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IDENTITY MARKS

بصمات الهوية

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IDENTITY MARKS

بصمات الهوية

Ben Haring

Identitätsmarken
Marques d'identité

Various types of non-textual notations were used in ancient Egypt in addition to, and in the absence of, writing. Systems of identity marks, such as ownership marks, masons' marks, and pot marks, are important categories among these notations. Such marks express the identity of persons, groups, institutions, or places, and are usually attested as individual signs painted or scratched on artifacts or stone surfaces. Although different from writing, the graphic repertoires of marking systems often include characters of writing, in addition to pictorial and abstract signs. Clusters of marks, sometimes with added signs of a different nature, may even resemble written texts and share some of the latter's characteristics.

تم استخدام أنواع مختلفة من الرموز غير النصية في مصر القديمة. أنظمة بصمات "علامات" الهوية، مثل علامات الملكية وعلامات البناء وعلامات الأواني، تعد فئات مهمة بين هذه الرموز. تعبر هذه العلامات عن هوية الأشخاص، أو الجماعات، أو المؤسسات، أو الأماكن، وعادة ما تتكون من علامات فردية مرسومة أو محفورة على القطع الأثرية أو الأسطح الحجرية. على الرغم من اختلافها عن الكتابة، إلا أن علامات الهوية غالبًا ما تتضمن أحرفًا كتابية، بالإضافة إلى العلامات التصويرية والتجريدية. أحيانًا مجموعات من العلامات، مضاف إليها رموز من نوع مختلف، قد تشبه النصوص المكتوبة، وتشارك في بعض خصائص الكتابة.



Identity marks, as they are known from ancient Egypt, are a type of non-textual notation and usually take the form of individual graphic signs painted or scratched on objects, buildings, and rock surfaces. They were applied, for instance, on pottery vessels, textiles, and furniture by manufacturers and owners; in quarries and on stone blocks by quarry and construction workforces; and on buildings and rock surfaces by individuals for commemorative or votive purposes. The identities expressed by the marks could be those of individuals, groups, institutions, or places. As such, they represent a phenomenon attested in many cultures throughout history and are referred to as “non-textual identity marks” (Haring and Kaper eds. 2009; Haring, van der Moezel, and Soliman

eds. 2018) or “non-textual marking systems” (Andrássy, Budka, and Kammerzell eds. 2009; Budka, Kammerzell, and Rzepka eds. 2015). They can be regarded as a specific sort of graphic information processing system, along with systems such as numerical information storage, graphic memory aids, and writing (terminology as proposed by Kammerzell 2009).

“Non-textual” means that the uses of the signs, and the systems they are part of, follow rules different from those of writing in a linguistic sense, and hence do not necessarily reflect human speech. Nevertheless, in societies familiar with writing, marking systems may include graphic signs borrowed from writing, and combinations of marks (sometimes with additional signs of a different

nature, such as numbers and depictions of commodities) may show similarities with textual layout, and even with linguistic syntax. A graphic composition (partly) consisting of identity marks may thus superficially resemble a written text and can be considered a case of pseudo-script (e.g., figs. 1 and 8; Haring 2018: 231-240). As opposed to true writing, however, non-textual marks represent systems of single articulation—that is, their meaning is conveyed directly by individual signs—whereas the individual characters of writing convey meaning principally through their combination, and thus represent systems of double articulation (Depauw 2009b: 207-208; Haring 2018: 91-92). Being notations of single articulation, marking systems are “open” systems in the sense that it is relatively easy for users to add, discard, or adapt signs. In writing systems this is far less usual, in some cases (e.g., in alphabetic writing systems) practically impossible, although Egyptian hieroglyphic writing was relatively open to extension of the sign repertoire.

This is not to say that marking systems have no rules. In any context where they are used, identity marks stand for human beings and for the social and administrative frameworks these persons find themselves in. Creation, selection, and transmission of individual marks are often determined by family, social, and professional relationships. Naturally, in order for marking systems to be an effective means of communication, they have to be clear in what they say, and must try to avoid ambiguity. The

spatial or physical position of a mark, isolated or in combination with other signs, is important for its understanding: the meaning of an individual mark—just as that of a written text—partly depends on the place where it has been applied (e.g., on a pottery vessel or on a rock surface); and when a mark is combined with other marks, or with signs of a different nature, its precise meaning may partly depend on its place in the sequence (for an example, see below, *A Special Case: Identity Marks at Deir el-Medina*). Such observations do not invalidate the principle of single articulation, but they do add an important nuance to it.

In societies that use writing, the morphology of individual identity marks may be influenced, sometimes very strongly, by characters of the current writing system(s). One might even say that characters of writing or combinations of them (monograms) can be used individually as identity marks. Often, however, the morphological repertoire of marking systems can include signs of different graphic inspiration, either pictorial (depictions of concrete objects or living creatures) or abstract (geometric). Ancient Egyptian team marks and workmen’s marks are typical examples of marking systems of threefold graphic inspiration: writing, picture, and geometry (e.g., Andrassy 2009a; Haring 2018: 227-231). The same three components can be detected in visual communication more generally, as becomes clear from the triad “writing/picture/notation” proposed by the art historian James Elkins (Elkins 1999: 82-91).



Figure 1. Ostracon Cairo CG 24105, found in the Valley of the Kings, near the tomb of Amenhotep II, and probably from his reign.

In pharaonic Egypt, hieroglyphs presented themselves as prototypes for identity marks that could be connected with the owners' names (e.g., 𓂏 for *Wsr-ḥꜣ.t Userhat*, and 𓂏 for *Jn-ḥr.t-ḥꜣ.w Anburkhamy*), but in other cases such a connection appears to have been absent. A case in point here is 𓂏 , denoting *ꜥnh ankḥ* when used in hieroglyphic writing, but as a mark often representing persons without the element *ꜥnh* in their names. To less literate users, it could even alternate with 𓂏 (*nfr* as hieroglyph), as a graphical variant turned upside down (Haring 2018: 226). Indeed, the orientation of a grapheme as a mark was not crucial for those who did not recognize it as a hieroglyph; hence, marks could be rotated or mirrored without change of meaning (Depauw 2009b: 210-212). Even for those acquainted with hieroglyphs, it is not always easy to distinguish between hieroglyphic and other pictorial marks, given the iconic nature of the hieroglyphic writing system itself, its relative openness and graphic variety, and the poor quality with which many marks were made.

Unlike writing, non-textual marking systems can be used easily by semi-literate or illiterate persons or communities, and indeed the use of such systems is thought to be much older than writing, potentially reaching back to Palaeolithic times. Their use as identity marks, however, is difficult to demonstrate in the absence of written information about the supposed users. Needless to say, in societies where writing is absent, the graphic inspiration for individual marks is restricted to the pictorial and abstract domains. Prehistoric rock carvings and paintings (for instance, in France; see von Petzinger and Nowell 2014), and markings on portable objects, may thus include pictorial and geometric signs potentially referring to their makers or owners. In the Middle East, marking systems make their appearance well before writing in the form of sealings (seventh millennium BCE at the latest; Duistermaat 2012) and pot marks (mid-fourth millennium; Bréand 2015; Oates and Oates 1997). This does not mean that writing developed out of marking systems, or that marks represent an early form of writing: the repertoire and style of marks and the earliest writing systems do not show significant overlap (for pot marks

and early writing, see Baines 2004: 159-160; Sconzo 2013: 285-289; Bréand 2015: 211). Nor did writing supplant or marginalize marking systems, which continued to exist alongside writing, and whose development and popularity could even be stimulated by it (as is particularly clear in the case of Ramesside Deir el-Medina).

