

ADMINISTRATION AT THE EGYPTIAN MIDDLE KINGDOM FRONTIER : SEALINGS FROM URONARTI AND ASKUT

1. Introduction

Sealing was widely practiced in Egypt throughout the Dynastic period for the securing of containers and rooms, and authentication of documents. The practice began as an essentially administrative, purely Royal prerogative, and thus is a particularly good medium for the study of administrative systems in Egypt. By the Middle Kingdom, private sealing was also flourishing¹. The late Middle Kingdom provides perhaps the best period in Egyptian history for the reconstruction of administrative systems from sealings². Large samples of sealings are available from Kahun and the fortresses of Lower Nubia. Governmental bureaus, along with a substantial number of individual officials, are clearly named on seals. Additionally, several administrative documents exist from the period which provide both a check and additional source of data.

2. State of the Literature

Despite this potential, and the increasing use of sealings to reconstruct administrative patterns by such scholars as Enrica Fiandra³ in the Aegean, and Richard Zettler⁴ for Nippur, little has been accomplished in this line of inquiry by Egyptologists since the pioneering efforts of George Reisner to reconstruct the internal workings of Uronarti Fort⁵. Syntheses dealing with Egyptian seals and sealings have either simply provided lists, or focused on date, epigraphy, and stylistic typology⁶. Site publications, admittedly often preliminary, simply

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- 1 B. WILLIAMS, "Aspects of Sealing and Glyptic in Egypt before the New Kingdom", in McG. GIBSON and R. BRIGGS (eds.), *Seals and Sealing in the Ancient Near East* (Bibliotheca Mesopotamica 6, 1977) 135-136.
 - 2 The late Middle Kingdom is here defined as late Dynasty 12 to roughly mid-Dynasty 13 (c. 1850-1700 BC).
 - 3 E. FIANDRA, "The Connection between Clay Sealings and Tablets in Administration", in H. HÄRTEL (ed.), *South Asian Archaeology* (1979) 29-43.
 - 4 R.L. ZETTLER, "Sealings as Artifacts of Institutional Administration in Ancient Mesopotamia", *Journal of Cuneiform Studies* 39 (1987) 197-240.
 - 5 G.A. REISNER, "Clay Sealings of Dynasty XIII from Uronarti Fort", *Kush* 3 (1955) 26-69, and also G.A. REISNER, and N.F. WHEELER, "The Art of Seal Carving in Egypt in the Middle Kingdom", *Bulletin of the Museum of Fine Arts, Boston* 28 (1930) 47-55.
 - 6 Cf. G. STEINDORFF, "Der Skarabäen mit Namen von Privatpersonen der Zeit des Mittleren und Neuen Reichs...", *Annales du Service des Antiquités de l'Égypte* 36 (1936) 161-186; G.Th. MARTIN, *Egyptian Administrative and Private Name Seals* (1971); W.A. WARD, *Studies on Scarab Seals I. Pre-12th Dynasty Scarab Amulets* (1978); O. TUFNELL, "Seal Impressions from Kahun Town and Uronarti Fort : A Comparison", *Journal of Egyptian Archaeology* 61 (1975) 67-90 and *Studies in Scarab Seals II : Scarab Seals and their Contribution to History in the Early Second Millennium B.C.* (1984). The analysis section of Martin's study remains unpublished.

provide illustrations and a list, usually incomplete, of the seals represented, without drawing any but the most basic conclusions about administration. Descriptions of the backs of the sealings, critical to any understanding of administrative practices, are generally omitted ⁷.

3. The Data

The sample of sealings from the Middle Kingdom is a rich one for the reconstruction of administrative patterns. Lower Nubia provides an especially good case study for such an analysis. This fact is largely due to the thorough archaeological coverage given to the region, an area of intense Egyptian activity during the later Middle Kingdom. Many important Egyptian administrative centers in the region have been excavated, notably by Reisner and Wheeler in the early part of this century, and by the various missions of the UNESCO Aswan High Dam salvage campaign in the 1960's ⁸. This is especially true for the Middle Kingdom border itself, the Second Cataract region, where all of the major forts were excavated thoroughly (if not always completely). Such excellent coverage allows one to assess the administrative system of an entire region over a relatively discrete period of time, and under the same regime. Publication, preservation, and to some extent, excavation provide the critical variables for assessing the representativeness of the sample. As can be seen in Table 1, these conditions vary considerably from site to site (see Pl. XXXIV) :

Table 1
Sealings Recovered from Lower Nubia ⁹

Site	No. of Sealings	Excavation	Preservation	Publication
Mirgissa 1	274	Complete	Excellent	Partial
Mirgissa 2	1000's	Good	Good*	Cursory

7 E.g. W.C. HAYES, "Inscriptions from the Palace of Amenhotep III", *Journal of Near Eastern Studies* 10 (1951) 156-162; D. DUNHAM, and J.M.A. JANSSEN, *Semna, Kumma* (Second Cataract Forts I, 1960); J. KNUDSTAD, "Serra East and Dorginarti", *Kush* 14 (1966) 165-186; D. DUNHAM, *Uronarti, Shalfak, Mirgissa* (Second Cataract Forts II, 1967); L.V. ZABKAR, and J.J. ZABKAR, "Semna South. A Preliminary Report on the 1966-68 Excavations of the University of Chicago Oriental Institute Expedition to Sudanese Nubia", *Journal of the American Research Center in Egypt* 19 (1982) 7-50. Only George Reisner's analysis of Uronarti (*supra* n. 5) and H.S. Smith's analysis of Buhen (*Buhen II. The Inscriptions* [Egyptian Exploration Society Memoir 48, 1976]) provide systematic descriptions of the backs of the sealings.

8 W.Y. ADAMS, *Nubia : Corridor to Africa* (1977) 71 ff.

9 Derived from DUNHAM (*supra* n. 7 : Mirgissa 1, Shalfak), B. GRATIEN, "Premières constatations sur les empreintes des sceaux de la forteresse de Mirgissa", in M. KRAUSE (ed.), *Nubische Studien* (1982) (Mirgissa 2), REISNER (*supra* n. 5 : Uronarti), KNUDSTAD (*supra* n. 7 : Serra East), ZABKAR and ZABKAR (*supra* n. 7 : Semna South), the author's own analysis (Askut), H.S. SMITH (*supra* n. 7 : Buhen), and DUNHAM and JANSSEN (*supra* n. 7 : Semna, Kumma). A small assortment of sealings was recovered from the fort at Kuban (W.B. EMERY, and L.P. KIRWAN, *The Excavations and Survey Between Wadi es-Sebua and Adindan* [1935]). A single group of about 100 sealings with the imprints of two scarabs was recovered from Faras (F.L. GRIFFITHS, "Oxford Excavations in Nubia", *University of Liverpool Annals of Archaeology and Anthropology* 8 [1921] 81, Pl. XVI). The sites of Aniba (G. STEINDORFF, *Aniba* [1935]), Ikkur (C.M. FIRTH, *The Archaeological Survey of Nubia. Report for 1908-1909* [1912] 22-25), Bigeh and Elephantine have also been partially excavated, but no substantial collections of sealings are reported. Those selected include all of the Second Cataract Forts, but only one, Serra East, outside of the area.

Uronarti	4543	Complete	Excellent	Thorough
Serra East	Lg. #	Good	Good*	Cursory+
Semna South	Lg. #	Good	Good*	Preliminary
Askut	257	Complete	Excellent	@
Buhen	Sm. #	Complete	Poor	Complete
Semna	Sm. #	Complete	Poor	Partial
Kumma	Sm. #	Complete	Poor	Partial
Shalfak	Sm. #	Complete	Poor	Partial

* derives from trash deposits rather than buildings.

+ undergoing analysis by Dr. Bruce Williams of the Oriental Institute.

@ undergoing analysis by the author, see below.

Note: Excavations at Mirgissa were first undertaken by Reisner at the magazine (1), later by Vercoutter throughout the rest of the fortress (2).

The large numbers of private and official sealings recovered from this important southern colonial frontier underscore the importance of sealing as an administrative and economic tool during the Middle Kingdom. Unfortunately, publication is very cursory for the sites with good preservation and large corpora. The collections from Semna South, Serra East, and the later excavations at Mirgissa are also of limited value since they derive from secondary trash deposits, apparently of material collected from throughout the fort. Conclusions drawn using these data are necessarily limited to a consideration of more generalized administrative patterns. The sites with reliable preservation of depositional patterns within buildings, however, are either published in a reasonably thorough, if incomplete, fashion (Uronarti and Reisner's excavations at Mirgissa), or are accessible to the author (Askut). This allows for an analysis of the spatial distribution of sealings within a single complex, critical to an understanding of localized administrative practices. As will be seen from the analysis of the material from Uronarti, even incompletely published data can yield insights into the functioning and interrelation of public and private systems. The substantial corpus of sealings from Askut also shows promise for revealing details of its administration which might otherwise be unknowable.

4. Kinds of Sealings

Sealings can be described in two ways—the imprint left by the seal on the front, and the impression of the object the sealing was affixed to on the back. The former fall into three broad categories, the seals of government departments, individual officials, and private individuals or families (Pl. XXXIX). The first two simply bear the name of the individual or entity concerned, contained within a spiral, rope, or plain border. The last consist of a variety of symbols and patterns, often in complex combinations. Government departments had both large, shield shaped seals for economic controls, apparently carved on the bases of figurines and statuettes¹⁰, and smaller oval seals, scarabs or the like, for correspondence. Seals of individual officials and private individuals or families are usually of the smaller, scarab type¹¹.

The backs of sealings, first described in detail by Reisner¹², show the impressions of sacks, pegs from boxes and doors, miscellaneous containers and bundles, and documents.

10 S.R.K. GLANVILLE, "An Unusual Type of Statuette", *Journal of Egyptian Archaeology* 17 (1931) 98-99.

11 WILLIAMS (*supra* n. 1) 136.

12 REISNER (*supra* n. 5).

Additionally, there are sample sealings which were never attached to anything, and might have functioned as a sort of docket for the exchange of goods ¹³.

