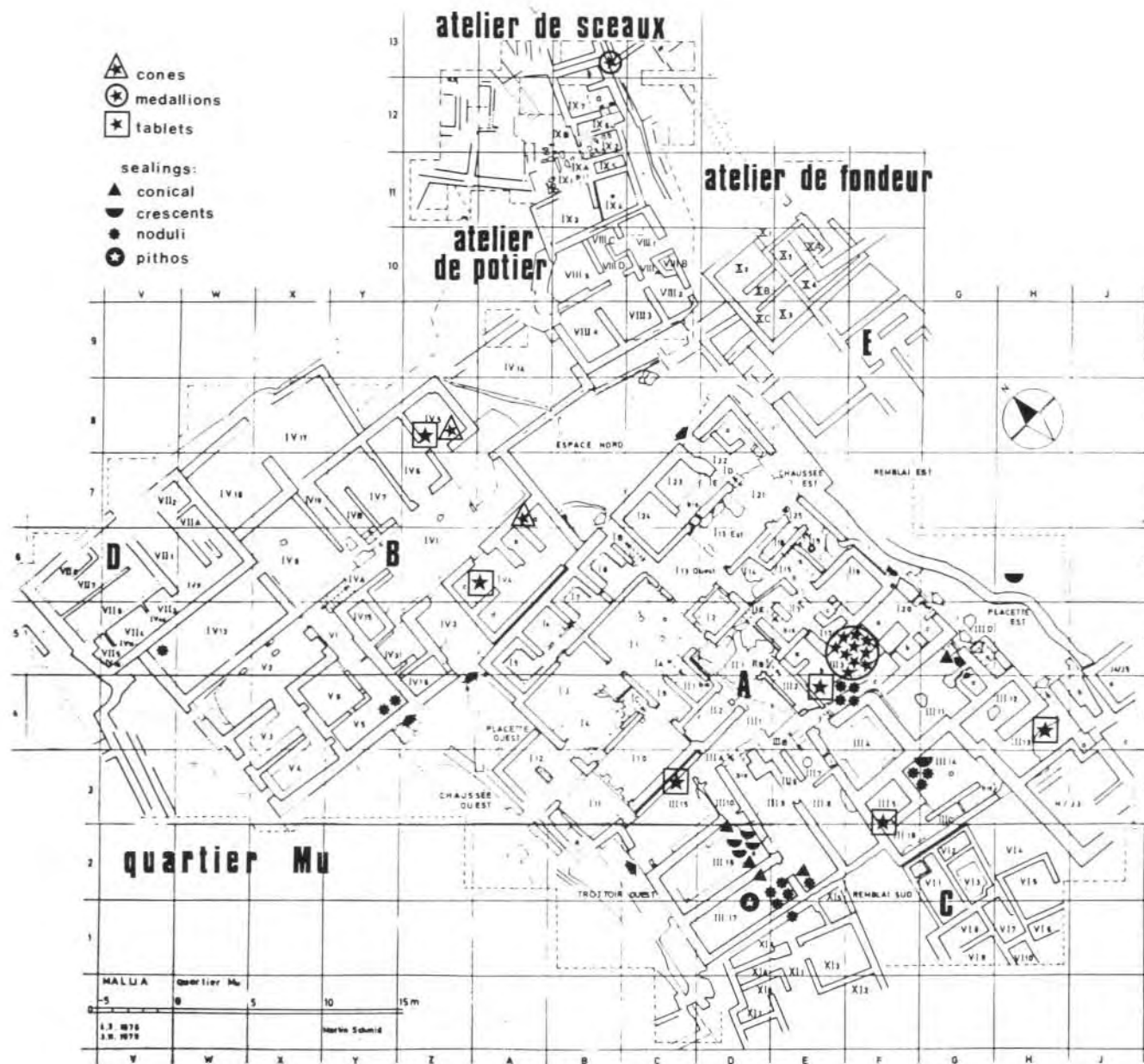
Louis Godart made this suggestion. But I do think that a number of this kind in Minoan-Mycenaean clay records very often refers to sheep.

Olivier :

Large numbers of this magnitude on the Linear B tablets often refer to livestock, most frequently sheep. Here we have only a round number, no ideogram. The identification of the commodity is pure conjecture.

J. Davis :

But it would certainly affect how one viewed the hypothesis of the material being stored with the tablets.



Mallia, Quartier Mu
Distribution map of hieroglyphic inscriptions