Categories of Identity Marks

Notations classified as non-textual marking systems include more systems than identity marks. Marks of very similar appearance, and attested in similar positions, are for instance assembly marks, setting marks, and bench marks, whose primary purpose is not to express the identity of builders or responsible authorities, but to indicate how buildings, furniture, etc., are to be constructed and oriented (see, for example, Arnold, D. 1979: 27-28; Budka 2009a: 73-78; Wiczorek 2015; Di Cerbo and Jasnow 2016). In the case of pot marks, it is often uncertain what is expressed by the marks applied: identities of producers or owners, purpose or quality of the vessel or its content, or yet something else. Similar difficulties relate to marks on bricks and tiles, and in quarries. The following overview concentrates on categories of marks that certainly or possibly have the expression of identities of individual persons, groups of persons, or institutions as their (main) purpose. It will be clear from this overview that the object or surface inscribed with marks is as important in establishing their genre or purpose as the form and meaning of the marks themselves. When all available criteria are taken into account, marks may still defy interpretation and classification (it should be noted that ancient Egyptian marking systems were hardly the object of systematic research until two decades ago). The categories that do seem relevant are certainly not mutually exclusive; for instance, the same signs may be mason's marks or team marks as well as quarry marks, or pot marks as well as ownership marks.

Team marks reflect the identity of teams (*ḥꜣ.t*) of workmen of monumental building projects of the Old and Middle Kingdoms—that is, the

teams quarrying, transporting, and setting stone blocks. These teams together constituted “phyles” (*s3.w*), which were joined on a higher level into “gangs” (*pr.w*). Whereas the phyles and gangs were indicated on stone blocks either by fully written names and words, or single-hieroglyph abbreviations, teams were consistently referred to by single signs of hieroglyphic, pictorial, or abstract nature (fig. 2). Hieroglyphic signs appear to be the most common, and many of these possibly refer to the names of persons, institutions, places, or districts, and some perhaps to the names of the teams themselves (Arnold, F. 1990: 22-23; Roth 1991: 124-133; Andrásy 2009a: 18-21; van der Moezel 2015: 20-21; Yamada 2017). Such references are more difficult to establish for pictorial but non-hieroglyphic marks, and for geometric ones. It is likely, moreover, that the meaning of a mark was recognized only within the context of one or more specific building projects, and during a limited span of time (Andrásy 2009a: 22). It is uncertain if team marks were used in later periods; Eighteenth Dynasty and Ramesside marks in quarries and on blocks of monumental buildings may refer to groups of workmen or individual masons; some are possibly abbreviations of the names of institutions and places (Budka 2009b: 182-189; Nilsson 2018: 119-121).

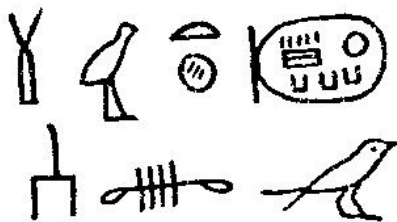


Figure 2. Gang and phyle names in the pyramid of Menkaura, Giza, with geometric team mark at lower left.

Masons' marks are usually understood to refer to individual workmen, rather than teams, in monumental stone building (as in, for example, European monumental building of the Middle Ages and later centuries; see Van Belle 2014). Possible but very doubtful examples have been

considered for the late Old Kingdom (Andrásy 2009a: 22-25). Individual masons' marks do not seem to have become frequent before the Eighteenth Dynasty; the earliest examples likely referring to individual masons are attested on the remains of the small Aten temple at el-Amarna and on Amarna *talatat* blocks at Hermopolis (fig. 3; Roeder 1969: pl. 219; Mallinson 1989; Van der Perre 2015: 77-78), and on blocks of the temple of Aye and Horemheb at Medinet Habu (Anthes 1939, here called “quarry marks”). Very similar marks were used in the construction of the Deir el-Bahri temples of the Eighteenth Dynasty (but may refer there to teams or institutions), and by the royal necropolis workmen at Deir el-Medina from the time of Hatshepsut and Thutmose III onward (for Deir el-Bahri see Budka 2009b: 180-196; for Deir el-Medina see below: *A Special Case: Identity Marks at Deir el-Medina*). The Deir el-Medina marks represent individual men and their families. In this particular case, however, the term “masons' marks” is not quite appropriate, since they are hardly attested on masonry or in the royal rock tombs. Whereas in the case of Deir el-Medina the meaning of the marks can be established with the help of written sources mentioning the same workmen, identification with individual workmen is less clear in the case of the temple blocks. But the *talatat* blocks of the Amarna temples would appear, by their modest size, to be the work of individual masons, and some of the Horemheb/Aye blocks bear hieratic inscriptions identifying them as the work of specified individuals (Anthes 1939). Identity marks in quarries and on masonry of the Late and Ptolemaic and Roman Periods are thought to refer to individual masons, their superiors, or even contractors (Jaritz 1980: 87; Depauw 2009a: 98; Dijkstra 2012: 33-34; interpretation as team marks by Baumann 2022: 421). The Meroitic masons' marks of Musawwarat el-Sufra are also thought to include the signs of individual masons (Karberg 2020: 18). In addition to the traditional hieroglyphic, pictorial, and geometric signs, marks on temple blocks of the Ptolemaic and Roman Periods include Greek alphabetic characters (e.g., Jaritz 1980: 85-94; Fauerbach 2018: 197-203).



Figure 3. Masons' marks on *talatat* blocks at Hermopolis.

Quarry marks represent a category that overlaps with the previous two. Team marks and masons' marks on stone blocks could theoretically be applied in quarries, but also later in the process of transport and building, and it is often difficult to establish at what point exactly the marks were made. Texts from the Ptolemaic and Roman Periods make clear that the same masons were responsible for the quarrying, transport, and setting of blocks at the construction site (Depauw 2009a: 96-98), but that was not necessarily the case in earlier periods. The marks on blocks of the Middle Kingdom pyramids at el-Lisht, for instance, are thought to have been made during transport (marks of this period not being attested in quarries) by teams of workmen settled near the

quarries or near the pyramids (Arnold, F. 1990: 14, 19-20). The term "quarry marks" can safely be used for signs actually attested in quarries, but such marks do not all necessarily refer to individual workmen or groups of them. The variety of marks left at the sandstone quarries of Gebel el-Silsila from the New Kingdom to the Ptolemaic and Roman Periods include workers' identity marks but also marks indicating the work process and more symbolic signs, such as depictions of deities or their attributes, possibly with an apotropaic function (Nilsson 2015, 2018); the same is true for the limestone quarries of Deir Abu Hinnis, exploited in the Amarna Period (Van der Perre 2015: 74-75). The identity marks in the quarries of the New Kingdom and later periods at

Gebel el-Silsila and in the region of Deir el-Bersha are thought to represent individuals rather than teams (Depauw 2009a: 98; Van der Perre 2015: 79; Nilsson 2018: 119-121). Marks of the Eighteenth Dynasty left in a limestone quarry at Qurna during the reign of Amenhotep III, possibly connected with the building of his memorial temple, are also known from ostraca found near the king's tomb and at Deir el-Medina, and are to be interpreted as the individual marks of royal necropolis workmen (Nishimoto, Yoshimura, and Kondo 2002).