Sacks were simply tied shut with string, knotted, and secured with a lump of mud to which a seal was applied ¹⁴. Reisner attributed his class of 'funnel' sealings to sacks drawn through a wooden plaque. Martha Wiencke, however, on examination of some of these sealings in the Museum of Fine Arts, Boston, determined that they represented seals placed around wooden pegs with cords wrapped around them, similar to those from Lerna studied by Enrica Fiandra. They are therefore properly classed as box or door sealings ¹⁵. Despite her publication, this misnomer continues to appear in the Egyptological literature ¹⁶. Another kind of sack sealing was found at Askut, with two dowels used for closure (Pl. XXXVa). Sealings with impressions of string wrapped around bundled fabric or leather (Pl. XXXVb) could derive from the neck of a sack or small jar, since the latter were often sealed in this way.

Wiencke noticed several different sizes of peg sealings from the Second cataract forts excavated by Reisner. They range from 17 to 45 mm. in length, tied by fine thread on the smaller, and coarser string on the larger examples. The pegs commonly flared at the top (Pl. XXXVc-d) ¹⁷. This kind of sealing is consistent with the typical style of Egyptian box, which had two pegs, one on the lid and the other on the body, around which a string was tied and sealed to secure the contents ¹⁸. A similar arrangement was used on some double doors, with a peg on each leaf, or on single leaf doors with one peg on the door and the other on the jamb ¹⁹. The New Kingdom journal of workmen in the Valley of the Kings at Thebes records just such a closure involving precious materials stolen from a royal tomb: "Take them to a magazine (*wḏ3*) in the temple of the Osiris King Ramesses III, justified, the Great God, and place seals upon them" ²⁰. Reisner notes that the larger pegs tend to bear the official shield shaped stamps, while the smaller pegs tend to bear private stamps. The official stamps are often countersealed with private seals ²¹. In countersealing, the official stamp was pressed onto the wet clay first, often two or three times in order to cover the entire surface. The person performing the sealing then added his own, personal seal, usually at the side of the institutional stamp, or where two impressions of the official stamp overlapped (Pl. XXXVe) ²². A single institutional seal might thus be accessible to several people, requiring the act of countersealing to determine who actually made the sealing. Another possibility is that two sealers were

13 J. WEINGARTEN, "Some Unusual Minoan Clay Nodules", *Kadmos* 25 (1986) 1-21 and "Seal Use at LM I B Ayia Triada: A Minoan Elite in Action", *Kadmos* 26 (1987) 1-43.

14 W. BOOCHS, *Siegel und Siegel im Alten Ägypten* (Kölner Forschungen zu Kunst und Altertum 4, 1982) 18.

15 M.H. WIENCKE, "Clay Sealings from Shechem, the Sudan, and the Aegean", *Journal of Near Eastern Studies* 35 (1976) 127-130. This and the other observations of Wiencke and Reisner below are confirmed by the author's own examination of the Askut collection.

16 E.g. B.J. KEMP, "Large Middle Kingdom Granary Buildings (and the archaeology of administration)", *Zeitschrift für Ägyptische Sprache* 113 (1986) 125.

17 WIENCKE (*supra* n. 15) 128.

18 E.g. A. LANSING, and W.C. HAYES, "The Egyptian Expedition 1935-1936", *Bulletin of the Metropolitan Museum of Art* 32 (1937) 24, Fig. 37.

19 BOOCHS (*supra* n. 14) 32.

20 G. BOTTI, and T.E. PEET, *Il Giornale della Necropoli di Tebe* (I Papiri Ieratici del Museo di Torino, 1928) 23, Pl. 15.

21 REISNER (*supra* n. 5) 28 and *passim*.

22 The order is clear from the overlap on the Askut impressions, although there are a few exceptions. Sealings from Semna South also show evidence of this practice ZABKAR and ZABKAR (*supra* n. 7) 33 ff.

involved, one with the institutional stamp, the other with his own personal stamp. Since this practice occurs almost exclusively when sealing doors or containers, it was presumably designed to insure individual accountability for the goods sealed, in case of any irregularity.

Some sealings show the imprint of **basketry** tied shut with strings (Pl. XXXVf) ²³. A New Kingdom example was found intact in Tutankhamon's tomb ²⁴. **Packages** were wrapped in cloth and tied about with string before being sealed with a circular or oval pat of mud (Pl. XXXVg). As noted above, the institutional seals were often countersealed with private seals ²⁵.

Letters were elaborately folded and tied off at one end over a clay pellet which was crimped in half and then sealed, as with an intact example from the Dynasty 11 Hekanakht papers (Pl. XXXVh, Pl. XXXVIb-c) ²⁶. For the fortresses, separate, smaller scarab sized institutional seals were used. Document seals were rarely countersealed ²⁷. Sealing was used to guarantee the identity of the sender and authenticate the contents of private, legal, and official documents ²⁸.

Two kinds of **sample** sealings, which show no evidence of ever being attached to anything, were present in Nubia, the first consisting of an impression of a seal (the only kind occurring at Askut - Pl. XXXVIa), the second, curiously, the impression of a sealing. Reisner ²⁹ argues that these were used for the authentication of incoming seal impressions. Weingarten ³⁰, however, argues convincingly that this class of sealing, which she terms **noduli**, actually represents a kind of authorization or obligation, which might be exchanged for wages or the like.

5. General Patterns

Before discussing the specific distributions at Uronarti and Askut, it is useful to consider the general patterns of administrative activity evinced by the sealings from the entire system of forts. This analysis can provide a larger context in which to place the better provenienced and more completely published collections from these two sites.

The variety of official entities at each fort attested from sealings is shown in Table 2. Survival of sealings may have limited the range of institutions represented for individual forts. Because the forts communicated and exchanged goods on a regular basis, however, it is possible to reconstruct some of the administrative activity present at those forts which are either poorly preserved or poorly published (Table 1). In such cases, the data, deriving primarily from sealings found at other fortresses, show a bias towards entities involved in the exchange of information or goods outside.

23 REISNER (*supra* n. 5) 28.

24 H. CARTER, *The Tomb of Tutankhamen* III (1933) Pl. LXVIB.

25 REISNER (*supra* n. 5) 28.

26 T.G.H. JAMES, *The Hekanakht Papers and other early Middle Kingdom Documents* (1962) 45, Pl. 9.








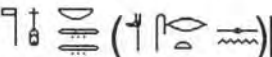
27 REISNER (*supra* n. 5) 27.

28 BOOCHS (*supra* n. 14) 43 ff., but see WILLIAMS (*supra* n. 1) 138.

29 REISNER (*supra* n. 5).

30 J. WEINGARTEN, "Some Unusual Minoan Clay Nodules", *Kadmos* 25 (1986) 17 ff. and "Seal Use at LM IB Ayia Triada: A Minoan Elite in Action", *Kadmos* 26 (1987) 42.

Table 2
Institutions of the Nubian Forts ³¹

Large Seals		
Granary		Bigeh, Serra East, Buhen, Mirgissa, Uronarti, Semna South.
Treasury		Bigeh, Mirgissa, Uronarti, Semna South.
Magazines		Mirgissa, Askut (?), Shalfak, Semna South.
Provisions		Shalfak, Semna, Semna South.
Upper Fort		Buhen, Semna South.
Seal		Bigeh, Serra East, Buhen.
Seal of the Governor		Mirgissa, Buhen.
Senwosret, Seal of		Mirgissa.

Small Seals

Elephantine, Bigeh, Faras, Buhen, Mirgissa, Shalfak, Uronarti, Semna, Semna South.

The control of goods at the various colonial outposts was apparently elaborate and highly compartmentalized. Each of the sealing authorities except the last is represented at more than one fort, suggesting a high degree of standardization in economic controls ³². No less than five separate institutions were present at Semna South and Mirgissa. Buhen, second in size to Mirgissa, has four, Bigeh three, Shalfak, Uronarti, and Semna two each, and Askut one possible (see below). The difference in the number of authorities present, especially between Uronarti and Semna South, forts of comparable size with good preservation and documentation of this class of sealing, is very interesting. A possible explanation lies in the economic dynamics of the Middle Kingdom frontier. The Semna Stela of Senwosret III establishes the southern border, but also sets down a very specific and strict set of economic guidelines for the regulation of trade. The critical passage reads ³³ :

Southern Boundary made in Year 8 under the Majesty of KhakauRe, may he be given life for ever and ever; in order to prevent all Nubians passing it in traveling downstream by water or by land with a ship or with all cattle of the Nubians, except when a Nubian will come in order that trading might be done in Iqen (Mirgissa) or on a commission. Any good thing may be done with them; but without allowing a boat of the Nubians to pass in traveling downstream by Heh (the region around Semna), forever.

³¹ Taken principally from KNUDSTAD (*supra* n. 7), GRATIEN (*supra* n. 9), REISNER (*supra* n. 5), and ZABKAR and ZABKAR (*supra* n. 7).

³² Even the last is present in its generic form at many of the forts.

³³ *Aegyptische Inschriften aus dem Koeniglichen Museen zu Berlin* (1913) 255 ff., in translation M. LICHTHEIM, *Ancient Egyptian Literature I* (1973) 118 ff.

Under this edict, Mirgissa (Iqen) is designated as the major trade center, which perhaps explains the need to provide more elaborate administrative control over the flow of goods. The Semna cataract is also designated as an important control point for the regulation of both overland and river trade. By preventing any native merchant ships from passing farther north, the last clause, in effect, requires the establishment of an extensive facility for the transshipment of goods from native to Egyptian bottoms in this area. Caravans traveling overland would also need a place to stop while awaiting official permission to continue. Semna South has a number of features which would make it an ideal facility for such activities. The lower pool of the Semna cataract was large enough to provide a harbor for ancient merchant vessels to stop and offload their goods for transshipment to Egyptian bottoms, or transfer to native or Egyptian caravans. The large plain lying to the north, which was protected by the southern end of a long defence wall, would provide a good staging area for incoming and outgoing overland expeditions, while the outer enclosure at the fort itself, which only has evidence of temporary occupations, would make an effective caravanserai³⁴. As a bustling center of commercial activity, it would naturally require a complex accounting system for the storage and transfer of goods, as is represented in the sealings. Uronarti, well behind the boundary, would have a much simpler role.

