Non-Textual Marking Systems in Ancient Egypt (and Elsewhere), 215-228

## The Early Dynastic Pot Mark Project\*

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## Abstract

The Early Dynastic Pot Mark Project examines about 8000 published and unpublished marks on various types of Early Dynastic pottery from different sites in Egypt. The project is not the first of its kind, but earlier ones on the same material by Helck (1990) and van den Brink (1992) had – with about 3,000 – a smaller number of marks available and less access to originals.

Although the first samples of these marks were discovered already at the end of the Nineteenth Century and many different interpretations on the marks' function have been offered, so far none has been generally accepted. The project's first aim is, therefore, to collect as much information as possible on the different samples in a database to identify parameters that might help to interpret the marks.

Originally, many Early Dynastic pot marks were only one component of a larger system of recording (Fig. 1). Ideally, the whole set comprised pot mark on a vessel, other parts like a lid made of pottery, leather, fibers or mud, and finally a mud stopper possibly with seal impression and another set of marks. In the past, such entities have been discovered at different sites, but due to traditions in archaeology and museology which were often biased against pottery, many were separated for storage reasons so that at the moment we have

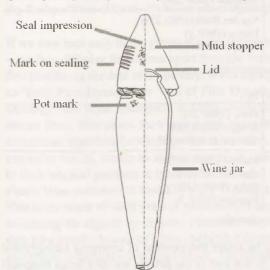


Fig. 1: Reconstructed set of wine jar with sealed stopper.

hardly any indication to reconstruct this complete set of information. In other cases the vessel was preserved completely, but the publication mentions only the mark. In many more instances, only sherds survived; here just the mark was recorded without reference to the vessel. Since the publications taken as source for the present study were written over the past 130 years, the quality of documentation varies quite a bit, so that much data is missing - depending on the site it is the provenance, the type of vessel the possibilities range between different kinds of storage vessels

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Only few of these sets of wine jar and sealing are published: CG 11039, 11085, 11062, 11063, 11064, 11096, 11099, BM 27737, cf. Spencer (1980: 46, Pl. 22, 27, 40, 41 [309]).

and open shapes like plates or bread moulds –, its content or whether the mark was incised prior to or after firing. Fabrics are only recorded for some of the most recent excavations.

The second and, of course, major aim of this study is to "decipher" the meaning of the pot marks in respect to their function. A number of authors have interpreted these marks as indications of potters, owners, content, workshops, locations or administrative units (Tab. 1). Although until now none of the interpretations has been singled out as the most probable, it is obvious that the date of the publication influenced the kind of description: While the older ones favor explanations that focus on individuals – the potter, the owner –, the more recent ones tend to recognize a kind of institution behind the marks. Therefore, it seems necessary to identify "clues" that enable us to decide at least between these personal or institutional approaches.

Interpretation	Ву
Property	Petrie & Quibell (1896: 44) Boghdady (1932: 157)
Content	Saad (1938: 53-54) Wengrow (2006: 209)
Potter	Junker (1919: 80) Brunton, Gardiner & Petrie (1927: 18) Boghdady (1932: 157)
Numerals	Emery (1949: 156)
Producing institution	Helck (1986: 635) Helck (1990: 1-2) Engel (1997: 25-27) Wengrow (2006: 209)
Collecting institution	Van den Brink (1992: 274) Dreyer (1999: 1) Kroeper (2000: 216)

Tab. 1: Interpretation of pot mark functions (selection).

Interpretation	Ву	
Hieroglyphs	Petrie (1900: 29) Kroeper (2000: 188) Tassie et al. (2008: 213)	
No hieroglyphs	Daressy (1905: 103) Saad (1938: 53-54) Helck (1986: 635) Regulski (2010: 7)	

Tab. 2: Interpretation of pot mark readings (selection).

The signs themselves were taken to be either independent of emerging hieroglyphic writing or as its precursors (Tab. 2). In this part of the debate, we have less a historical development, but two different tendencies for or against the mark's resemblance with hieroglyphs. All participants in this debate agree insofar that they refrain from defining what they accept as writing. For the present question about the function of the marks, their resemblance with hieroglyphs is only of secondary or perhaps no importance and therefore not part of this paper.<sup>2</sup>

<sup>2</sup> This aspect will be treated elsewhere.