Tile marks are signs incised or painted on the back of ceramic tiles that decorated the walls of temples, palaces, and tombs. The incised marks were made before firing at the short ends of the rectangular tiles, above or beneath the tenons by which the tiles were attached to the walls; the painted marks were made after firing. Well-known examples are the glazed polychrome tiles from the reign of Ramesses III at Medinet Habu and Tell el-Yahudiya (Parkinson 1999: 108-109), and the blue faience tiles of the Djoser pyramid complex (Parkinson 1999: 93; Kuraszkiwicz 2015). Tiles of the latter type are also attested at the sites of early Old Kingdom temples elsewhere in Egypt (from Tell Ibrahim Awad to Elephantine: van Haarlem 2019: 76-85). The graphic repertoire of the marks on these tiles is partly hieroglyphic or otherwise pictorial, partly geometric, and also includes numbers in the form of vertical strokes and hieratic signs for “10” (Kuraszkiwicz 2015: 44; van Haarlem 2019: 77). The repertoire on the Ramesses III tiles is very similar (Anthes 1951: 43; Śliwa 1974: 235-236; Parkinson 1999: 109; see also the marks on Ramesside tiles from Qantir: Hayes 1937: 25-27). The meaning of these marks is very uncertain. In fact, only a minority of tiles bear marks. One marked tile may therefore have been part of a batch of (otherwise unmarked) tiles, the incised marks possibly referring to workshops or (teams of) producers, according to Hayes (1937: 25, note 98), Parkinson (1999: 93), and Kuraszkiwicz (2015: 47). The painted marks are thought to express the destination or position of the tiles (assembly marks [*Versatzmarken*]: Hayes 1937: 25, note 98; Śliwa 1974: 235-236; Parkinson 1999: 93).

Brick marks (“brick” here meaning mudbrick/adobe) constitute a problematic category, as do pot marks, it being uncertain in both cases if they have anything to do with the identity of persons or institutions. Not included here are the hieroglyphic stamps on mudbricks giving the names of kings and institutions as attested from the early New Kingdom onward (Kemp 2000: 83-84; Budka 2009b: 192-193). Bricks were marked while still in the molds by their producers, either with fingers or with a stick in the wet clay; when unmolded, bricks could be stamped by way of control (as becomes clear from a case study of the memorial temple of Thutmose III; Seco Álvarez and Gamarra Campuzano 2015: 65). Brick marks are usually of a very simple type, consisting of dots, strokes, crosses, and circles, or combinations of these (for examples see Arnold, D. 1979: 7; Seco Álvarez and Gamarra Campuzano 2015: 63; the same is true for pre-fired pot marks). It is uncertain what these marks represent; possibly they refer to individual makers or groups of them. A remarkable cross-cultural parallel is Inca monumental mudbrick architecture, where marks of similar appearance represent the communities (*ayllu* or *comunidad*) who produced the bricks in periodical state *corvée* (Tsai 2021).

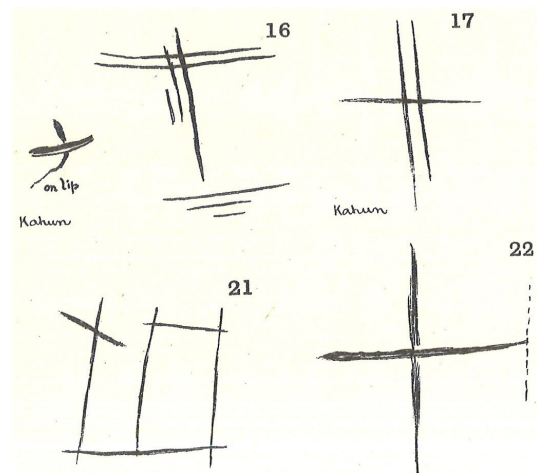


Figure 4. Pot marks from el-Lahun.

Pot marks appeared in Egypt about the mid-fourth millennium BCE at the latest (the earliest known pre-fired marks belong to Naqada IIA: Hendrickx 2008; Bréand 2015),

and continued to be used throughout Egyptian history. It is important to distinguish between pre-fired marks, incised before firing, and post-fired ones, scratched or painted on finished ceramic objects. These two types of pot marks usually have different morphologies, and are bound to express different things. Obviously, pre-fired marks were deemed important during the production process and may even refer to it (although that is far from certain), whereas post-fired marks could theoretically be applied long after pottery production. Corpora of marked pottery from el-Lahun (Middle Kingdom: Gallorini 2009) and Qantir (Ramesside: Ditze 2007) include pre-fired marks, which are usually of simple design (strokes and crosses made with finger or stick, as shown in Figure 4; hence comparable to tile marks and brick marks), and post-fired marks with more complex forms, including hieroglyphs. Thus writing appears to have had some influence in the making of post-fired marks (apart from being present in the form of post-fired, written docketts), whereas the marks made during pottery production usually reflect a hardly literate milieu. The strokes of pre-fired marks may express numbers, and sometimes include hieratic “10” (Λ). Such numerical information seems to have been conveyed, for instance, by marks on Middle Kingdom storage jars from the quarries of Gebel el-Asr, which were connected with “12th Dynasty governmental distribution of supplies,” according to Shaw (2009: 77). Pre-fired marks are tentatively associated with institutional production and logistics by other authors as well (e.g., Gallorini 2009: 121-122; Bréand 2015: 210; Engel 2015: 224). A recent analysis of pre-fired marks on Early Dynastic bread molds from Tell Gabbara suggests two different practices: 1) hieroglyphic marks incised in the interior of the molds, leaving the same marks on the baked loaves, possibly as indications of quality or use of the bread (“commodity branding”: Rampersad 2020); and 2) non-hieroglyphic, linear marks on the outside, possibly referring to individual producers and/or receivers of bread rations in local, “proto-bureaucratic” rationing, before centralized state administration and its written records took over (Rampersad 2022). It is

usually difficult to assess whether pot marks indeed express identity, individual or otherwise (Gallorini 2009: 120-121). One account on hieratic Papyrus Gebelein III (Fourth or Fifth Dynasty) shows the sign A between a heading mentioning an inspection by a person called Khuy and seven columns that specify types of pottery and their numbers. The sign may well have been used by Khuy to mark the items inspected, as is assumed by Andrassy (2015). An important point to note is the relative scarcity of pot marks (pre- or post-fired) among pottery retrieved at almost every site. This is certainly true for the New Kingdom (e.g., at Qantir; Ditze 2007: 273), with the single exception of Deir el-Medina (Aston 2009: 52). It could mean that marked vessels, like tiles, were once part of batches of (otherwise unmarked) vessels. The post-fired pot marks of Deir el-Medina are the necropolis workmen’s personal marks, which they also used for other purposes. As pot marks they are probably signs of ownership, and thus present a rare case of more frequently applied marks with more certainty about their meaning. Another case of more frequent marking is the production of pottery for ritual or festive occasions, such as the palace ware produced for the *sed*-festivals of Amenhotep III (Hope 1999) and, quite possibly, the pottery destined for Osirian rituals at Umm el-Qaab (Budka 2015). Post-fired marks incised on Ptolemaic jars from the Theban necropolis are thought to refer to the jars’ function or context (Schreiber 2015). Finally, it should be noted that pot marks are not the only type of information applied to pottery items; often, they occur together with other signs or sign systems, such as (written) docketts and seal impressions (Engel 2015: 215; Haring 2018: 47-48).