Unfortunately, without tighter control over provenience, it is difficult to shed much light on the specific function of each of these institutions. Semantic meaning, however, does provide some clue. The treasury would obviously be for the storage of valuable products and raw materials, the granary for grain. The provisions 'department' would presumably be reserved for prepared foods, perhaps meat, wine, and the like, but the role of the storerooms 'department' is more difficult to determine. The Reisner Papyri, building and dockyard accounts of Senwosret I³⁵, indicate that the *wꜥꜣ* was responsible for the storage of various goods (wood, stone, etc.). The seal of the fort itself, without mention of a specific department, presumably dealt with items under the general control of the fort. In the larger forts of Mirgissa and Buhen, a separate seal was required to deal with goods originating from the commandant's personal store. Mirgissa additionally had a local branch of a royal entity, which had separate seals under different kings, and also separate 'departments' for the granary, and 'upper' granary (see Table 3).

The Semna Dispatches, an archival copy of dispatches between several of the Nubian fortresses found at Thebes, describes several examples of trading with natives at Semna fort. The exchange of bread and beer appears to have been a standard component of these transactions³⁶. These foods must have been prepared and stored in case of need, both for trade, and perhaps also as a ration for the troops. Papyrus Reisner I, from the reign of Senwosret I, indicates a daily ration of approximately 8 *trsst* (bread units) per common laborer on a large building project³⁷. Papyrus Reisner II, a dockyard account, records a daily rate of 10, 15, and 20 *trsst*, with the addition of a beer ration³⁸. Daily wages for the personnel of the frequent quarrying expeditions of the Middle Kingdom consisted of multiples of a basic bread

34 For more elaborate discussions of this problem see ZABKAR and ZABKAR (*supra* n. 7) 9, and the author's comments in *Askut and the Role of the Second Cataract Forts* (M.A. Paper, on file at the Archaeology Program, UCLA, 1988) 20-21.

35 W.K. SIMPSON, *Papyrus Reisner III* (1969) 37; *Papyrus Reisner I* (1963), *Papyrus Reisner II* (1965).

36 Dispatch 1, in P.C. SMITHER, "The Semna Despatches", *Journal of Egyptian Archaeology* 31 (1945) 3-10.

37 W.K. SIMPSON, *Papyrus Reisner I* (1963) 44-5.

38 W.K. SIMPSON, *Papyrus Reisner II* (1965) 32-3.

and beer ration at similar rates ³⁹. Wooden *trsst* tallies in the shape of loaves were found at Uronarti in the northern part of Building A (Pl. XXXVII). Each of these was labeled with a number of *trsst* rations and the amount of grain allocated to baking the various loaves represented. Several were further labeled with the source and kind of grain and the group for which the loaves were intended, either soldiers (*mš*) or bowmen (*pdwt*) ⁴⁰, when specified. An inscription on one of the loaves indicates that its ration was established in Year 33 of Amenemhet III ⁴¹. Their presence in an area with sealings nearby, and careful conservation (one had been repaired) argues for their importance in the continuing administrative system, rather than serving as commemorative markers or single event receipts. These models most likely represent some sort of calculating device for a basic ration system, serving as a sort of standing order for the garrison's food supply authorized by the central bureaucracy. The total of 660 *trsst* rations represented by these tallies would support 82.5 individuals at a weekly 8 *trsst* ration, a substantial part of the garrison ⁴². The grain for the rations might have been stored and drawn from the granary, stores, or provisions 'departments', although the last seems the most likely on semantic grounds. Nonetheless, the presence of only a granary seal at Uronarti implies that this institution might at least take over this role. Perhaps the two were functional complements, since they appear together only at Semna South, which, as noted above, must have had an extremely complicated administrative system. Since it was located on an island, Uronarti would have less access to native peoples for trading. Shalfak, Semna, and Semna South, however, all had access to native groups, and, as noted above, we do know that trading including the exchange of bread and beer did in fact take place at Semna. Thus, perhaps the granary was for Egyptian use, as at Uronarti, and the provisions for transactions with native groups, as at the other three forts.

The Semna Dispatches also record a great degree of communication between fortresses, the main purpose being to keep everyone apprised of the movements of native groups. This is confirmed by the sealings, which show a great deal of correspondence between the forts. Uronarti, for example, received letters from Semna, Shalfak, Mirgissa and Buhen. Exchanges of goods, however, were also common. Mirgissa received items from both 'departments' of Uronarti (Treasury and Granary), four of Semna South's five divisions (Treasury, Granary, Provisions, and Stores), and from Bigeh (Treasury), Serra East (Granary), Buhen (Granary and plain Seal), Shalfak (Stores and Provisions), and Semna (Provisions). Any of the various divisions could send goods to the outside.

The forts were also in communication with the central government back in Egypt (Table 3). Goods were sent under the 'Seal of the Good God, Lord of the Two Lands <Prenomen>' ⁴³. This organization had at least three divisions, the plain seal, the great granary, and Upper Granary. Another variant includes the nomen Senwosret, rather than a prenomen. This presumably refers to Senwosret III, since examples were found at Uronarti,

39 D. MUELLER, "Some Remarks on Wage Rates in the Middle Kingdom", *Journal of Near Eastern Studies* 34 (1975) 249-264.

40 The reading of the latter is somewhat dubious and may be ephemeral. The title does, however, exist in Nubia, and is represented in rock inscriptions, stelae, and seal impressions (e.g., Table 4).

41 W.K. SIMPSON, "Two lexical notes to the Reisner Papyri", *Journal of Egyptian Archaeology* 59 (1973) 220-222, whose transcription supersedes that in DUNHAM (*supra* n. 7) 34-5, Pls. 27-8.


42 Using the formula of four to ten occupants for each Apartment (DUNHAM [*supra* n. 7] 118), Uronarti's population might have ranged from 112 to 280 individuals.


43 Each King had several names, two of which were enclosed in cartouches, the Prenomen, taken at his accession to the throne, and the Nomen, given at birth. The Horus name, the oldest of the royal names, was also frequently used in administrative contexts during the Middle Kingdom (see below).

which was founded under this king ⁴⁴. It also had several divisions, including a 'branch division at Mirgissa. Examples of these royal sealings are found at every fort with good preservation (including Askut, see below).

Letters with the royal seal, which consisted of the Horus Name contained within a serekh motif, were also sent to virtually all of the fortresses. Letters were also sent from the Vizier of the Southern City (Thebes), and the Vizier of the *Tp-rsy* (Head of the South). No other central authority is represented in the sealings from Lower Nubia (the implications of this are discussed below).

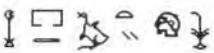
Table 3
Royal Institutions Represented in Nubia


Seal of the Great Granary  of Senwosret II, III, Amenemhet III.

Seal of the Upper Great Granary  of Senwosret II.

Seal of Senwosret : Great Granary, Fortress, Fortress of Mirgissa.

Royal Letter Seals.

Letter Seals of the Office of the Vizier of the *Tp-rsy* .

and Office of the Vizier of the Southern City .

6. Distribution at Uronarti

We can now move on to a discussion of how some of these institutions functioned at an individual fortress, first at Uronarti, then at Askut, with brief reference to the Mirgissa granaries excavated by Reisner. The overall distribution of sealings at Uronarti, gleaned from Reisner's article ⁴⁵ and Dunham's catalog of the finds ⁴⁶, is presented in Pl. XXXV. Some 115 sealings, probably from private pattern or symbol seals distributed throughout the 'apartments,' are unaccounted for. For a detailed listing of frequencies, see Appendix.

Building D appears to be the major administrative center for the control of goods, with Building A forming an administrative area of lesser importance. The bulk of these sealings are internal to the fort, and, as noted above, only the Treasury and Granary 'departments' occur. Within Building D, examples of each seal are present in each room with sealings, so no specific loci for either authority can be determined. The distribution of countersealings to these seals is also mixed. The seal of the *šmsw* Khenty-chety occurs in rooms 154, 157, and 162, as well as in the deposit outside the eastern wall (Pl. XXXV-XXXVIa). The four most common overprints (non-name symbol and pattern seals) are also present in each of these areas. This could indicate that the responsibility for sealing fell to the same individual(s), who conducted most of their activity in Building D, or simply indicate a mixing of deposits. The only way to decide the question would be to check the correlation, or lack thereof, of each overprint with

44 J.M.A. JANSSEN, "The Stela (Khartoum Museum No. 3) from Uronarti", *Journal of Near Eastern Studies* 12 (1953) 51-55.

45 REISNER (*supra* n. 5).

46 DUNHAM (*supra* n. 7).

the two institutional seals. Unfortunately, Reisner does not provide enough information to decide the question.

The practice of countersealing, however, does provide further insights into the control of goods at Uronarti fort. A private counterseal occurring on a sealing of the fortress itself assures that the owner was physically present for some period of time. By taking the relative frequencies in the use of these seals, one can begin to build up an administrative hierarchy. Two factors can explain the frequency of a given counterseal, length of stay, as Reisner pointed out ⁴⁷, but also degree of involvement in the sealing process, and therefore direct, although not necessarily ultimate, administrative control over the distribution and storage of goods and provisions. The weight of either depends upon the length of time represented by the deposition. The shorter the period of activity represented by the sample, the more important is the degree of the sealer's involvement in the process, since the more active sealer will leave the most sealings behind. As time depth increases, so does the possibility of the turnover of officials, and length of stay becomes critical, since even a comparatively inactive sealer could leave a large number of sealings behind during a long stay. Kemp ⁴⁸ has suggested that the sample represents some final administrative act, accomplished over a very short period of time. This conclusion, however, was based on the mistaken belief that the bulk of the sealings were from sacks, which might be stored in large quantities and emptied quickly into larger containers or disbursed among the garrison before the fortress was abandoned. Since we now know that these sealings actually derive from large boxes or, perhaps more likely considering the multi-roomed layout of Building D, doors, it is clear that the sample, which Reisner ⁴⁹ estimated might come from at least 500 complete examples, represents a long series of openings and re-sealings. For example, assuming that one or two rooms were opened daily on a regular basis, it is clear that at least several months of activity, if not a year or two, are represented. Olga Tufnell ⁵⁰ has argued, largely on stylistic grounds, that the sealings span almost 200 years. It is, however, dangerous to extrapolate data from scarabs used as amulets and jewelry, which are frequently found in funerary contexts, to those used as seals in daily life. If, for example, seals represent a sort of family emblem, they might continue in use with the same or a similar motif for several generations. It is also highly unlikely that sealings would be conserved, even in private hands, for so long a period. A critical component of Tufnell's argument for the beginning of her chronology is the presence of impressions of seals using the names of Senwosret II and III. The presence of a royal name in such a context, however, only establishes a terminus post quem, and cannot be used as proof of contemporaneity, especially considering the existence of royal mortuary cults which commonly employed the deceased king's nomen and prenomen.