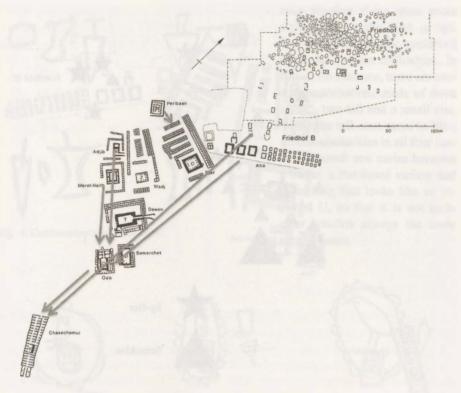


Fig. 2: Map of Umm el-Qa'ab with movements of objects (selection).

If we now turn only to the group of wine jar marks – the largest one among the marks - we face different limitations apart from the variability in published information. The first problem is the date of the pottery. While smaller sites are dated usually just roughly to "early First Dynasty" or "end of First Dynasty" or sometimes even only to "First Dynasty," the royal necropolis at Umm el-Qa'ab, where the vast majority of marks comes from, also poses such a problem since the material from a single grave was sometimes distributed over large distances. This is exemplified in Fig. 2 with a few examples which, thanks to their inscriptions, can be traced back from their find spot to their original position: a label of Narmer that was discovered in tomb V, wine jar sherds from cemetery B found in tomb O or seal impressions from Adjib in tomb O. This is the result of 5000 years of plundering, burning, offering, and excavating as well as hunting for objects by visitors. Therefore, one first has to estimate whether a given date for a sherd - in case of Umm el-Qa'ab it is usually the find spot which is seen to be equivalent to its date - is correct or not. The distribution of pottery fragments mentioning Kings Semerkhet and Iry-Hor help to elucidate this pattern: Fig. 3 illustrates where sherds with Semerkhet's name have been found.

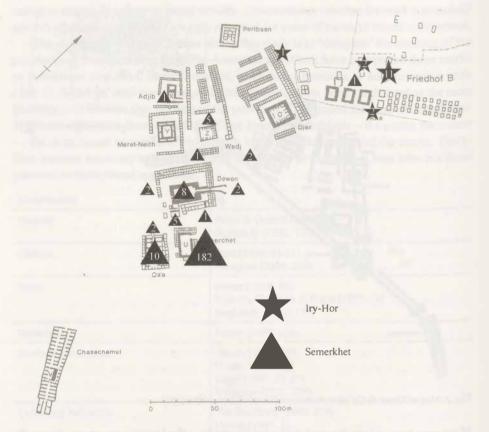


Fig. 3: Distribution of pot marks mentioning Kings Iry-Hor and Semerkhet in Umm el-Qa'ab.

About 250 fragments are identified from the necropolis, from Amélineau's and Petrie's work there as well as from the re-excavation by the German Institute of Archaeology. Not all of them could be attributed to a specific find spot, but the figure exemplifies that of the about 250 fragments the vast majority, that is about 180, comes from the area of the tomb itself, while the neighboring tombs of Qa'a and Den still had their share, but one fragment was found as far away as cemetery B.

Marks mentioning Iry-Hor who was buried in B0/1/2 in cemetery B can be used as control: They are less frequent but display the same pattern, concentrating around his tomb and spreading over some dozen meters. Therefore, when dealing with the marks from Umm el-Qa'ab, we can be more or less sure – at least, if a larger number of attestations exists – that the marks belong to the tomb with the highest concentration of sherds. Therefore, the find spots as equivalent of a king's reign are generally accepted as their dates (e.g. tomb T for King Den), but corrected if necessary to that of the majority of finds for a certain sign combination.

And then, apart from the problems with available data and dating, there are the marks themselves which pose a problem. At present there are about 150 different signs which appear alone or in several hundred different combinations. Many of the 8000 samples are fragmentary, therefore it is in many cases nearly impossible to de-

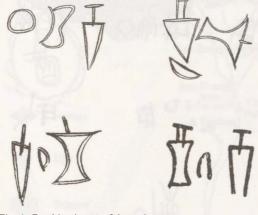


Fig. 4: Combination(s) of three signs.

cide whether there were more signs to a specific mark or not. But even completely preserved examples present difficulties. In Fig. 4, for instance, there are several combinations made of three signs – two tall and a small one. While the tall ones seem to have certain similarities in all four cases, the small one varies between a circle, a flat-based variety and something that looks like an inverted U, so that it is not quite clear whether always the same sign is meant.