Ownership marks are attested on various types of objects, such as furniture, textiles, and tools. Post-fired marks on pottery also potentially refer to the owners of vessels; they certainly did so in the Deir el-Medina community. The same community left ownership marks painted on, or woven in, clothing and engraved on stone seats, headrests of stone and wood, combs, and tools of wood and metal (see Haring 2018: 42, note 5 for references). These categories of marked objects are certainly not restricted to

Deir el-Medina, nor do they necessarily indicate personal ownership as opposed to ownership by an entity (e.g., a temple). Several burials from the reign of Mentuhotep Nebhepetra, near the king's temple at Deir el-Bahri, included linen marked with an enigmatic sign thought to refer to the temple or the surrounding cemetery (fig. 5), and a copper chisel bearing the same mark (Winlock 1945: 4 and 26). Linen from embalmers' caches of the Eighteenth Dynasty in the Valley of the Kings bear hieratic inscriptions but also crosses and hieroglyphic groups, such as *ḥh dd w3s* (KV 54 and 63; Winlock 2010: 32-34; Ertman, Wilson, and Schaden 2006: 25). Marks on tools are known also from the Old and Middle Kingdoms (e.g., Petrie 1917: pls. III-IV) and seem to be incorporated in hieratic accounts of copper tools in P. Reisner II, possibly referring there to places where teams of workmen were based (Roth 1991: 122-124; Andrásy 2009b, and see p. 120, notes 18-19, for references to marked tools).



Figure 5. Marked linen from the reign of Mentuhotep Nebhepetra, Deir el-Bahri.

Brand(mark)s are a specific type of ownership mark applied to animals and humans by pressing a hot metal branding instrument onto the skin, leaving a permanent mark (overview in Eggebrecht 1975). A number of Egyptian branding instruments have survived (Petrie 1917: 56-57, pl. LXXI; Müller 1987: 72-77, where the metal is not specified except in one case: copper) and show pictorial and hieroglyphic signs: animals (some possibly referring to deities) and cattle horns, names and figures of kings, and groups of hieroglyphs. One example of the latter type has \dagger and \ddagger

(fig. 6), while the description of a brand in Twentieth Dynasty P. Varzy talks about a 𓏏

(bowstring) with a 𓏏 (pillar) inside (Haring 2018: 39-41). A scene in the Theban tomb of Kenamun shows three branding instruments

with cartouche, 𓏏 , and 𓏏 (for *pr.t-hrw?*), respectively (Davies 1930: 33, pl. XXVIII). In the second and third cases, the hieroglyphs may be textual abbreviations. The brands probably served the marking of livestock; some may refer to royal institutions and temples as owners. The branding of cattle is depicted in, for instance, the Theban tomb of Nebamun (Davies 1923: pl. XXXII); the branding of war captives is depicted in one of the war scenes of Ramesses III at Medinet Habu (Epigraphic Survey 1930: pl. 42).

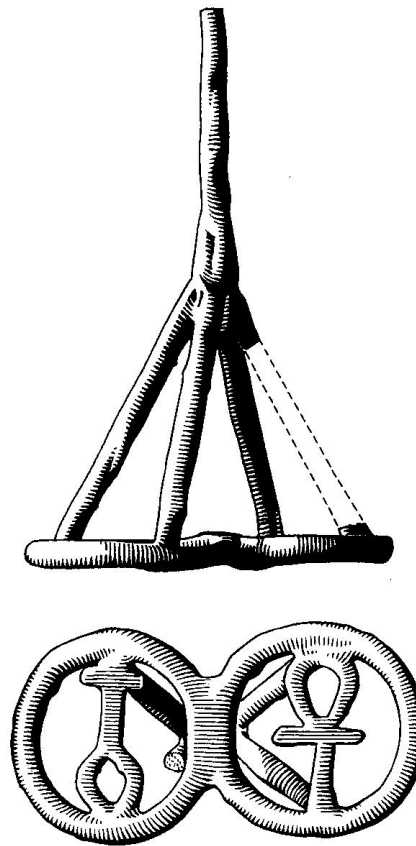



Figure 6. Branding instrument Munich ÄS 5520.

A Special Case: Identity Marks at Deir el-Medina

Identity marks of hieroglyphic, pictorial, and abstract nature were used by the community of workmen who were responsible for cutting out and decorating the rock tombs of the New Kingdom pharaohs at Thebes, and who lived at the site known today as Deir el-Medina (see Haring 2018 for a synthesis, Soliman 2016 for the history and identifications of the marks, and van der Moezel 2016 for a palaeographic and semiotic analysis of the corpus). Among the artifacts found at this exceptionally well-preserved site, and in the Valley of the Kings and the Valley of the Queens, are numerous marked objects, including pottery vessels and dishes, stone jar lids, stone seats and headrests, tools of metal and wood, spindle whorls, combs, and linen clothing. What is more, the same marks were used for administrative purposes on ceramic and limestone ostraca, over a thousand of which have been found,

and for commemorative or votive purposes in hundreds of graffiti in the Valley of the Kings and its surroundings (Fronczak and Rzepka 2009; Rzepka 2015). The marks are attested as ownership marks and appear on ostraca from the reigns of Thutmose III and Hatshepsut until the late years of Ramesses XI (Haring 2018: 158-206); their use as graffiti probably began in the Ramesside Period (together with textual graffiti; Rzepka 2015: 181; Soliman 2018: 474).

From their earliest attestations in the Eighteenth Dynasty, the marks seem to be multifunctional. They occur as ownership marks, for instance, on linen, pottery, and bronze vessels and tools in the tomb of the overseer of royal tomb construction Kha (reigns of Thutmose IV and Amenhotep III; Soliman 2015: 110-112). Most of these items bear Kha's personal mark , which also appears on pottery from the workmen's settlement (fig. 7). As early as the reigns of

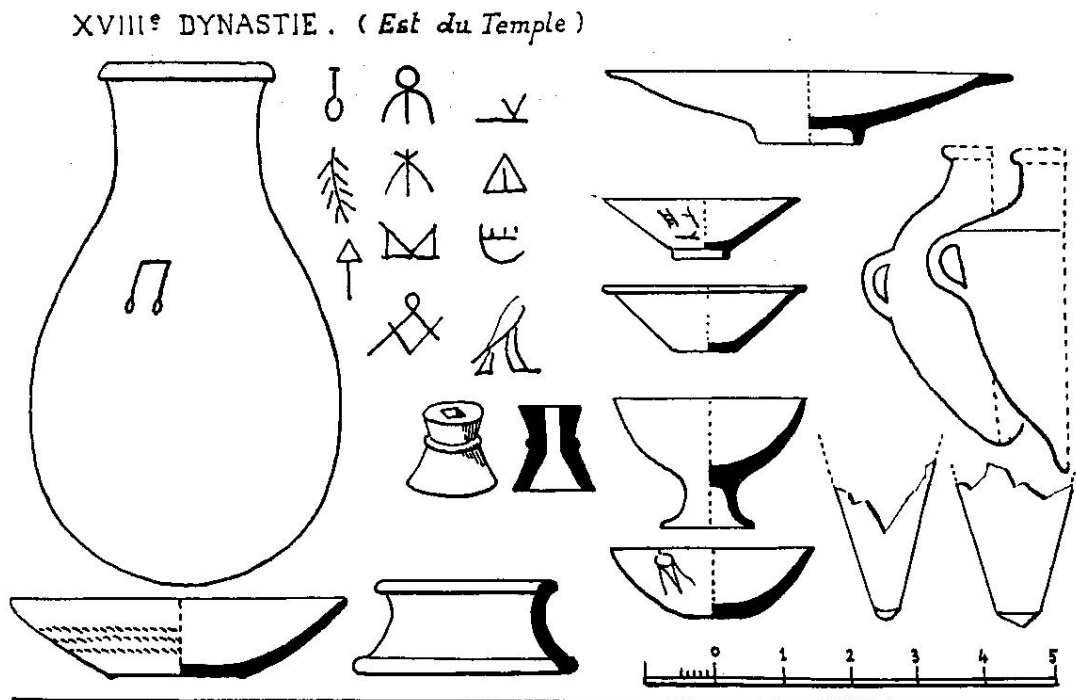


Figure 7. Deir el-Medina pottery and marks, Eighteenth Dynasty.