Critical to this question is the nature of deposition. We know, in fact, that sealings were discarded on a regular basis, as at Semna South ⁵¹, Mirgissa ⁵², and Askut (Pl. XXXIX); yet apart from two deposits, one outside of Building A, the other outside the main wall opposite Building D, the Uronarti sealings were found in situ (Pl. XXXVII). The heavy concentration of sealings in Room 157 of Building D (Pl. XXXVII-XXXVIIIa) suggests the existence of an archival system, such as described by Enrica Fiandra in her paper in this volume. Middle Kingdom granary models depict just such a long chamber as a vestibule where scribes sit

47 REISNER (*supra* n. 5) 45.

48 KEMP (*supra* n. 16) 125.

49 REISNER (*supra* n. 5) 38.

50 O. TUFNELL, "Seal Impressions from Kahun Town and Uronarti Fort : A Comparison", *Journal of Egyptian Archaeology* 61 (1975) 69.

51 ZABKAR and ZABKAR (*supra* n. 7).

52 J. VERCOUTTER, "Excavations at Mirgissa - III", *Kush* 15 (1967-68) 269-279.

diligently recording the movement of grain ⁵³. As Fiandra also points out, an administrative document of the early New Kingdom (Thutmose III) clearly indicates a yearly administrative cycle ⁵⁴. Thus, the Uronarti sealings, at least those from Building D, probably represent an accumulation of not more than one year. The most reliable chronological indicator within the sample from Uronarti are letter sealings with the king's Horus name, traditionally used in administrative contexts, since they are directly attributable to a living king, unlike the other royal stamps, whose exact purpose is uncertain ⁵⁵. In this case only three kings are mentioned, Horus Kha-baw (8), Dedwy-kheperw (10), and Mery-tawy (1). The first two were found together in deposits from Building D, suggesting contemporaneity, while the last was recovered from Apartment 22, and could represent the conservation of an important memento by an individual. In Dynasty XIII, with its long succession of kings with very short reigns, it would not be unusual for a single administrative cycle of a year or less to span the division between two, or even three, reigns. To sum up, the Uronarti sealings found in situ probably represent a point in a yearly administrative cycle, probably well advanced judging from the numbers recovered ⁵⁶. The sealings found in secondary deposits might represent some portion of an earlier administrative cycle. They could also represent discards from the beginning of the end of year accounting cycle (Fiandra in this volume), perhaps interrupted by the abandonment of the fortress or discontinuation of the accounting system.

A total of forty-seven seals counterstamped on 441 individual treasury and granary sealings of the fortress of Uronarti were recovered. First we will examine the distribution of countersealings with names and titles, and then add those with patterns and symbols.

Three-quarters of the name seals ⁵⁷, including those with the highest frequency of use, bear the title of *šmsw*, attendant (Table 4). The seal of the 'citizen' Senebu Sahapy is the only non-*šmsw* in the most frequent group, with ten sealings. The *šmsw* were an elite military corps under royal authority in the Middle Kingdom. An Inspector of *šmsw* commanded 100 men, while a *šmsw* of the Ruler, such as commanded at Askut, might lead 60 men ⁵⁸. The remainder of seals are infrequent examples from various high officials: an Admiral, Vizier, and Hallkeeper of the Kitchen ⁵⁹. These last are possibly from officials passing through on inspection tours ⁶⁰, although it is odd if this is the case that they do not appear at any of the other forts in sealings or in rock inscriptions ⁶¹. Perhaps they were involved in one of the punitive military expeditions launched during this period into Upper Nubia, using Uronarti as a staging area as Kemp has recently suggested ⁶².

53 E.g. H.E. WINLOCK, *Models of Daily Life in Ancient Egypt* (1955) 25 ff., Pl.20.

54 M. MEGALLY, *Recherches sur l'économie, l'administration, et la comptabilité à la XVIIIe Dynastie* (1977).

55 REISNER (*supra* n. 5) 37 ff.

56 Thus confirming the original assumptions of REISNER (*supra* n. 5) 42. Some caution should be exercised in extending this system to the private Apartments. They might have operated on a different basis, perhaps conserving sealings over a longer period of time.

57 As represented by the absolute frequency of sealings. The *šmsw* account for only two-thirds of the individuals represented.

58 R.O. FAULKNER, "Egyptian Military Organization", *Journal of Egyptian Archaeology* 39 (1953) 39; Askut Inscription 1 - A. BADAWY, *An Egyptian Island Fortress of the Middle Kingdom at Askut* (nd.), ms. on file, Museum of Cultural History, UCLA.

59 Not 'Doorkeeper of the Room of Offerings' as suggested by Reisner (*supra* n. 5) 43.

60 REISNER (*supra* n. 5) 45.

61 It was common for officials to leave inscriptions on the rocky outcrops near the forts and at other prominent points (see especially, DUNHAM and JANSSEN [*supra* n. 7]).

62 KEMP (*supra* n. 16) Fig. 6.

Table 4
Countersealing Officials with Name-seals at Uronarti ⁶³

Name	Count	%
Retainer Khenty-chety	18	19.6
Retainer of the <i>Rmn-tpy</i> * Ia	13	13.0
Retainer Iry	12	14.1
Retainer Gebu	10	10.9
'Citizen' Senebu-sa-hapy	10	10.9
Retainer of <i>Rmn-tpy</i> Kem-nebetsen(?)	8	8.7
Retainer of <i>Rmn-tpy</i> Iapepy	5	5.4
Overseer of Ships Senebtifi	4	4.3
Vizier Ptah-dedu	2	2.2
Retainer of <i>Rmn-tpy</i> Hor(?)	2	2.2
Bowman Sa-hapy	1	1.1
Retainer of <i>Rmn-tpy</i> Bebi	1	1.1
Inspector of Retainers of <i>Rmn-tpy</i> Sobek-hotep	1	1.1
Hallkeeper of the Kitchen	1	1.1
Name Illegible	4	4.3
Total	92	100.0

* Meaning unclear, perhaps "Chief Sword/Spear (of the Army)" ⁶⁴.

The frequency of countersealings for each of these officials, however, when compared to the frequency of countersealings of all types, is low, only 4.1% for the highest (Khenty-chety), compared to 18.4% for the most frequently occurring counterseal (with an intricate scroll pattern, see Table 5, Pl. XXXVIIIb). All of the name seals together make up only 20.9% of the total counterseals, while the five highest ranking seals, of the private symbol and pattern type, represent 64.9%. The remaining 14.3% are accounted for by twenty-eight other pattern and symbol seals (Pl. XXXVIIIb).

Table 5
The Six Most Frequently Occurring Counterseals at Uronarti

Seal #	Count	%
297	81	18.4
314	66	15.0
316	56	12.7
300	46	10.4
318	37	8.4
301*	18	4.1

* Seal of Khenty-chety

⁶³ Translation of the titles follows W.A. WARD, *Index of Egyptian Administrative and Religious Titles of the Middle Kingdom* (1982).

⁶⁴ WARD (*supra* n. 63) 176, 202.

Since the length of deposition is apparently restricted to about one year, we can safely consider the effects of length of stay on a given countersealer to be rather limited. Although this factor will be considered, emphasis will be placed on the degree of involvement in the sealing process as a function of sealing frequency. This distribution indicates that the highest officials, presumably those with name seals, while involved in the sealing process, more often delegated it to subordinates. They (the owners of the five most frequently occurring symbol and pattern seals) had more direct responsibility for sealing, and perhaps also stayed in their posts longer, providing essential continuity in support of titled officials who may have had no experience with the task at hand. None of these seals are present outside of official contexts (the Buildings), possibly indicating that they were full time bureaucrats. This reconstruction correlates well with the tomb biographies of important and wealthy officials of the period, which often list a variety of widely ranging assignments undertaken over the span of a career. So too, shared responsibility for sealing also helps to explain the very need for countersealing, since a question might arise over who sealed the contents of a room or box.

The twenty-eight seals remaining, which were employed infrequently as counterseals, may represent lower level functionaries, to whom might be delegated the responsibility of sealing doors and containers from time to time. It is interesting to note the presence of a very few private sealings, including one sample sealing, in both Buildings A and D. Perhaps this last class of sealers might have stored, or had the right to, certain rations or goods contained in Buildings A and D. A number of Uronarti store seals were also found in various private apartments, including nos. 8, 25, 17, and 3-4 (Pl. XXXVII). Parallels of private sealings from Apartments 8, 17, 18, and 19 appear as counterseals in Building D, again arguing for some joint responsibility.

Several centers of private activity are also apparent in the distribution (Pl. XXXVII). The bulk of the sealings in the private apartments were of the small peg type, with impressions of scarab style seals. Apartment 8 provides the most considerable locus, and is tied by common sealings to Apartments 7, 18, 25, 3-4, and 19 (all of the other major loci), as well as Building D. A few of the other apartments also share sealings, but none so extensively as Apartment 8. Of the private sealings in Apartment 1, forty-eight came from five different name seals, suggesting some special function for the occupant of this set of rooms. A sample sealing from Semna fort and a letter sealing from that fortress were found there, as well as a sealing from Buhen. Either this complex was an office of some sort, or the occupant carried on some semi-official, or officially sanctioned, activity.

In fact, approximately one-quarter to one-third of all the official sealings originating from outside the fortress were found in the Apartments, suggesting an important link between private and public systems of economic and administrative control. The distribution of these sealings between the official and civilian portions of Uronarti provides insight into how the private and public networks meshed (Table 6).