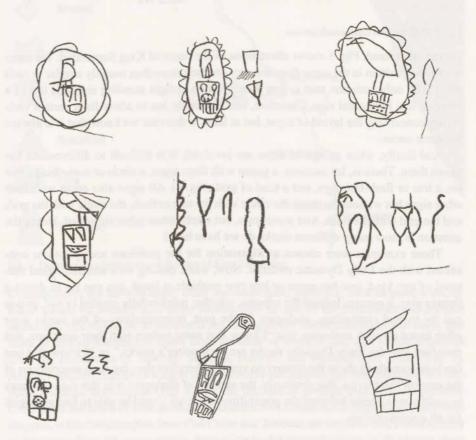


Fig. 5: Pot marks with name of King Semerkhet.

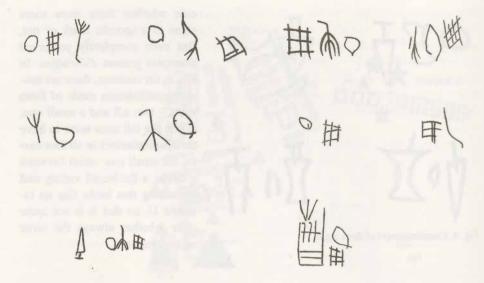


Fig. 6: Different pot mark combinations.

On the other hand, Fig. 5 shows attestations of the name of King Semerkhet: the signs are neither written in the same direction, nor are they more than roughly similar to each other. The only common trait is that there are two upright standing signs on top of a more or less horizontal sign. Therefore, one obviously has to allow for a certain variability concerning the layout of signs, but at least in this case we know that it is always the same name.

And finally, when groups of signs are involved, it is difficult to differentiate between them. There is, for instance, a group with three signs, a circle or something similar, a tree or flash-like sign, and a kind of grid (Fig. 6). All signs also occur with both other signs but without the third: the circle with the tree or flash, the circle with the grid, and the grid with the flash. And sometimes, but rarely, other signs are added. Hence the question is: how many different marks do we have here?

These examples were chosen as illustration for the problems and questions connected with the Early Dynastic material. Now, when dealing with archaeological material of any kind, one has more or less two methods at hand: one can try to detect a certain plan, a pattern, behind the scheme, whether purposefully created or not, or one can try to find similarities, analogies. In the past, interpretations of the marks were often based on such analogies, like "I know that some potters sign their creations, and therefore also the Early Dynastic marks are such potter's marks," or "I know that one can note something about the content on vessels, therefore they are such descriptions of the content" and so on. But obviously, the amount of analogies is in this case too large to enable us to decide between the possibilities since we would be able to find analogies for all quoted options.

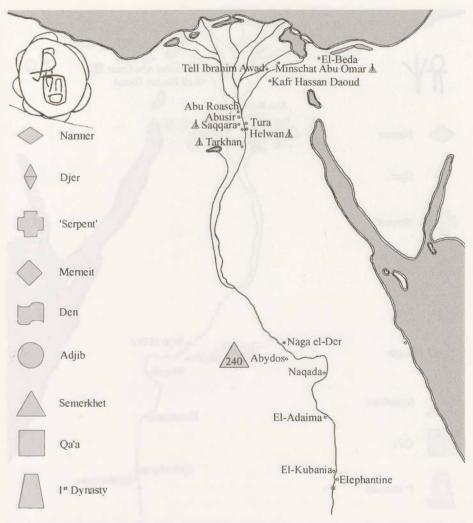


Fig. 7: Distribution of pot marks with name of King Semerkhet.

Consequently, we have to apply other archaeological methods, such as pattern recognition which we already have done successfully in case of the Semerkhet and Iry-Hor marks in Umm el-Qa'ab. If the charts are enlarged, the Semerkhet-signs still show that more or less all attestations come from his tomb at Abydos, and only single examples from the cemeteries of Tarkhan, Saqqara, Helwan, and Minshat Abu Omar (Fig. 7). Another combination of two signs is with twelve attestations not that frequent, but displays a similar distribution (Fig. 8): Of the thirteen or perhaps fourteen, six probably come from the tomb of Den at Abydos, another three from two contemporary tombs at Saqqara, while two samples from Old Cairo and Tarkhan are dated to mid First Dynasty or Sequence Date 80, respectively. According to the excavation report, the marks from Minshat Abu Omar are dated to "First Dynasty." The findings seem to suggest a date of all marks in the reign of Den.