Thutmose III and Hatshepsut, the marks appear on ostraca. Some clusters of ostraca with workmen's marks from the Valley of the Kings and the West Valley are clearly associated with the tombs of Thutmose III, Amenhotep II, and Amenhotep III (see fig. 1; Soliman 2018: 474-483). The origin of these marks is uncertain, as is the origin of the workmen themselves. Their resemblance to the team marks of the Old and Middle Kingdoms, and to the Eighteenth Dynasty team or masons' marks at Deir el-Bahri and Asasif, suggests that they followed a centuries-old tradition of marking systems in monumental building. It is very possible, moreover, that the Deir el-Medina workmen of the early Eighteenth Dynasty, or some of them, were also working for the local Amun temples (Soliman 2018: 473 and 506). The abovementioned workmen's marks in the Qurna quarry of Amenhotep III strengthen this idea.

It is their use on ostraca and in graffiti that makes the Deir el-Medina marks stand out among ancient Egyptian identity marks. Ostraca inscribed with workmen's marks appear to have served administrative purposes. Rows or columns of marks represent groups of workmen, and additional signs (dots, strokes, pictograms referring to commodities, numbers and dates in [pseudo-]hieratic) suggest the delivery and counting of food rations and tools. Ramesside ostraca of this type closely parallel hieratic texts on local ostraca and papyri recording similar information; in some cases, ostraca of both sorts can even be demonstrated to reflect the same deliveries on precisely the same days (Haring and Soliman 2014). Whereas hieratic documentary ostraca and papyri were the domain of professional scribes, ostraca with marks and a limited set of additional signs could be produced and read by semi-literate workmen, who could thus act as (assistant) administrators. Significantly, the Eighteenth Dynasty has left us no hieratic documentation of royal tomb construction (which perhaps existed on papyri or ostraca that were not locally kept or were discarded), but rudimentary administrative records from that period survive in the form of ostraca with marks, sometimes with added dots or strokes.

The wealth of hieratic papyri and ostraca from the Ramesside Period is probably to be explained by the permanent local presence of scribes in the workmen's community (Haring 2018: 145-154). Surprisingly, however, their work did not cause the disappearance of ostraca with marks. The number of these ostraca rather seems to have risen together with the hieratic ones in the course of the Ramesside Period, and to have become more and more complex, resulting in a sort of pseudo-script that is particularly well-attested for the mid-Twentieth Dynasty.

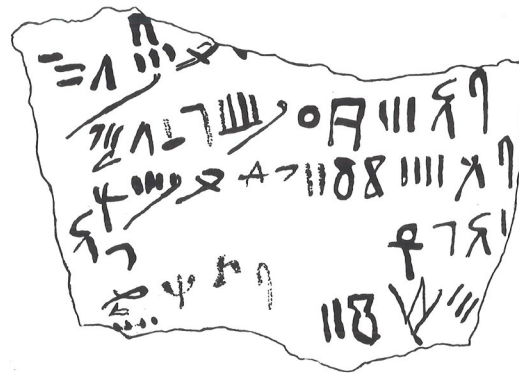


Figure 8. Ostracum Strasbourg H 13, reign of Ramesses III.

Ostracum Strasbourg H 13 (fig. 8), from the late reign of Ramesses III, for instance, has five lines; lines 2-5 start with dates, each of which is followed by an individual workman's mark: day 23 𓆎 , day 24 𓆏 , day 25 𓆐 , day 26 𓆑 . After the marks follow pictograms for loaves, jars of beer, and units of firewood, with numbers of items delivered. Line 2 even includes a hieratic version of 𓆒 , for *wd3.t* "deficit." At the end of line 3 is 𓆓 . This looks like the identity mark of the necropolis workman Userhat, who is known from the same period. However, workmen's marks only appear at the beginning of entries on ostraca of this type. The sign 𓆓 on Strasbourg H 13 is most likely not an identity mark but an abbreviation used by the maker of the ostracum to refer to Usermaatranakht, a woodcutter delivering the firewood (Soliman 2016: 177). True identity marks (i.e., marks also used outside the ostraca) were probably only

held by the construction workforce of the royal tombs, not by their service staff of woodcutters, watercarriers, etc. (Gabler 2014: 215-216). From this example it becomes clear that the position of signs on Ramesside ostraca with marks is distinctive.

It is mainly due to the ostraca inscribed with marks, and their comparison with hieratic texts, that the owners of the Deir el-Medina marks can be identified, and the process of transmission of marks within local families and the organization of necropolis workmen can be reconstructed through multiple generations.

Concluding Remarks

In ancient Egypt, as elsewhere, there were different categories of identity marks, for different purposes, and following different rules. The above survey merely presents the categories that have been given modest or substantial attention by Egyptologists. Most of the publications referred to, notably case studies, general discussions, and surveys of relevant material, are from the past two decades, which indicates that the topic is a recent one in the Egyptological research agenda. As such it is part of the growing

interest, within different scholarly fields, in extra-textual and non-textual communication (as expressed outside Egyptology in Evans Pim, Yatsenko, and Perrin 2010; Bodel and Houston eds. 2021, and many more interdisciplinary volumes).

With research being in its early stages, the understanding of non-textual marking systems is often very limited, which is partly due to a traditional textual bias in the humanities, and the ensuing marginalization of material relevant to this topic. In addition, there are more direct obstacles to the research of marks, such as the lack of published corpora and the absence of written information that might shed light on the identities expressed and the purposes of the marking systems—as exists for the exceptionally well-documented case of Deir el-Medina. More extensive and systematic research of the relevant corpora is bound to improve this situation and to elicit the appreciation of Egyptologists, as well as specialists in other fields, for the importance of marks and marking systems in ancient and modern societies to their literate and less literate members alike.

Bibliographic Notes

Important edited volumes with case studies on marking systems in ancient Egypt and in other cultural contexts are: Haring and Kaper eds. (2009); Andrásy, Budka, and Kammerzell eds. (2009); Budka, Kammerzell, and Rzepka eds. (2015); Haring, van der Moezel, and Soliman eds. (2018). These volumes mainly concentrate on Egypt and its immediate surroundings but also include other ancient, medieval, and modern examples for comparative purposes. Volumes of (mainly) non-Egyptian case studies are Evans Pim, Yatsenko, and Perrin eds. (2010) and Bodel and Houston eds. (2021). A general typology of systems of graphic information processing is offered by Kammerzell (2009).

References

Andrásy, Petra

- 2009a Die Teammarken der Bauleute des ägyptischen Alten und Mittleren Reiches. In *Pictograms or pseudo script? Non-textual identity marks in practical use in ancient Egypt and elsewhere: Proceedings of a conference in Leiden, 19 – 20 December 2006*, Egyptologische Uitgaven 25, ed. Ben Haring and Olaf Kaper, pp. 5-48. Leiden: Nederlands Instituut voor het Nabije Oosten; Leuven: Peeters.
- 2009b Symbols in the Reisner Papyri. In *Non-textual marking system, writing and pseudo script from prehistory to modern times*, *Lingua Aegyptia – Studia Monographica* 8, ed. Petra Andrásy, Julia Budka, and Frank Kammerzell, pp. 113-122. Göttingen: Seminar für Ägyptologie und Koptologie.