Table 6
Private/Public Association of Sealings from outside Uronarti

Place	Apartments	Buildings
Buhen	9	2
Semna	5	2
Vizier of Thebes	3	1
Elephantine	2	0
Shalfak	1	2
Bigeh	0	3

Senwosret Granary	1	4
Royal	2	12
Senwosret III	5	34(?)
Vizier of Tp-Rsy	0	6
Mirgissa	0	13
Total	28	79

Communication with Buhen revolved around the exchange of goods with individuals in the private apartments. These were about evenly divided between packages and large pegs (presumably from boxes). One sealing came from a letter. The two sealings from the Buildings were actually found in the deposit outside the Eastern Wall, and thus, while probably from Building D, could have derived from Apartments nearby. The exchange of goods with Mirgissa, however, was entirely through official channels. Eight fragments of package sealings came from the Treasury, and three peg sealings from the seal of the Governor. Two letters were also sent. This pattern suggests that between these two largest of the Second Cataract forts, the 'Command Center' may have been located at Mirgissa, the trade center for goods transhipped from Egypt to private individuals at Buhen.

Two branches of the Vizierate sent messages to Lower Nubia. Sealings from both of these offices are present at Uronarti, and come only from letters. Correspondence from the Office of the Vizier of the *Tp-rsy* (Head of the South) is only found in the official areas of Uronarti, suggesting that this authority may have had control over Lower Nubia. In contrast, the Office of the Vizier of Thebes communicated chiefly with private persons, perhaps for trade purposes. This pattern suggests that there was some functional division between this department and that of the *Tp-rsy*. Perhaps the Vizier had a separate Theban office, presumably for local, and perhaps more personal business, as well as an office for the *Tp-rsy*. Large-scale administration was divided into several *w'rt* (lit. division) including two geographical units, the North and Head of the South ⁶⁵, two corresponding Offices of the Vizier ⁶⁶, the Treasury, and Office of Labor ⁶⁷. Papyrus Boulaq 18, from Dynasty 13, records income and expenditures of the royal court while at Thebes. The *w'rt* of the Vizierate, Head of the South, Treasury, and Office of Labor are all listed as sources of income. The headquarters of the *Tp-rsy* was located at Thebes. The exact limits of its authority have been much debated, but it is clear that it stretched from at least Elephantine (in the First Upper Egyptian Nome) to a point in Middle Egypt somewhere around Akhmim ⁶⁸. Two administrative documents, found in Thebes and

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- 65 W.C. HAYES, "Notes on the Government of Egypt in the Late Middle Kingdom", *Journal of Near Eastern Studies* 12 (1953) 31-39, notes that several scholars, including himself, suggest that there was an additional Waret of the South. I, however, agree with W. HELCK, *Zur Verwaltung des mittleren und neuen Reichs* (1958) 12-13 and "Landesverwaltung", *Lexikon der Ägyptologie* 3 (1977) 918-922, that this division is ephemeral, and that the Landesverwaltung was dual, breaking along the political lines of the First Intermediate Period civil war. Part of the confusion may be due to the fact that *w'rt* can refer to smaller scale local divisions as well as the national ones (R.J. LEPROHON, "Some Remarks on the 'Administrative Department' [*w'rt*] of the Late Middle Kingdom", *Journal of the Society for the Study of Egyptian Antiquities* 10 [1980] 162). It is interesting to note that Ward's (*supra* n. 63) index of Middle Kingdom titles lists only one example of this *w'rt*, which could very well be local (#1348 - Scribe of the Fields of the Southern District), but many of the *Tp-rsy* and North.
- 66 HELCK (*supra* n. 65) 12-13, E. MARTIN-PARDEY, "Wesir, Wesirat", *Lexikon der Ägyptologie* 6 (1986) 1227-1235.
- 67 HAYES (*supra* n. 65) and *A Papyrus of the late Middle Kingdom in the Brooklyn Museum* (1955).
- 68 A.H. GARDINER, "The Reading of the Geographical Term [*tp-rs*]", *Journal of Egyptian Archaeology* 43 (1957) 6-9.

dating from the late Middle Kingdom/Second Intermediate Period, shed light on this issue : the Brooklyn Papyrus ⁶⁹, a list for the corvee labor force, and the Ramesseum Onomasticon, which includes a list of places ⁷⁰. Each covers roughly the same territory, which presumably corresponds to the *Tp-rsy*. Significantly, the latter also includes a list of the forts of Nubia, placed before, and overlapping somewhat, the south to north listing of Egyptian places. The inclusion of these sites on the Onomasticon list implies that Nubia was also under the authority of the Vizierate of the *Tp-rsy*. It is not surprising that the Nubian forts would be omitted from the other document, since Egyptian colonial policy in the Middle Kingdom did not involve bringing Nubia into the corvee and tax systems (as was the case later in the New Kingdom), but was rather a policy of aloof contact, motivated chiefly by the control of trade and exploitation of resources ⁷¹. The recovery of the Semna Dispatches at Thebes lends further support to this notion, implying that the central authority (Office of the Vizier of the *Tp-rsy*) was receiving regular reports of the situation in Lower Nubia.

Not surprisingly, the bulk of direct royal communications were official, indicating that the King himself might still exercise direct control over the area when necessary. The associational evidence is less clear for the peg and package sealings of Senwosret III. Most of these were found in the South Wing outside the fort proper, which may or may not have been an administrative area. The Granary of Senwosret, however, sent its goods principally through official channels. The presence of these two seals at so many of the fortresses, combined with the quantity of goods exchanged suggests that it may represent some central royal supply depot.

The rest are less susceptible to explanation. The predominantly private contact with Semna, appears to have been chiefly written. Written correspondence with nearby Shalfak was mixed. Goods were exchanged officially from Bigeh and Shalfak, privately from Elephantine.

7. Distribution at Askut

Askut was excavated by the late Alexander Badawy from 1962-4 under the auspices of the University of California at Los Angeles. Virtually the entire site was cleared to sterile deposits or to bedrock in two seasons ⁷². The collection, located in the Museum of Cultural History at UCLA, is currently undergoing analysis by the author ⁷³.

All of the major types of sealings described above are represented at Askut (Pl. XXXV-XXXVI and XLa). The main deposit is distributed in a peripheral disposal pattern around a block of magazines and/or workrooms in the Southeast Sector outside the fort proper. This pattern might have resulted from activity in this building, or, perhaps more likely, from debris from the upper fort being swept down a staircase (Pl. XXXIX, stair is at *), perhaps in a corollary to one of the cleaning episodes which generated the deposits at Mirgissa, Semna South, and outside the East wall at Uronarti. This deposit thus could be from a mix of private

69 HAYES (*supra* n. 67).

70 A.H. GARDINER, *Ancient Egyptian Onomastica* (1947).

71 TRIGGER (*supra* n. 6) 77 ff., for a divergent view, see O.D. BERLEV, "A Social Experiment in Nubia during the Years 9-17 of Sesostri I", in M.A. POWELL (ed.), *Labor in the Ancient Near East* (American Oriental Series 68, 1987).

72 BADAWEY (*supra* n. 58), "Preliminary Report on the Excavations by the University of California at Askut", *Kush* 12 (1964) 47-53, "Askut : A Middle Kingdom Fortress in Nubia", *Archaeology* 18 (1965) 124-31 and "Archaeological Problems Relating to the Egyptian Fortress at Askut", *Journal of the American Research Center in Egypt* 5 (1966) 23-7.

73 Although the distributions listed here and on Pl. XXXIX-XLa are substantially correct, the analysis is still preliminary and the numbers may change somewhat. In particular, it will be possible to place some of the loosely provenienced sealings more precisely once the field notes are recovered from Cairo.

and public contexts. Badawy ⁷⁴ notes that some sort of structure may have existed in the empty space south of the Commandant's Quarters.

Official sealings in this deposit outnumber private by 3 to 1. The only other heavy concentration of official sealings was in the drain at the entrance to the Commandant's quarters, and consisted entirely of the seal of Senwosret III. Unfortunately, the area which Kemp ⁷⁵ sees as a granary, the large block labeled 'A', was so badly disturbed by later occupants that any direct evidence for the administration of that facility was very likely destroyed. Most, if not all, of the official sealings appear to have come from outside entities, in numbers which compare favorably to the larger fort of Uronarti (Table 7).

Table 7
Sealings from Outside at Askut

Senwosret III		26
<u>Dr Sti</u> w		17
Granary or Treasury	12	
Upper Fort	3	
Prison/Workhouse	2	
Stores		16
Uronarti		5
Treasury	1	
Granary	4	
Buhen (Package)		2
Senwosret Granary		2
Faras (Letter)		1
Serra East (Peg)		1
Royal (Letter)		2
Sub-Total		72
Unidentified (Mostly Peg)		64
Total Official Sealings		136

Sealings of Senwosret III and the Senwosret granary are the most frequent. The deposit at the entrance to the Commandant's Quarters contained only this seal. They may have originated from activity here, or perhaps in the adjacent Magazines. If so, they provide the only direct evidence of administrative activity there. This sealing is also found at Uronarti and Semna South, and in large numbers at Mirgissa. They are typically from large pegs. Many of the sealings found in a peripheral disposal pattern around the Mirgissa granary (Pl. XLb) came from this institution, none were from Mirgissa's own granary (Table 8). This, combined with the fact that Mirgissa even apparently had its own branch of this institution, may indicate that this facility was under direct royal authority. Mirgissa's granary, represented in sealings from the trash deposit outside the main gate, may have been located elsewhere. Kemp has pointed out that the granary at Askut is the largest of all the Second Cataract Forts, including Mirgissa. He has suggested that Askut served as the major supply depot for large military campaigns into Upper Nubia. Mirgissa would serve in part to support these campaigns, but also as a trading



⁷⁴ BADAWY (*supra* n. 58).

⁷⁵ KEMP (*supra* n. 16).

as a trading store ⁷⁶. Perhaps the granary at Askut, of such strategic importance, was also under royal control. This would help explain the complete absence of a granary sealing at Askut.

