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Erratum : une malencontreuse erreur s'est glissée dans l'article de J.-L. Le Quellec publié dans le précédent volume d'Archéo-Nil (19, 2009). A la page 24, à la place de « *une expédition organisée de concert avec Mark Borda* », il faut lire « *une expédition organisée par Mark Borda* ».

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Aesthetic culture and the emergence of writing in Egypt during Naqada III¹

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Nombreuses sont les interprétations des premières manifestations de l'écriture qui se sont concentrées sur la langue et son déchiffrement. Mais les documents les plus anciens suggèrent que l'enregistrement du langage n'était pas leur seule fonction. La découverte de la tombe U-j à Abydos par Günter Dreyer a apporté des informations essentielles à ce sujet. Ce tombeau est un exemple parmi d'autres des changements radicaux survenus durant la phase Naqada IIIA dans la culture matérielle et ses aspects esthétiques, avec la présence par exemple de matériaux périssables comme des étoffes. L'utilisation accrue des sceaux prouve l'intensification des pratiques de notation et une concentration sur des formes miniatures, contrebalancée par le développement des monuments. L'écriture, à la fois incisée sur de petites étiquettes en os et inscrite au moyen d'encre sur de grands pots grossiers, forme un système double. Les signes « hiéroglyphiques » incisés sont intégrés à des compositions picturales bien attestées ailleurs. Dans la tombe U-j l'écriture a probablement un caractère cérémoniel. L'évolution des graphies durant la phase Naqada IIIB a transformé les fonctions et le potentiel de l'écriture. Ce système dual n'a aucun équivalent en Mésopotamie et va à l'encontre d'une influence de cette région sur l'écriture égyptienne.

Many interpretations of early writing have focused around language and decipherment, but its earliest attestations suggest that recording language was only part of their purpose. The discovery by Günter Dreyer of Tomb U-j at Abydos brings vital evidence. The tomb, from Naqada IIIA, belongs with other radical changes in material culture and its aesthetic aspects, including perishable materials such as textiles. Increased use of seals attests to intensified marking practices and to a focus on miniature forms, balanced by the development of monuments. The writing, which is incised on small bone tags and inscribed in ink on large crude pots, forms a dual system. The incised, "hieroglyphic" signs are integrated with pictorial compositions that are attested elsewhere. In Tomb U-j the writing probably had a largely ceremonial character. Successor forms of Naqada IIIB transformed writing's potential and functions. The dual system has no parallel in Mesopotamia and does not support the idea that its invention was influenced from there.

¹ I am very grateful to Béatrix Midant-Reynes and Yann Tristant for the invitation to make a presentation of this topic at the Journées Archéo-Nil in June 2010, and to Robert Bagley, Stephen Houston, and David Wengrow for penetrating readings of my draft paper.

Introduction

Much scholarly discussion of writing and literacy in non-western societies has tended to see scripts as technologies that were created for purposes of administration. It is not always asked how administration is embedded in other social practices and how writing is embedded in visual and material practice. These omissions can easily lead us to over-estimate what writing did in pre-modern societies and how far it penetrated them. Twentieth-century scholars and educators often assumed that in antiquity writing should have had functions similar to those it has in modern society (which they saw as uniformly progressive and enlightening) and then proceeded to ask why it did not. Such a mode of argument approaches matters in reverse order. One should first seek to establish what were the characteristics of a script and the pattern of its usage, and only then ask what its potential was and what social changes it might have stimulated. And one should bear in mind that few institutions, people, or aspects of material culture realize all of their potential. The same is no doubt true of writing.

Ideally one might try to model what those who first invented writing intended to achieve, but that would be very difficult, and in any case few new institutions and technologies keep to their original purposes for very long. Later usage is no good guide to earlier. In studying early writing, one should therefore focus on characteristics that can be identified in the oldest examples, not on features that the system and the social institution subsequently acquired. Attempts to decipher the earliest writing should be similarly cautious about arguing from later usage.