- 2015 Pot marks in textual evidence? In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 245-253. Hamburg: Widmaier.
- Andrássy, Petra, Julia Budka, and Frank Kammerzell (eds.)
2009 *Non-textual marking systems, writing and pseudo script from prehistory to modern times*. *Lingua Aegyptia – Studia Monographica* 8. Göttingen: Seminar für Ägyptologie und Koptologie.
- Anthes, Rudolf
1939 Masons' marks and inscriptions. In *The excavation of Medinet Habu II: The temples of the Eighteenth Dynasty*, Oriental Institute Publications 41, ed. Uvo Hölscher, p. 99. Chicago: The University of Chicago Press.
1951 Catalogue of tiles and other inlays. In *The excavation of Medinet Habu IV: The mortuary temple of Ramesses III, Part II*, Oriental Institute Publications 55, ed. Uvo Hölscher, pp. 42-47. Chicago: The University of Chicago Press.
- Arnold, Dieter
1979 *The temple of Mentubotep at Deir el-Bahari*. Publications of the Metropolitan Museum of Art Egyptian Expedition 21. New York: The Metropolitan Museum of Art.
- Arnold, Felix
1990 *The south cemeteries of Lisbt III: The control notes and team marks*. Publications of the Metropolitan Museum of Art Egyptian Expedition 23. New York: The Metropolitan Museum of Art.
- Aston, David
2009 Theban potmarks: Nothing other than funny signs? Potmarks from Deir el-Medineh and the Valley of the Kings. In *Pictograms or pseudo script? Non-textual identity marks in practical use in ancient Egypt and elsewhere: Proceedings of a conference in Leiden, 19 – 20 December 2006*, *Egyptologische Uitgaven* 25, ed. Ben Haring and Olaf Kaper, pp. 49-65. Leiden: Nederlands Instituut voor het Nabije Oosten; Leuven: Peeters.
- Baines, John
2004 The earliest Egyptian writing: Development, context, purpose. In *The first writing: Script invention as history and process*, ed. Stephen Houston, pp. 150-189. Cambridge and New York: Cambridge University Press.
- Baumann, Stefan
2022 Die Steinmarken im Umfeld des Repittempels von Athribis. In *Athribis V: Archäologie im Repittempel zu Athribis 2012 – 2016*, Institut français d'archéologie orientale, Temples 15, ed. Marcus Müller, Mohamed El-Bialy, and Mansour Boraik, pp. 409-423. Cairo: Institut français d'archéologie orientale. (Improved version online in Propylaeum-DOK: <https://doi.org/10.11588/propylaeumdok.00005363>)
- Bodel, John, and Stephen Houston (eds.)
2021 *The hidden language of graphic signs: Cryptic writing and meaningful marks*. Cambridge: Cambridge University Press.
- Bréand, Gaëlle
2015 Pot marks on bread moulds in settlement context during Naqada III Period: A comparative view from Adaïma (Upper Egypt) and Tell el Iswid South (Lower Egypt). In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 187-213. Hamburg: Widmaier.
- Bruyère, Bernard
1953 *Rapport sur les fouilles de Deir el Médineh (années 1948 à 1951)*. Fouilles de l'Institut français du Caire 26. Cairo: Institut français d'archéologie orientale.
- Budka, Julia
2009a Benchmarks, team marks and pot marks from the Asasif (Western-Thebes). In *Pictograms or pseudo script? Non-textual identity marks in practical use in ancient Egypt and elsewhere: Proceedings of a conference in Leiden, 19 – 20 December 2006*, *Egyptologische Uitgaven* 25, ed. Ben Haring and Olaf Kaper, pp. 67-91. Leiden: Nederlands Instituut voor het Nabije Oosten; Leuven: Peeters.
2009b Non-textual marks from the Asasif (Western-Thebes). In *Non-textual marking systems, writing and pseudo script from prehistory to modern times*, *Lingua Aegyptia – Studia Monographica* 8, ed. Petra Andrássy, Julia Budka, and Frank Kammerzell, pp. 179-203. Göttingen: Seminar für Ägyptologie und Koptologie.
2015 Marks on Egyptian festival pottery: The use of pot marks in the context of Osirian rituals at Umm el-Qaab, Abydos. In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 283-297. Hamburg: Widmaier.

- Budka, Julia, Frank Kammerzell, and Sławomir Rzepka (eds.)
 2015 *Non-textual marking systems in ancient Egypt (and elsewhere)*. *Lingua Aegyptia – Studia Monographica* 16. Hamburg: Widmaier.
- Daressy, Georges
 1902 *Fouilles de la Vallée des Rois*. Catalogue général des antiquités égyptiennes du Musée du Caire nos. 24001-24990. Cairo: Institut français d'archéologie orientale.
- Davies, Norman de Garis
 1923 *The tombs of two officials of Tutmosis the Fourth: Nos. 75 and 90*. The Theban Tomb Series, Third Memoir. London: The Egypt Exploration Society.
 1930 *The tomb of Ken-Amūn at Thebes*. Publications of the Metropolitan Museum of Art Egyptian Expedition 5. New York: The Metropolitan Museum of Art.
- Depauw, Mark
 2009a Quarry marks in Deir el-Barsha and the logistics of building materials in Late Period and Graeco-Roman Egypt. In *Pictograms or pseudo script? Non-textual identity marks in practical use in ancient Egypt and elsewhere: Proceedings of a conference in Leiden, 19 – 20 December 2006*, *Egyptologische Uitgaven* 25, ed. Ben Haring and Olaf Kaper, pp. 93-106. Leiden: Nederlands Instituut voor het Nabije Oosten; Leuven: Peeters.
 2009b The semiotics of quarry marks applied to Late Period and Graeco-Roman Egypt. In *Non-textual marking systems, writing and pseudo script from prehistory to modern times*, *Lingua Aegyptia – Studia Monographica* 8, ed. Petra Andrassy, Julia Budka, and Frank Kammerzell, pp. 205-213. Göttingen: Seminar für Ägyptologie und Koptologie.
- Di Cerbo, Christina, and Richard Jasnow
 2016 Demotic block notations and mason's marks: Assembly marks from the small temple of Medinet Habu. In *Sapientia Felicitas: Festschrift für Günter Vitmann zum 29. Februar 2016*, *Cahiers de l'Égypte Nilotique et Méditerranéenne (CENiM)* 14, ed. Sandra Lippert, Maren Schentuleit, and Martin Stadler, pp. 89-105. Montpellier: Cnrs and Université Paul Valéry.
- Dijkstra, Jitse
 2012 *Syene I: The figural and textual graffiti from the temple of Isis at Aswan*. *Beiträge zur ägyptischen Bauforschung und Altertumskunde* 18. Darmstadt and Mainz: Philipp von Zabern.
- Ditze, Barbara
 2007 Gedrückt – Geritzt – Gekratzt: Die Gefäße mit Topfmarken. In *Die Keramik des Grabungsplatzes Q I Teil 2*, *Forschungen in der Ramses-Stadt* 5, ed. Edgar Pusch, pp. 269-507. Hildesheim: Gerstenberg.
- Duistermaat, Kim
 2012 Which came first, the bureaucrat or the seal? Some thoughts on the non-administrative origin of seals in Neolithic Syria. In *Seals and sealing practices in the Near East: Developments in administration and magic from Prehistory to the Islamic Period: Proceedings of an international workshop at the Netherlands-Flemish Institute in Cairo, December 2 – 3, 2009*, *Orientalia Lovaniensia Analecta* 219, ed. Ilona Regulski, Kim Duistermaat, and Peter Verkinderen, pp. 1-15. Leuven, Paris, and Walpole, MA: Uitgeverij Peeters and Departement Oosterse Studies.
- Eggebrecht, Arne
 1975 Brandstempel. In *Lexikon der Ägyptologie* I, ed. Wolfgang Helck and Eberhard Otto, columns 850-852. Wiesbaden: Otto Harrassowitz.
- Elkins, James
 1999 *The domain of images*. Ithaca and London: Cornell University Press.
- Engel, Eva-Maria
 2015 The Early Dynastic pot mark project. In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 215-228. Hamburg: Widmaier.
- Epigraphic Survey, The
 1930 *Medinet Habu I: Earlier historical records of Ramesses III*. Oriental Institute Publications 8. Chicago: The University of Chicago Press.
- Ertman, Earl, Roxanne Wilson, and Otto Schaden
 2006 Unraveling the mysteries of KV 63. *Kmt* 17(3), pp. 18-27.
- Evans Pim, Joám, Sergey Yatsenko, and Oliver Perrin (eds.)
 2010 *Traditional marking systems: A preliminary survey*. London and Dover: Dunkling Books.