Table 8
Institutional Sealings from the Mirgissa Granary

Large Stamps	
Senwosret Granary	29
Senwosret II Granary	10
Buhen Granary	11
Buhen (Plain)	14
Mirgissa (Unknown Institution)	10
Illegible Institutional	3
<i>Wd3</i> (Place Unknown)	6
Small Seals	
Semna	5
Uronarti	3
Mirgissa	18
Buhen	4
Serra	1

Seventeen sealings originated from a fortress called *Dr stiw* ()⁷⁶, otherwise unattested. As it does not appear on the Onomasticon list, it is probably not located in Nubia. The use of *stiw* (lit. : *sti* people) would suggest a location in southern Egypt ⁷⁷. These all came from pegs or packages. Most originated from either the granary or treasury (it is difficult to tell which one, since this portion was usually broken away), but also from the Upper Fort, and the prison or workhouse ()⁷⁸, an institution thus far unattested in Nubia. It dealt with issues concerning the corvee of labor, especially individuals who were sentenced to permanent labor duties ⁷⁸. They might be detailed to various places and individuals, and were perhaps employed at Askut. One of the counterseals (A-2) appears on a sample sealing found in a room in the main fort, next to the only large concentration of private sealings (Pl. XXXVII-XXXVIIIa). This complex may be analogous to the larger private deposits at Uronarti.

Almost as frequent are sealings from the seal of the storerooms, or perhaps stores (*wd3*). The counterseal A-18 appears on four of these. It also appears on a small peg sealing which was found in the workshop/storeroom building of the Southeast Sector. This seal may have been used at Askut, since it seems unlikely that the sealer would be sending goods through both personal and official channels. Additionally, the lack of a place name on the seal supports this attribution, since one would expect a name on a seal for external use. The Storerooms 'department' at Askut may, in fact, have been located in this complex. A set of large Middle Kingdom storage jars were found in situ in at least one of the rooms there. A combined workshop/storehouse would jibe well with the *wd3* described by the Reisner Papyri ⁷⁹. The

⁷⁶ KEMP (*supra* n. 16) 133-4.

⁷⁷ The first Upper Egyptian Nome was called *T3-sti* (lit.: Land of the *Sti*).

⁷⁸ W.C. HAYES, *A Papyrus of the late Middle Kingdom in the Brooklyn Museum* (1955).

⁷⁹ W.K. SIMPSON, *Papyrus Reisner III* (1969) 37.

fact that all of these sealings were found in the South East Sector, and that an impression of its counterseal was found within the complex itself, also supports its location there ⁸⁰.

It is clear that the Second Cataract Forts engaged in a wide correspondence with each other and outside areas, and Askut was no exception. Letters passed from Semna, perhaps including requests for stores, if indeed Askut was the principal granary. Goods came from Uronarti. On analogy with Uronarti, the receipt of packages from Buhen may indicate private trade. A letter was received from Faras, and a box from Serra East. Finally, two royal letters were sent.

8. Conclusion

Clearly, a rigorous analysis of all of the sealings from Egypt along Ageanist lines is long overdue. Even the incomplete data from the forts of Lower Nubia, and especially from Uronarti Fort, has revealed numerous patterns of significance to Egyptian administration. In combination with Egypt's rich, if fragmentary, written record, sealings have the potential to reveal new insights into both large and small scale administrative practices. Unfortunately, publication of the sealings from other locations, including Kahun and sites from other periods, is much less thorough than Reisner's somewhat incomplete publication of Uronarti, in particular regarding the important practice of countersealing, and description of the backs of sealings. It is to be hoped that future final publications of the corpora from such sites as Mirgissa and Semna South will include complete data, so that a more complete picture of administration in Nubia and throughout Egypt can be realized.

⁸⁰ The sealings of Senwosret III and all of the granary/treasury sealings from other forts also occur in the main fort.

APPENDIX :
Frequency of Private vs. Official Sealings at Uronarti

Building A	
Near Gate :	14 Private, 229 Official.
Entry :	3 Private, 3 Official
Room :	2 Private.
Building B :	5 Private, 6 Official.
Building C :	1 Private, 1 Official.
Building D :	
Room 154 :	3 Private, 384 Official.
Room 155 :	2 Private.
Room 157 :	10 Private, 1365 Official.
Room 162 :	3 Private, 279 Official.
Outside Wall :	11 Private, 177 Official.
South Wing :	3 Private, 34 Official.
Apartment 1 :	74 Private, 6 Official.
Apartment 2 :	4 Private, 1 Official.
Apartments 3 & 4 :	249 Private, 7 Official.
Apartment 7 :	184 Private.
Apartment 8 :	819 Private, 5 Official.
Apartment 13 :	1 Private.
Apartment 14 :	6 Private, 6 Official.
Apartment 15 :	13 Private, 2 Official.
Apartment 16 :	7 Private.
Apartment 17 :	9 Private, 9 Official.
Apartment 18 :	385 Private, 1 Official.
Apartment 19 :	8 Private, 1 Official.
Apartment 22 :	9 Private, 4 Official.
Apartment 23 :	14 Private, 1 Official.
Apartment 25 :	92 Private, 14 Official.

115 Private Sealings unaccounted for.

Except for Buildings A & D, internal plans of Buildings and Apartments omitted in Pl. XXXVII.

Stuart T. SMITH

LIST OF ILLUSTRATIONS

- Pl. XXXIV : The Second Cataract Forts and Ramesseum Listing.
- Pl. XXXVa : Sack-Dowel (1708-9). Scale = 1:1.
- Pl. XXXVb : Sack or Bottle (1520-1). Scale = 1:1.
- Pl. XXXVc-d : Large (1735-2) and Small (1735-11) Pegs. Scale = 1:1.
- Pl. XXXVe : Countersealing on a Large Peg (1643-2). Scale = 1:1
- Pl. XXXVf : Basketry or some sort of bundle (1735-9). Scale = 1:1
- Pl. XXXVg : Cloth Package (1682-2). 4.9 by 5.0 cm.
- Pl. XXXVh : Papyrus Letter (1563-1). Scale = 1:1
- Pl. XXXVIa : Sample Sealing (1698-1). Scale = 1:1.
- Pl. XXXVIb : Sealed letter Hekanakht archive.
- Pl. XXXVIc : Royal papyrus sealing (1744-18). Scale = 1:1.
- Pl. XXXVII : Uronarti Fort. Distribution of sealings.
- Pl. XXXVIIIa : Uronarti, Building D : Granary/Treasury complex.
- Pl. XXXVIIIb : Frequency of use as Counterseal at Uronarti.
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- Pl. XLa : Seal impressions from Askut.
- Pl. XLb : Mirgissa Granary complex.

Response by Michelle MARCUS

With this paper Stuart Smith has prepared the way for new approaches to the study of Egyptian sealings. It is hoped that the Egyptian material will continue to be studied with the same attention to use and function paid first to Aegean sealings and more recently to Near Eastern discoveries. These comparative studies should serve to create a vital data bank of sealing types and functions for future research.

On terminology :

If one of the ultimate goals of the conference is to create a shared data bank of sealing function studies for use by Aegean, Near Eastern, and Egyptian scholars, then it is essential to standardize the terminology ¹. First, the term "sealing" needs to be more explicitly defined—either as an ancient seal impression or, more preferably, as a lump of clay that was pressed when moist upon a door or container actually to seal it shut. In the latter case, reference would then be made to ancient seal impressions on sealings (or tablets).

The term "sample sealing" is likewise problematic. In Smith's paper, it refers to lumps of clay that preserve a clear seal impression on one side, but that show no signs of ever having been attached to a door or commodity. Similar objects are called "nodules" in the Aegean terminology and tabs, tags, and wall labels ² in the Near Eastern literature. Three "tabs" were discovered at the Iron Age settlement at Hasanlu in Northwest Iran ³. They are flattened, ovoid-shaped tags of clay that have a smooth underside and, like the Nubian "sample sealings", show no signs of having been used actually to seal something shut. The front of the Hasanlu tabs is impressed with a single rolling of a cylinder seal. Unlike the multiple, overlapping rollings on the commodity and door sealings from Hasanlu, care was taken in the case of the tabs to create a clearer, more complete rolling of the seal design. Similar objects have been discovered, as well, at Susa, Tall-i Malyan, and other sites in the Susiana plain ⁴. Unlike the Hasanlu examples, however, those from Susa are preserved with plaster on the back, which has led Holly Pittman to call them "wall labels" ⁵. As mentioned by Smith, George Reisner has suggested that the Uronarti "sample sealings" served to authenticate seal impressions on

1 Cf. comments by Joan ARUZ in the round-table discussion, this volume.

2 H. PITTMAN, paper presented at the XXXVe Rencontre Assyriologique Internationale, Philadelphia, 1988.

3 Cf. M. MARCUS, "Glyptic Style and Seal Function : The Hasanlu Connection", this volume, n. 4.

4 P. AMIET, *Glyptique susienne des origines à l'époque des perses achéménides; cachets, sceaux-cylindres et empreintes antiques découverts à Suse de 1913 à 1967* (1972), nos. 1676, 1743 (called "languettes"); H. PITTMAN, personal communication; H.T. WRIGHT and G.A. JOHNSON, "Population, Exchange, and Early State Formation in Southwestern Iran", *American Anthropologist* 77 (1975) 271.

5 *Supra* n. 2.

sealings⁶. Although this interpretation is tenable, equally likely is that they served to authorize a particular individual to conduct a sealing transaction⁷.

On style :

As an art historian, I am interested in questions of style, as well as function; and particularly in the case of the Nubian sealings in the relationship between the center in Egypt and the frontier in Lower Nubia. A number of related questions come to mind. Is there any way of determining on the basis of glyptic style whether the seals from the Nubian forts were all produced in Egypt or whether some were made, perhaps, at the forts themselves? Is there any evidence of Nubian traders in the Second Cataract region? Are there any Nubian seal impressions on incoming goods; for instance, at Semna South, this site being an important control point? Is there any stylistic evidence of interaction between Egyptians and Nubians in the south. Last, can one conduct a stylistic analysis of any of the personal pattern/no-name seals? To date, Egyptian stamp seals have been studied primarily with reference to seal type (size, and form of the back and side), with little attention given to the style of the seal designs. One wonders, then, whether a comprehensive stylistic analysis of Egyptian stamp designs might be productive in future research.

Discussion

Weingarten :

One remark on style and function. When Reisner divided the seal impressions by style or patterns, scrolls, etc., he remarked that those used for countermarking tended to be the most expensive seals, that is, the more complicated seals. Yet I think that Smith's study may disprove this theory. Of Smith's five countermarking seals, two are obviously quite simple types. Therefore, I think that the only conclusions which we have had so far on style and function in the Egyptian material may in fact be incorrect.