Another omission from discussions has

often been that writing is not analysed as a practice tied to specific media. Here, Egyptian writing is one of the world's most distinctive. Different script forms were used in different contexts, they were aligned closely with the materials on which they were written, and they were integrated visually with pictorial and other compositional elements. Their social and symbolic matrix was still more important, defining where and how writing could be used, and which of the two (later three) main forms was appropriate for specific purposes and contexts.

The physical supports for writing adopted in the period of its invention and first development in Egypt constrained how it could be used. They also opened up a context in which elite actors acquired new skills and came together in altered or new groupings, notably when the small tags of the type known from Tomb U-j were inscribed in a communal commemoration (discussed below). In all periods writing was a practice of elites themselves and not only of subordinates working for them².

It is very improbable that the archaeological record has provided evidence of all the materials which bore early writing. While it is known that papyrus was in use by the mid 1st Dynasty, the date of its invention is unknown, and other perishable media could have been used alongside it³. The earliest writing may not have been used for complex administration, which seems to have relied on large papyrus rolls by the time when evidence for it appears, from the mid 1st Dynasty onward⁴. In this article I focus on other aspects of the hypothetical setting in which Egyptian writing was invented and first developed, in particular on the relationship between writing and visual art.

² On material aspects of early writing, see Wengrow 2008; Piquette 2009; 2010.

³ See Helck 1985. Although Helck's ideas were overtaken by the discovery of Tomb U-j, his insistence on the significance of perishable media is most valuable.

⁴ The earliest papyrus that has been discovered, from the mid 1st dynasty, is from a major tomb at Saqqara (Baines 2007: 37 n. 4, with references). The character of the find does not point toward administrative use. Evidence for administration consists primarily in details of writing and in sealing practices.

The writing from Tomb U-j at Abydos

The most important discovery in some decades relating to the origins of Egyptian writing was Günter Dreyer's excavation in late 1988 of Tomb U-j at Abydos. This introduced two hitherto unknown or unrecognized types of inscribed artefact, as well as taking the history of writing back up to two centuries. Some hundreds of inscribed objects were recovered from the heavily looted structure, which must have been extraordinarily rich when intact. The tomb has been magisterially published by its excavator (Dreyer *et al.* 1998) and, for the Canaanite-style pottery, by Ulrich Hartung (2001).

The U-j written materials must come from a period near to the invention of writing, but the limited system they attest is well formed, suggesting that it was already an established practice; whether the practice had existed for a generation or a century cannot be said. We may never get any closer than this to writing's ultimate origins, because its first steps were no doubt experimental and small in scale, and they probably took place in settlements in humid environments now buried beyond the reach of archaeology⁵.

Much effort has been invested in attempts to decipher or read the U-j writing (e.g. Breyer 2002; Kahl 2003), but this work is inconclusive. The material does not provide enough evidence for secure reading. In addition, however the writing may have related to speech, which it must have done in some way, the system is unlikely to have been designed to represent language at all fully.

The tags (for which see also below) typically bear two signs, with a range from one to four or five. The pots have fewer signs, just one or two. The definition of the material as writing is nonetheless unproblematic: it exhibits in operation a system that uses a specific repertory of signs in varying combinations in order to convey a range of meanings that go beyond the numerical. (Numbers constitute an alternative domain of meaning that can be conveyed by partly comparable signs; the U-j material includes a group of tags with numerical notation but without other signs.) To adopt a tighter definition that relates writing primarily or exclusively to an extensive encoding of language is to impose a perspective from a later phase in its evolution.

Instead of pursuing questions of decipherment, I review what has been discovered in relation to the aesthetic culture of the time and ask what the attested range of inscribed objects and types can tell us about that culture's functions and significance. Here, I return to an approach exploited notably by Ludwig Morenz (2004), who has contributed much to attempts at decipherment and has also presented the widest-ranging study of pictorial parallels⁶. My point of departure, however, differs from his. It is "aesthetic culture" understood in a broad sense. Aesthetic concerns are of central importance to the elites in complex societies (Baines 2007: ch. 1). The proportion of the ancient aesthetic culture that can be investigated directly through archaeology is certainly only a fraction of what existed in remote periods – as is true to a lesser extent of almost any period of antiquity.