- Fauerbach, Ulrike
2018 *Der große Pylon des Horus-Tempels von Edfu: Architektur und Bautechnik eines monumentalen Torbaus der Ptolemaierzeit*. Archäologische Veröffentlichungen 122. Wiesbaden: Harrassowitz.
- Fronczak, Maria, and Sławomir Rzepka
2009 “Funny signs” in Theban rock graffiti. In *Non-textual marking systems, writing and pseudo script from prehistory to modern times*, Lingua Aegyptia – Studia Monographica 8, ed. Petra Andrassy, Julia Budka, and Frank Kammerzell, pp. 159-178. Göttingen: Seminar für Ägyptologie und Koptologie.
- Gabler, Kathrin
2014 Methods of identification among the Deir el-Medina service personnel: The use of names, titles, patronyms and identity marks in administrative texts. In *Decoding signs of identity: Egyptian workmen’s marks in archaeological, historical, comparative and theoretical perspective*, Egyptologische Uitgaven 32, ed. Ben Haring, Kyra van der Moezel, and Daniel Soliman, pp. 191-218. Leiden: Nederlands Instituut voor het Nabije Oosten; Leuven: Peeters.
- Gallorini, Carla
2009 Incised marks on pottery and other objects from Kahun. In *Pictograms or pseudo script? Non-textual identity marks in practical use in ancient Egypt and elsewhere: Proceedings of a conference in Leiden, 19 – 20 December 2006*, Egyptologische Uitgaven 25, ed. Ben Haring and Olaf Kaper, pp. 107-142. Leiden: Nederlands Instituut voor het Nabije Oosten; Leuven: Peeters.
- Haring, Ben
2018 *From single sign to pseudo-script: An ancient Egyptian system of workmen’s identity marks*. Culture and History of the Ancient Near East 93. Leiden and Boston: Brill.
- Haring, Ben, and Daniel Soliman
2014 Reading twentieth dynasty ostraca with workmen’s marks. In *The workman’s progress: Studies in the village of Deir el-Medina and other documents from Western Thebes in honour of Rob Demarée*, Egyptologische Uitgaven 28, ed. Ben Haring, Olaf Kaper, and René van Walsem, pp. 73-93. Leiden: Nederlands Instituut voor het Nabije Oosten; Leuven: Peeters.
- Haring, Ben, and Olaf Kaper (eds.)
2009 *Pictograms or pseudo script? Non-textual identity marks in practical use in ancient Egypt and elsewhere: Proceedings of a conference in Leiden, 19 – 20 December 2006*. Egyptologische Uitgaven 25. Leiden: Nederlands Instituut voor het Nabije Oosten; Leuven: Peeters.
- Haring, Ben, Kyra van der Moezel, and Daniel Soliman (eds.)
2018 *Decoding signs of identity: Egyptian workmen’s marks in archaeological, historical, comparative and theoretical perspective: Proceedings of a conference in Leiden, 13 – 15 December 2013*. Egyptologische Uitgaven 32. Leiden: Nederlands Instituut voor het Nabije Oosten; Leuven: Peeters.
- Hayes, William
1937 *Glazed tiles from a palace of Ramesses II at Kāntfr*. The Metropolitan Museum of Art Papers 3. New York: The Metropolitan Museum of Art.
- Hendrickx, Stan
2008 Rough ware as an element of symbolism and craft specialisation at Hierakonpolis’ elite cemetery HK6. In *Egypt at its origins 2: Proceedings of the international conference “Origin of the state: Predynastic and Early Dynastic Egypt,” Toulouse (France), 5th – 8th September 2005*, Orientalia Lovaniensia Analecta 172, ed. Béatrix Midant-Reynes and Yann Tristant, with the collaboration of Joanne Rowland and Stan Hendrickx, pp. 61-85. Leuven: Peeters.
- Hope, Colin
1999 Some remarks on potmarks of the late Eighteenth Dynasty. In *Studies on ancient Egypt in honour of H. S. Smith*, Egypt Exploration Society Occasional Publications 13, ed. Anthony Leahy and John Tait, pp. 121-146. London: Egypt Exploration Society.
- Jaritz, Horst
1980 *Elephantine III: Die Terrassen vor den Tempeln des Chnum und der Satet*. Archäologische Veröffentlichungen 32. Mainz am Rhein: Philipp von Zabern.
- Kammerzell, Frank
2009 Defining non-textual marking systems, writing, and other systems of graphic information processing. In *Non-textual marking systems, writing and pseudo script from prehistory to modern times*, Lingua Aegyptia – Studia Monographica 8, ed. Petra Andrassy, Julia Budka, and Frank Kammerzell, pp. 277-308. Göttingen: Seminar für Ägyptologie und Koptologie.

- Karberg, Tim
2020 The old stonemasons' rightful habit: Masons' marks and their semiotics at the Great Enclosure of Musawwarat es Sufra. *Der Antike Sudan* 31, pp. 7-23.
- Kemp, Barry
2000 Soil (including mud-brick architecture). In *Ancient Egyptian materials and technology*, ed. Paul Nicholson and Ian Shaw, pp. 78-103. Cambridge: Cambridge University Press.
- Koenig, Yvan
1997 *Les ostraca hiératiques inédits de la Bibliothèque nationale et universitaire de Strasbourg*. Documents de fouilles 33. Cairo: Institut français d'archéologie orientale.
- Kuraszkiewicz, Kamil
2015 Marks on the faience tiles from the "blue chambers" of Netjerykhet's funerary complex. In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 41-48. Hamburg: Widmaier.
- Mallinson, Michael
1989 Report on the 1987 excavations: Investigation of the small Aten temple. In *Amarna Reports V*, ed. Barry Kemp, pp. 115-142. London: The Egypt Exploration Society.
- Müller, Hans
1987 *Der Waffenfund von Balâta-Sichem und Die Sichelschwerter*. Bayerische Akademie der Wissenschaften, philosophisch-historische Klasse, Abhandlungen – neue Folge 97. Munich: Verlag der Bayerischen Akademie der Wissenschaften.
- Nilsson, Maria
2015 Non-textual marking systems at Gebel el-Silsila: From dynastic signifiers of identity to symbols of adoration. In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 81-105. Hamburg: Widmaier.
2018 Quarry marks in Gebel el Silsila: Signifiers of men and gods alike? In *Decoding signs of identity: Egyptian workmen's marks in archaeological, historical, comparative and theoretical perspective: Proceedings of a conference in Leiden, 13 – 15 December 2013*, *Egyptologische Uitgaven* 32, ed. Ben Haring, Kyra van der Moesel, and Daniel Soliman, pp. 113-134. Leiden: Nederlands Instituut voor het Nabije Oosten; Leuven: Peeters.
- Nishimoto, Shin-ichi, Sakuji Yoshimura, and Jiro Kondo
2002 Hieratic inscriptions from the quarry at Qurna: An interim report. *British Museum Studies in Ancient Egypt and Sudan* 1, pp. 20-31.
- Oates, Joan, and David Oates
1997 An open gate: Cities of the fourth millennium BC (Tell Brak 1997). *Cambridge Archaeological Journal* 7(2), pp. 287-297.
- Parkinson, Richard
1999 *Cracking codes: The Rosetta Stone and decipherment*. London: British Museum Press.
- Petrie, Flinders
1917 *Tools and weapons illustrated by the Egyptian Collection in University College, London, and 2,000 outlines from other sources*. British School of Archaeology in Egypt and Egyptian Research Account, Twenty-Second Year, 1916. London: British School of Archaeology in Egypt.
- Petrie, Flinders, Guy Brunton, and Margaret Murray
1923 *Lahun II*. British School of Archaeology in Egypt and Egyptian Research Account, Twenty-Sixth Year, 1920. London: British School of Archaeology in Egypt and Bernard Quaritch.
- Rampersad, Sabrina
2020 Commodity branding and textual potmarks: Three bread mould intaglios from Tell Gabbara. *The Journal of Egyptian Archaeology* 106, pp. 187-198.
2022 Potmarks as a rationing system on Egyptian food producing sites: Defining Egypt's proto-bureaucracy. *The Journal of Egyptian Archaeology* 108, pp. 105-122.
- Reisner, George
1931 *Mycerinus: The temples of the third pyramid at Giza*. Cambridge, MA: Harvard University Press.
- Roeder, Günther
1969 *Amarna-reliefs aus Hermopolis*. Ausgrabungen der Deutschen Hermopolis-Expedition in Hermopolis 1929 – 1939, Band II; Pelizaeus-Museum zu Hildesheim, Wissenschaftliche Veröffentlichungen 6. Hildesheim: Verlag Gebrüder Gerstenberg.