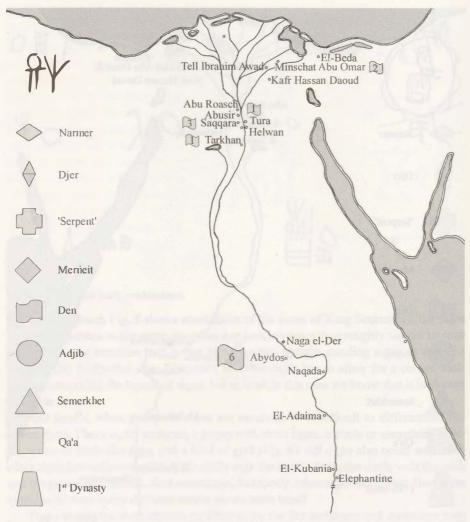


Fig. 8: Distribution of pot marks, time of Den.

Yet another mark consists of a tree-like sign and a spotted or checkered circle (Fig. 9). 16 of the 22 attestations come from Abydos, probably from the tomb of 'Serpent,' while four of the remaining six are from 'Serpent's' reign in Saqqara and Tarkhan and another is of early First Dynasty date from Helwan. Only a single example from Saqqara dates to the reign of Den. In contrast to the previous example, we have here a mark with a majority of occurrences in one reign, and a single attestation one generation later.

The above mentioned combination with three different signs (Fig. 4) occurs during the reign of Den in large numbers at Abydos and nearly as frequent at Saqqara, but also in smaller numbers during the reigns of Adjib and Semerkhet, Den's successors, at Tarkhan, Helwan, and Minshat Abu Omar (Fig. 10).

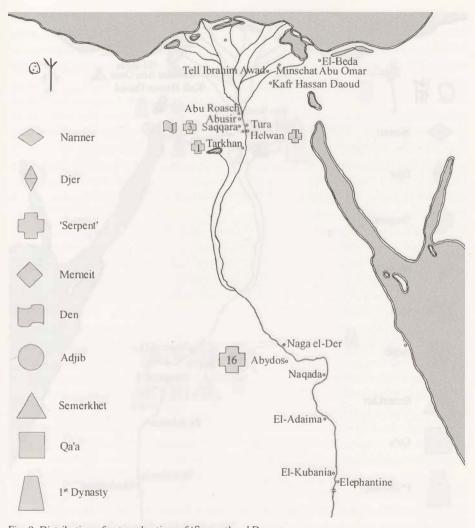


Fig. 9: Distribution of pot marks, time of 'Serpent' and Den.

We seem to have one pattern: some marks are frequent during a certain reign at one or two sites, usually Abydos or Saqqara, and less frequent at other sites during the same reign or a generation or two later.

But then, there are a few marks that do not fit into this pattern: they have been in use during a longer period of time. The floral motif in Fig. 11, for instance, occurs almost exclusively on marl clay wine jars and is attested at Abydos and the sites in the North during the entire First Dynasty.

We can conclude at present that the marks on wine jars follow two different patterns, one that is in use during one up to three reigns of different kings and the other which is in use over a longer period of time. Both patterns include different sites in Egypt.

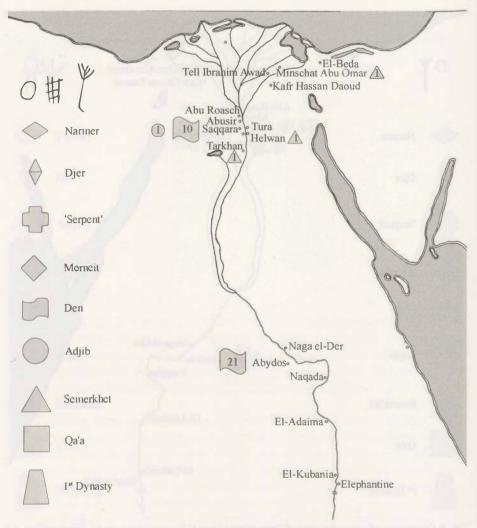


Fig. 10: Distribution of pot marks, time of Den, Adjib, and Semerkhet.

That indicates that the marks are independent of individual activities, but result of some institutional practice.

How do these findings, then, relate to our knowledge about Early Dynastic institutions? Institutions seem to have evolved around the royal household that had to support all its members, not only the royal family, as well the royal mortuary cult: at the end of Dynasty 0 hardly more than the king's name is necessary to indicate institution and product, and the two recognizable departments always sign together with the royal name. During the First Dynasty, the number of institutions increases, especially after the reign of Djer. The institutions now leave documents in form of labels, stone vessels and cylinder seal impressions, thus being another part of the original set of information described at the beginning.