⁵ In agreement with Jochem Kahl (2003), I do not accept it as established that writing was invented during late Naqada II. Authors who prefer the earlier date include Günter Dreyer, Ulrich Hartung (1998b), and Ludwig Morenz (2004). Forerunners, such as the "signs" on Naqada II period vessels from Cemetery U (Dreyer *et al.* 1998, pl. 22e-g), probably contributed to the development of writing's graphic forms but cannot be shown to be part of a system with non-pictorial organizing principles.

⁶ See also Morenz 2007, notably for the relationship between writing and the oral context. Morenz proposes verbal "readings" for a number of visual compositions that I believe should be interpreted as images, some without and some with captions. My perspective is less "linguistic" than his.

Developments of the period of Tomb U-j

Knowledge of the immediate context of Tomb U-j and its writing is limited, because the tomb was looted and nothing comparable has been discovered. Large tombs of late Naqada II at Hierakonpolis differ in type and produce rather different finds (checklist: Friedman 2009). Significantly, the cemetery area there, which was reused over some centuries, contains not just tombs but also buildings that might have been constructed for the funeral or the mortuary cult, reminding us of the social setting of burial. That setting is relevant to the inscribed material from Tomb U-j.

The tomb dates to early Naqada III (IIIA), a time that saw radical changes in material culture. The widespread, rather simple figurative scenes on red-painted Decorated Ware (D-Ware), which is the hallmark of Naqada II, disappeared around the end of that period. Naqada III pottery decoration is restricted to plain geometric shapes, patterns imitating prestigious materials, primarily stone, and others recalling suspension nets. Pictorial and other complex decoration proliferated in a variety of media, including hardstone palettes and numerous types of artefacts in ivory and stone, and probably also wood, of which hardly any survives. The contemporary production of large numbers of hardstone vessels emphasizes how prestige forms increasingly used materials that required vast resources to procure and turn into finished objects; essentially the same point applies to ivory. These artefacts were available only to the elite. Pottery became larger and less complex in form. People outside the elite were deprived of aesthetic and symbolic resources, while the scale of material and social institutions increased greatly. In these changes David Wengrow (2006: 151-175) and Norman Yoffee (2001) see an “evolution of simplicity” characteristic of the formation of state-level societies in many regions of the world (their usage may depart from that of the phrase’s originator, James C. Scott).

In addition to the forms just mentioned,



Fig. 1

Ivory statuette of a woman. From Abydos, Tomb U182. Dimensions not stated. After Hartung (2007: 190, fig. 264). Courtesy Deutsches Archäologisches Institut and Ulrich Hartung. Late Naqada II.

statuary developed strongly in Naqada III, in a range of styles. The oldest known life-size stone statue, later smashed into thousands of pieces, dates to Naqada II (Harrington 2004). This was succeeded in early Naqada III by the colossal statues of Min from Koptos (Dreyer 1995; Kemp *et al.* 2000; Wengrow 2006: 195-198). Other examples at intermediate scale in hard

and soft stones, and ivory works, some of extraordinary quality, have been discovered both in Cemetery U at Abydos (e.g. Hartung 2007: 190, fig. 264; Dreyer *et al.* 2000: pl. 5d) and in vast quantities in the Main Deposit at Hierakonpolis (the latter probably including material dating at least as far back as Naqada IIIA: McNamara 2008; Bussmann 2010: 42-50). A Naqada III Period group of small and miniature statuary in ivory and in sheet gold around wooden cores was found at Tell el-Farkha in the Delta (Słaboński *et al.* 2007).

An ivory statuette from Abydos shows a woman wearing a long dress, a patterned shawl that covers her head, and probably further garments (fig. 1). This reminds us of the great importance in antiquity of textiles, including patterned and coloured ones. While Dynastic period Egypt generally favoured white clothing, at least in pictorial representations, counter-examples are numerous. The preference for white seems to be conventional rather than realistic for later times, and one should allow for patterned forms and colours, in addition to the development of very fine fabrics, from Predynastic times onward.