S. Smith :

I agree completely. Reisner has one chart which lists the percentage of occurrences of different seal types as counterseals vs. private seals. He divides them into about eight different categories, which would be a whole range of sealings and actual seals for some of these pattern seals. It is not surprising that the official seals occur as counterseals—something like 43% of them occur as counterseals. But if one studies the actual frequency, the five most frequent seals at Uronarti are all from the full range, i.e., from his highest quality to the very lowest.

Aruz :

The institutional seals in Smith's paper are quite clearly identifiable on the basis of both their shapes and their inscriptions. This is very nice and very unusual, especially in the ancient Near East where it is very hard to define institutional seals. Are any of these institutional seals, which should have belonged to an office rather than to any individual, found in graves?

S. Smith :

Not that I know of.

Aruz :

One would expect that they would *not* be found in burials.

6 See SMITH, this volume, for reference.

7 I owe this suggestion to Richard Zettler (personal communication).

S. Smith :

Exactly. But there are individual seals, as, for example, a seal at Uronarti with the title of vizier "Tjaty" and a personal name after it. Presumably this was a personal seal, and the office would have had separate seals.

Aruz :

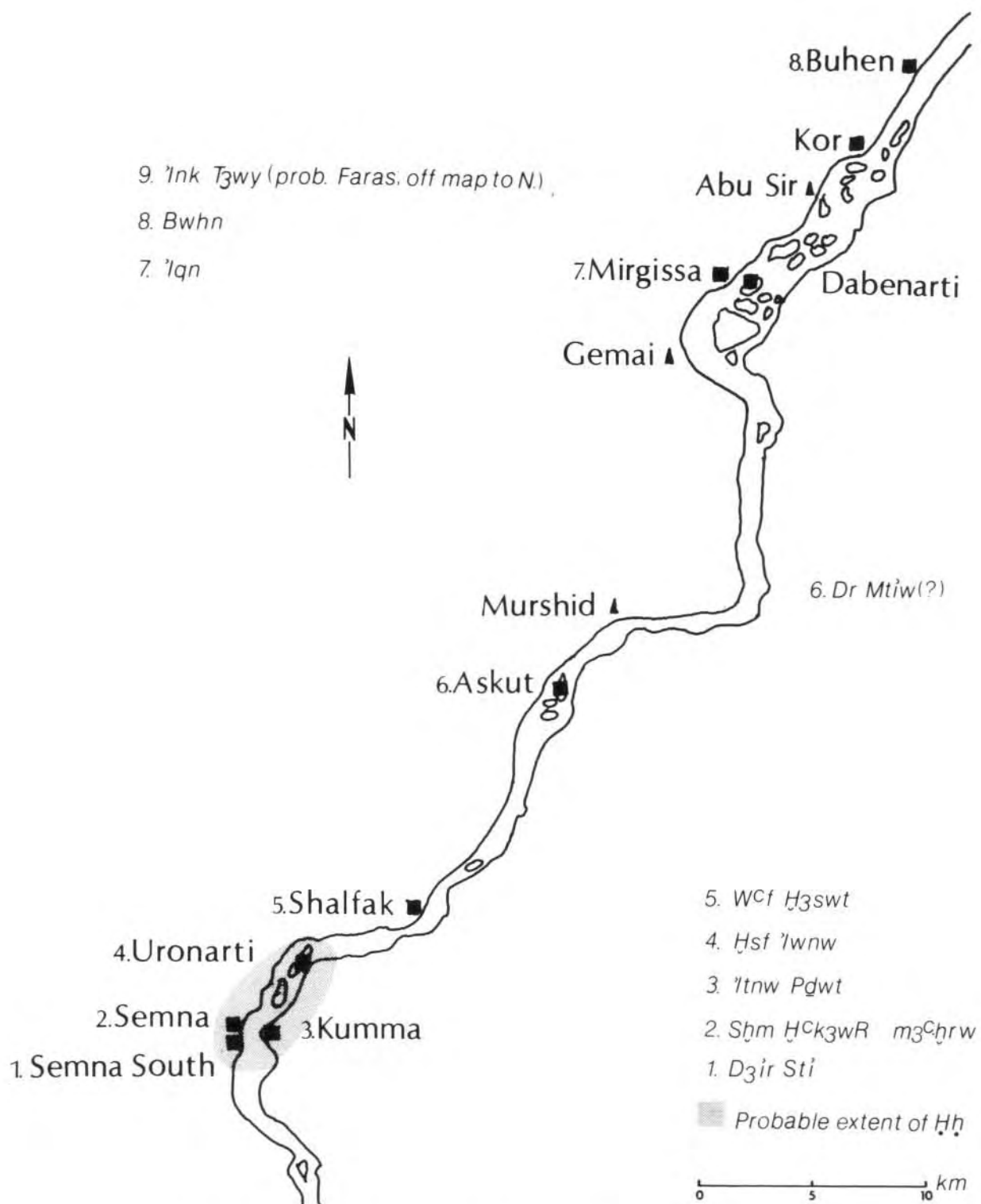
I think that there are some reference to a few non-personally owned seals from the Near East.

Magness-Gardiner :

I think that they are very rare and very early. In the Near East the individual quality of the seal takes precedence over the institutional nature of the office almost everywhere. One can use it officially, but it still designates his responsibility.

Marcus :

It has been argued that the geometric stamp seals were institutional because they are so few in number. They are found in much smaller quantities than the more elaborate cylinder seals.



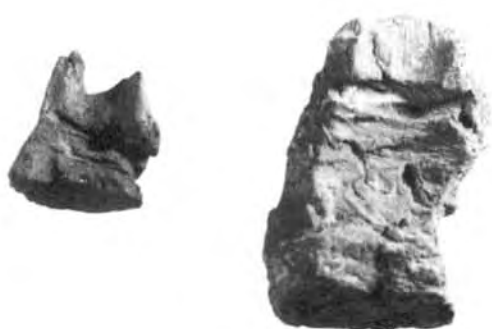
The Second Cataract Forts & Ramesseum Listing.