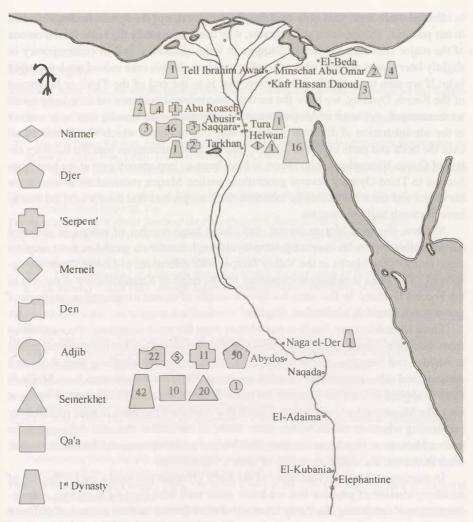


Fig. 11: Distribution of pot marks with floral motif.

Earlier studies by Kaplony and Helck indicated that some of these institutions were rather short-lived, while both authors were able to follow the development of others over several generations, sometimes even dynasties.<sup>3</sup> The short-lived institutions usually were domains established for and by each king that supported much of the tomb equipment for the king and some of his contemporaries. Other institutions are attested over several decades. In course of the First Dynasty, the single institutions, the short-lived as well as the more permanent ones, are more and more subdivided into smaller units. Hence it is tempting to associate the two patterns of pot marks with different institutions and their departments that are — maybe only partially — attested in the inscriptional evidence of the period.

<sup>3</sup> Kaplony (1963); Helck (1987).

On the other hand, this only explains the temporal, not the spatial findings we had in our patterns. The question still remains, why there are usually the same marks on one of the major sites like Abydos or Saqqara in large quantities, and in contemporary or slightly later tombs at other sites in smaller numbers. In this case indeed analogy might help: If we turn to a slightly later period, that is to the end of the Third or beginning of the Fourth Dynasty, we have the earliest inscriptional evidence on how institutions were managed: the tomb of Metjen preserves information on how he was busy with or in the administration of different estates or domains or nomes which were scattered all over the delta and parts of Upper Egypt. One of those institutions was the funerary estate of Queen Nimaathapi, who seems to have been an important figure at the turn from Second to Third Dynasty several generations earlier. Metjen received an income from his duties and from the estates he inherited from his parents that finally enabled him to have his tomb build at Saqqara.

Sneferu, the king Metjen served, had also a large number of estates in different nomes delivering to his mortuary temple, although Sneferu's record is not complete since many of the blocks in the Valley Temple with references to Lower Egypt are destroyed. The same is already documented for the reign of Khasekhemwy at the end of the Second Dynasty. In this case, we have a couple of nomes mentioned on sealings of grave goods found in his tomb at Abydos.

Since Khasekhemwy, Sneferu and Metjen were the main recipients of commodities from their own estates, we can conclude that also the owners of the monumental tombs at Abydos and Saqqara were in a similar position, receiving whatever from their own domains and other institutions. In addition, if especially the information from Metjen's tomb is applied to the First Dynasty pot mark findings, it seems likely that the marks at sites like Minshat Abu Omar are on vessels that contained payment in kind received for performing whatever duties within some estate or institution that also delivered to its main addressee at Abydos or Saqqara, like Metjen probably received from his involvement in the service within the estate of Queen Nimaathapi.

In conclusion I suggest that many of the Early Dynastic pot marks are a reflection of an administration of produce that we know quite well from the Old Kingdom. Administration evolved during the Early Dynastic Period from a mobile control of different regions into a net of permanent institutions. These institutions served to procure control over several Egyptian regions that were originally not very densely populated by imbedding the products of institutions into the mortuary cult as well as the institutions' land into the realm of the king, a process that was still being continued in the reign of Sneferu and later. The pot marks show that during the Early Dynastic Period not only the main recipients, the owners of the monumental tombs, profited, but also people living in some of the provinces, illustrating that, in the course of time, this system included more and more people not only as producers but also as beneficiaries, granting privileges to some and by this securing continuity.

As a consequence, it seems very likely that the Early Dynastic pot marks offer for the first time an opportunity to grasp archaeologically the process of Egypt being

<sup>4</sup> Zorn & Bisping-Isermann (2011).

<sup>5</sup> Fakhry (1961).

<sup>6</sup> Engel (2006).

transformed into a state, a process that has until now only been described in terms of controversial ideological theories.

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