- Roth, Ann
1991 *Egyptian phyles in the Old Kingdom: The evolution of a system of social organization*. Studies in Ancient Oriental Civilization 48. Chicago: The Oriental Institute of the University of Chicago.
- Rzepka, Sławomir
2015 “Funny signs” graffiti vs. textual graffiti: Contemporary or not? In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 159-184. Hamburg: Widmaier.
- Schreiber, Gábor
2015 Late Dynastic and Ptolemaic pot marks from the Thebaid. In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 307-320. Hamburg: Widmaier.
- Sconzo, Paola
2013 *Pottery and potmarks at an early urban settlement of the Middle Euphrates River Valley, Syria*, *Altertumskunde des Vorderen Orients* 16(2), ed. Manfred Dietrich, Reinhard Dittmann, and Oswald Loretz. Münster: Ugarit-Verlag.
- Seco Álvarez, Myriam, and Agustín Gamarra Campuzano
2015 Thutmosis III Temple of Millions of Years and the mud brick marks: Conservation and first conclusions. In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 59-67. Hamburg: Widmaier.
- Shaw, Ian
2009 Non-textual marks and the Twelfth Dynasty dynamics of centre and periphery: A case-study of potmarks at the Gebel el-Asr gneiss quarries. In *Non-textual marking systems, writing and pseudo script from prehistory to modern times*, *Lingua Aegyptia – Studia Monographica* 8, ed. Petra Andrassy, Julia Budka, and Frank Kammerzell, pp. 69-80. Göttingen: Seminar für Ägyptologie und Koptologie.
- Śliwa, Joachim
1974 Ägyptische Fayence-Kacheln mit Darstellungen von Fremdvölkern. In *Festschrift zum 150 jährigen Bestehen des Berliner Ägyptischen Museums*, *Mitteilungen aus der ägyptischen Sammlung* 7, pp. 233-238. Berlin: Akademie-Verlag.
- Soliman, Daniel
2015 Workmen’s marks in pre-Amarna tombs at Deir el-Medina. In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 109-132. Hamburg: Widmaier.
2016 *Of marks and men: The functional and historical context of the workmen’s marks of the Royal Theban Necropolis*. Ph.D. dissertation: Leiden University.
2018 Ostraca with identity marks and the organisation of the royal necropolis workmen of the 18th Dynasty. *Bulletin de l’Institut français d’archéologie orientale* 118, pp. 465-534.
- Tsai, Howard
2021 Where credit’s due: Making marks and counting labor in the Andes. In *The hidden language of graphic signs: Cryptic writing and meaningful marks*, ed. John Bodell and Stephen Houston, pp. 233-255. Cambridge: Cambridge University Press.
- Van Belle, Jean-Louis
2014 *Pour comprendre les signes lapidaires*. Collections Précisions 3. Brussels: Éditions Safran.
- van der Moezel, Kyra
2015 Signification in ancient Egyptian builders’ marks. In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 9-30. Hamburg: Widmaier.
2016 *Of marks and meaning: A palaeographic, semiotic-cognitive, and comparative analysis of the identity marks from Deir el-Medina*. Ph.D. dissertation: Leiden University.
- Van der Perre, Athena
2015 Quarry marks of the Amarna Period: The limestone quarries of Dayr Abū Hinnis. In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 69-80. Hamburg: Widmaier.
- van Haarlem, Willem
2019 *Temple deposits in Early Dynastic Egypt: The case of Tell Ibrahim Awad*. BAR International Series 2931. Oxford: BAR Publishing.

von Petzinger, Genevieve, and April Nowell

2014 A place in time: Situating Chauvet within the long chronology of symbolic behavioral development. *Journal of Human Evolution* 74, pp. 37-54. (<http://dx.doi.org/10.1016/j.jhevol.2014.02.022>.)

Wieczorek, Dawid

2015 Building Dipinti in the Hatshepsut and Thutmose III temples at Deir el-Bahari: Summarising four seasons of work (2006, 2008, 2009, 2011). In *Non-textual marking systems in ancient Egypt (and elsewhere)*, *Lingua Aegyptia – Studia Monographica* 16, ed. Julia Budka, Frank Kammerzell, and Sławomir Rzepka, pp. 49-57. Hamburg: Widmaier.

Winlock, Herbert

1945 *The slain soldiers of Neb-Hepet-Re' Mentu-Hotpe*. Publications of the Metropolitan Museum of Art Egyptian Expedition 16. New York: The Metropolitan Museum of Art.

2010 *Tutankhamun's funeral*. New York, New Haven, and London: The Metropolitan Museum of Art and Yale University Press.

Yamada, Ayano

2017 Some remarks on the evolution of the workers organization of the pyramid construction in the Old Kingdom – Through the examination of the so-called mason's mark. In *Abusir and Saqqara in the year 2015*, ed. Miroslav Bárta, Filip Coppens, and Jaromír Krejčí, pp. 489-501. Prague: Faculty of Arts, Charles University.

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- Figure 1. Ostrakon Cairo CG 24105 found near the tomb of Amenhotep II, Valley of the Kings. (Daressy 1902: pl. XVIII.)
- Figure 2. Gang and phyle names in the pyramid of Menkaura, Giza, with geometric team mark at lower left. (Reisner 1931: plan XI.)
- Figure 3. Masons' marks on *talatat* blocks at Hermopolis. (Roeder 1969: pl. 219.)
- Figure 4. Pot marks from el-Lahun. (Petrie, Brunton, and Murray 1923: pl. LIII.)
- Figure 5. Marked linen from the reign of Mentuhotep Nebhepetra, Deir el-Bahri. (Winlock 1945: pl. XIV.)
- Figure 6. Branding instrument Munich ÄS 5520. (Müller 1987: 75.)
- Figure 7. Deir el-Medina pottery and marks, Eighteenth Dynasty. (Bruyère 1953: pl. XXI.)
- Figure 8. Ostrakon Strasbourg H 13, reign of Ramesses III. (Koenig 1997: pl. 6.)