a



b



c



d



e



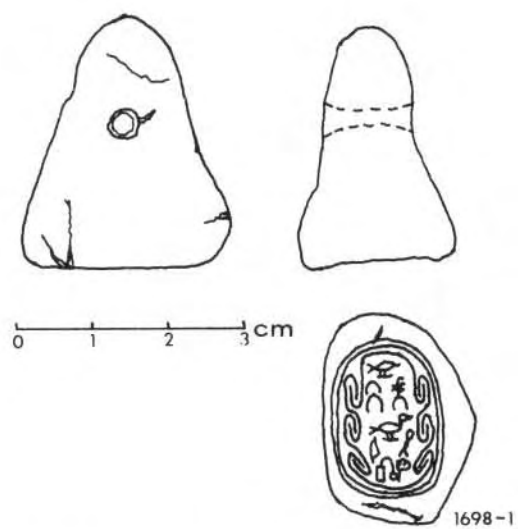
f



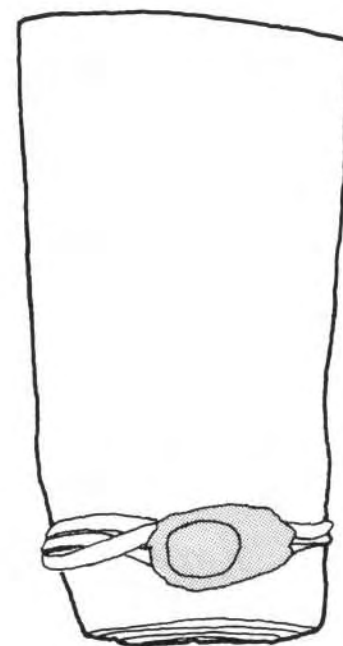
g



h



a. Sample Sealing

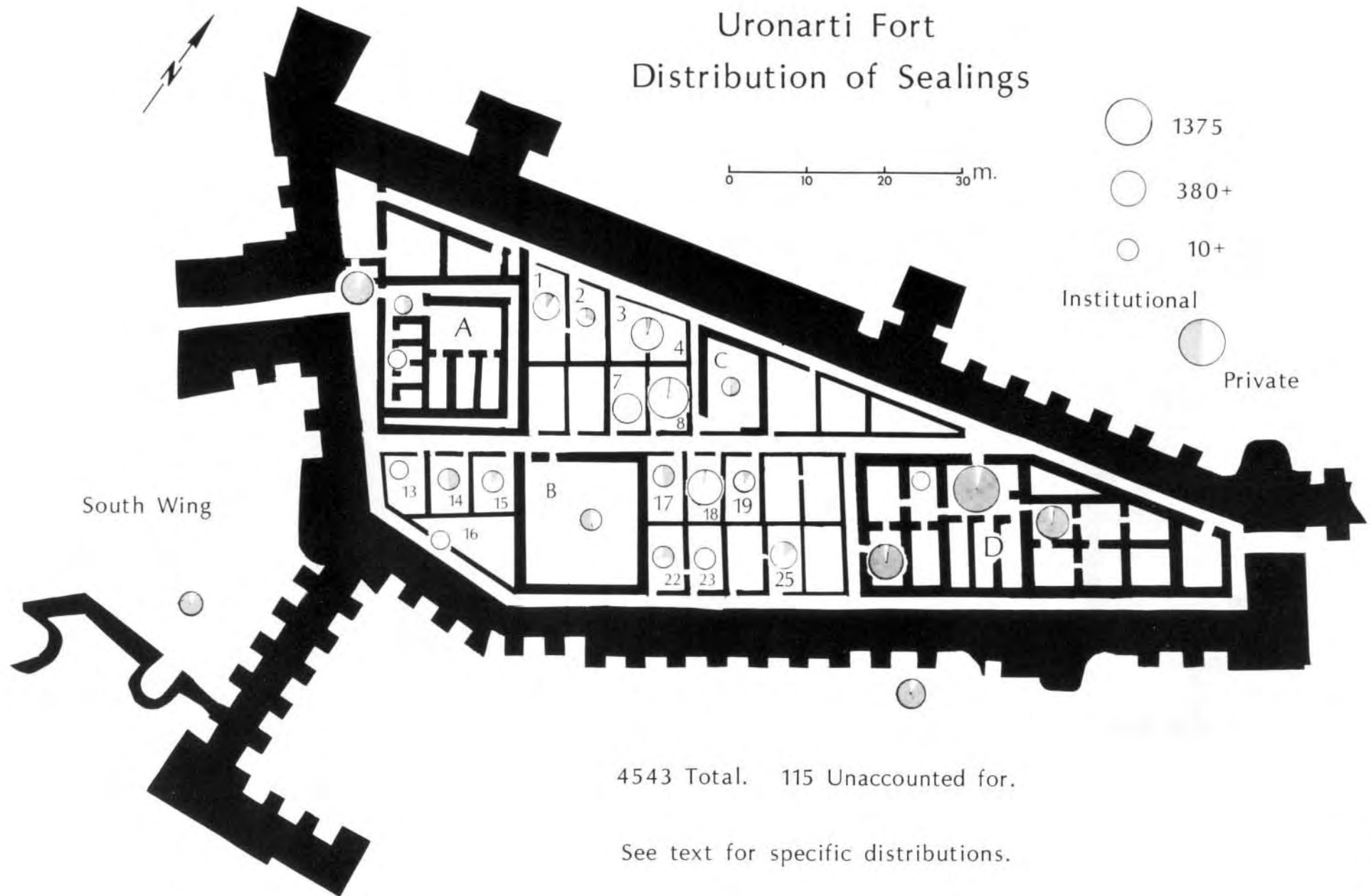


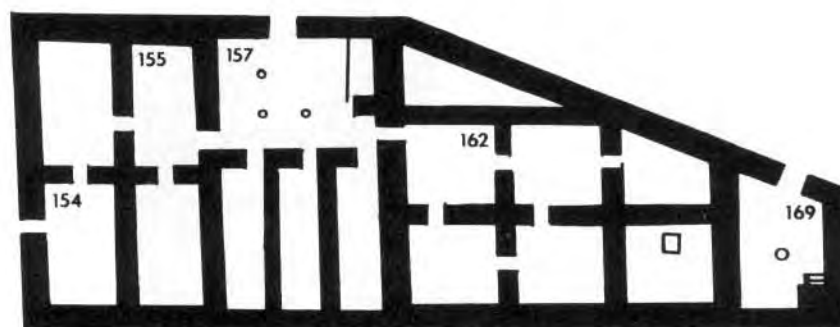
b. Sealed letter
Hekanakht archive.



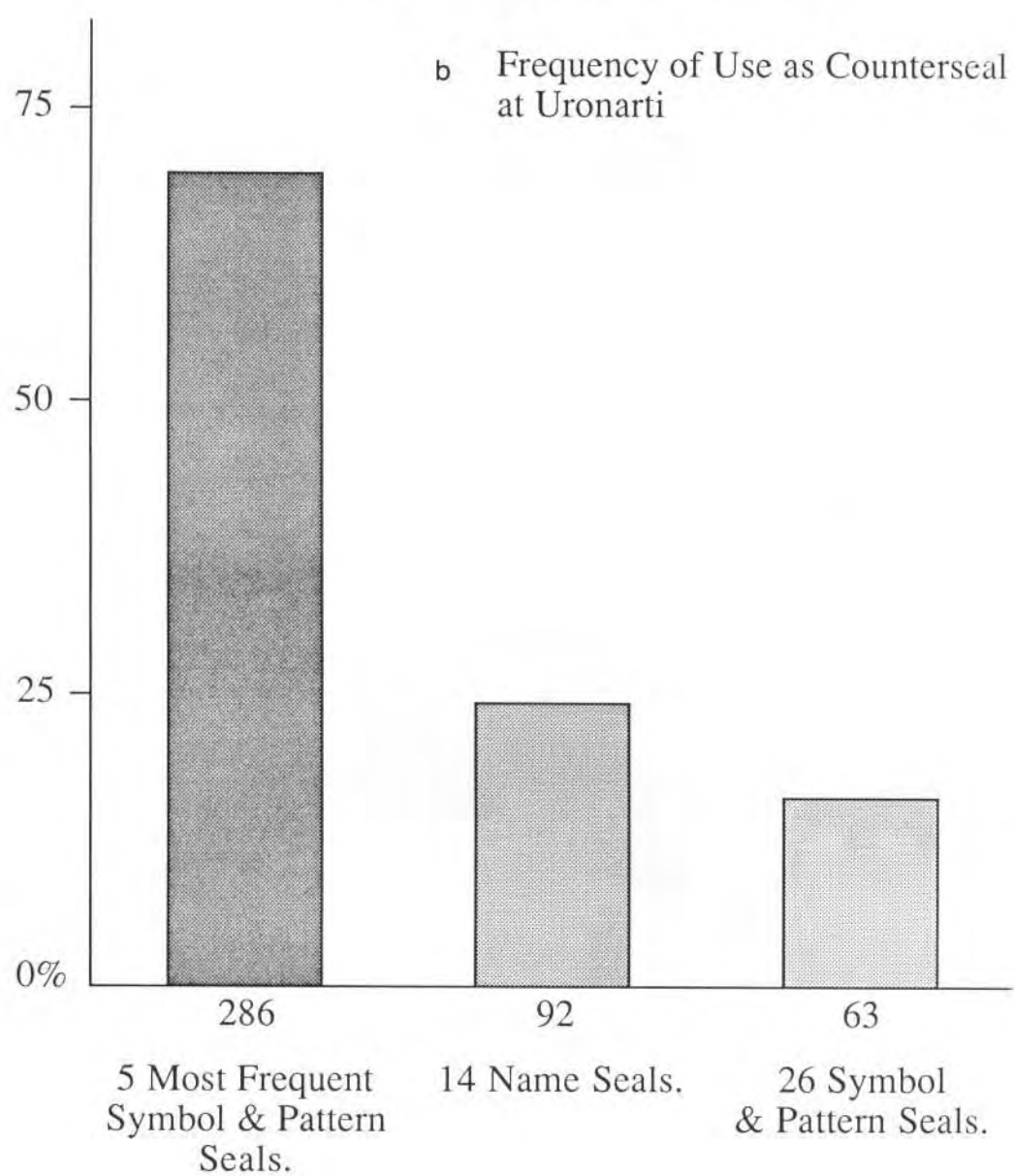
c

Uronarti Fort Distribution of Sealings



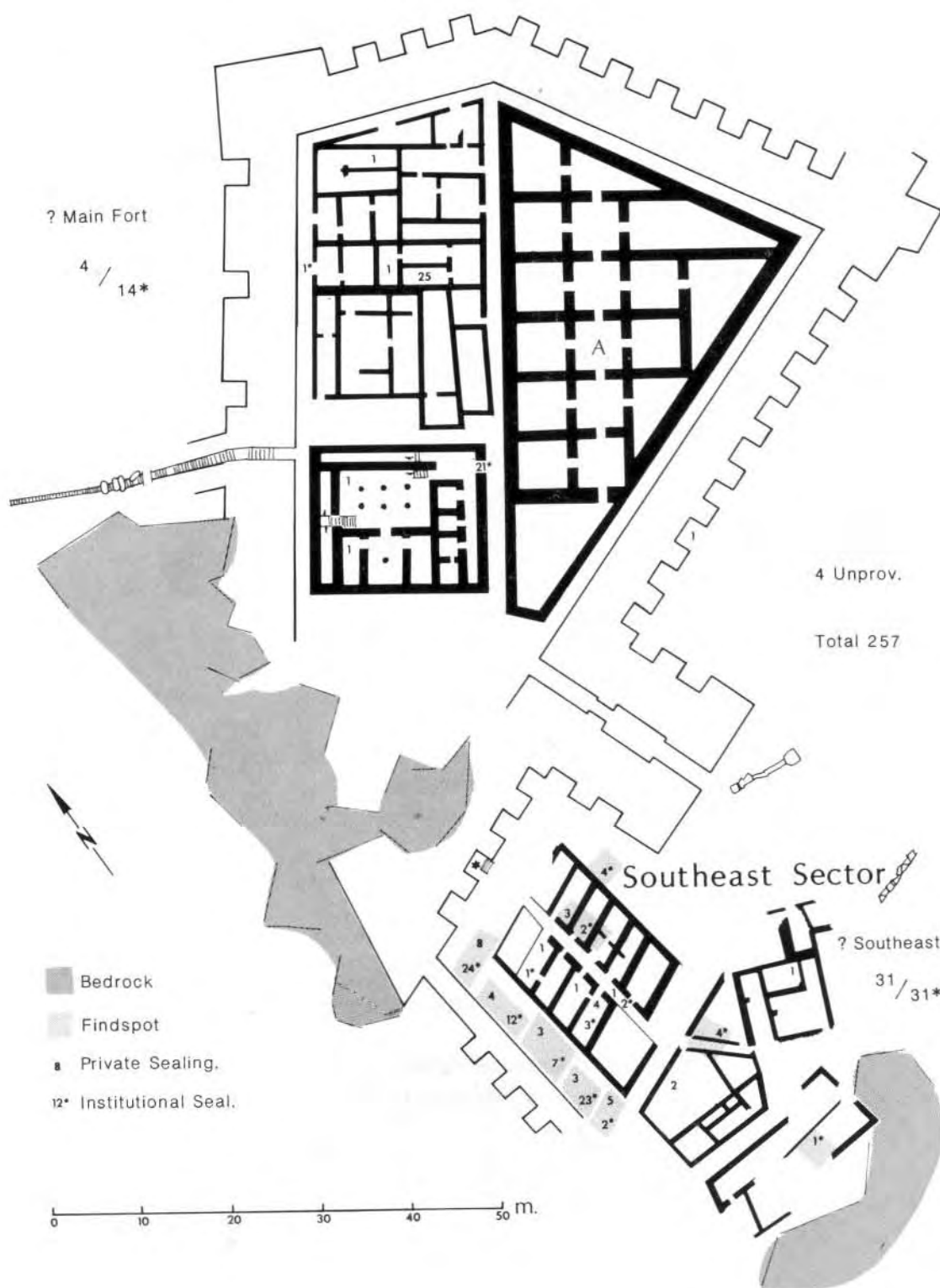


a Uronarti – Building D
Granary/Treasury Complex



Total: 441 Sealings.

Askut Sealings Distribution





a

Seal Impressions from Askut

Mirgissa Granary Complex