A significant feature of Naqada II-III is intensified contact with regions outside Egypt. The relevance of such contact for the appearance of writing is uncertain, not least because current dating methods have not

established firmly which script appeared first, Mesopotamian or Egyptian. The arrival during Naqada II of pictorial motifs of Near Eastern origin and of the originally Mesopotamian medium of the cylinder seal is, however, firmly established (e.g. Hartung 1998a). The reception of these, especially of cylinder seals, over a couple of centuries points to significant change in mechanisms of exchange. While the seals themselves are very small, they served the function of sealing goods for despatch, and they are likely to have been associated with the transport of increasing quantities of often bulky goods over longer distances. It is an open question how far such practices involved administration in the sense of elaborate institutional structures of control.

The cylinder seal fits with an interest in miniature forms, which in turn goes together with aesthetic investment in movable things. It also shows a strong concern with marking and perhaps ownership. Yet without additional associated practices, sealings could only ensure the integrity of goods, not track their movement in any detail, and we do not know whether such practices existed. Be that as it may, seals are telling artefacts, exemplifying an increased use of visible controls on materials and an aesthetic investment in those controls that drew on motifs from the wider cultural context. Furthermore, late Naqada II seal patterns from Cemetery U at Abydos are clear forerunners of the more elaborate designs from Tomb U-j; they show us something of the graphic environment that surrounded the invention of writing (Hartung 1998a: esp. 49, fig. 3). Evidence of other types, however, shows that the society and its decorative forms were in the early stages of transition from the mobile and small-scale to the monumental, and in the longer term also from the perishable to the durable.

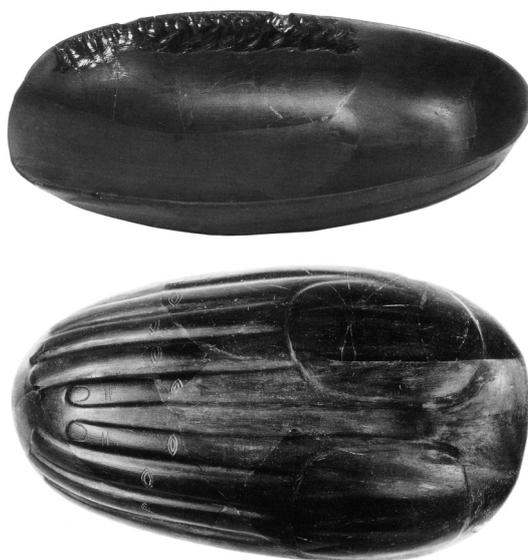


Fig. 2

Fragmentary obsidian bowl in the form of a pair of cupped hands. From Abydos, Tombs U-j and U-i. Reconstructed length 23.6cm. After Dreyer *et al.* 1998: pl. 41. Courtesy Deutsches Archäologisches Institut and Günter Dreyer. Naqada IIIA.

Tomb U-j: the grave goods and inscribed material in context

Tomb U-j is by far the largest tomb from the Naqada IIIA Period that has been excavated in Cemetery U (ca. 11 × 7.5 metres in plan)⁷. Its design may represent something like a palace, with interconnecting rooms and a central hall or court, as well as extensions that could signify courtyards or storage areas, but any real palace would have been realized in a very different style (the illustrative reconstruction of Dreyer *et al.* 1998: 7 fig. 5, does not take this into account). The tomb belonged to a ruler, in all probability a king, but the size of the region he ruled cannot be established securely. Its rooms were filled with vast quantities of grave goods; these had attracted robbers who took almost everything reusable.

The plundering was violent, as is shown by the shattered state of fragments of decorated stone and ivory. Particularly striking is a small bowl, found in pieces, in the form of a pair of cupped hands (fig. 2). This was shaped from obsidian, one of the hardest materials ever worked in Egypt. The material was imported from a great distance, possibly originating in Anatolia or Ethiopia. An ivory relief fragment, perhaps from a vessel, is tentatively reconstructed as showing a figure of a man wearing an elaborate kilt and surrounded by birds (p. 147, fig. 87, no. 208). Neither of these objects has a close parallel. If they are typical of the grave goods that have not survived, the tomb was exceptionally rich in representational motifs and objects bearing pictorial forms.

Dreyer has suggested that the small bone tags which form one of the two types of inscribed object from the tomb (typically 1.5-2cm and square or rectangular, pls. 27-35, figs. 74-82) had been attached to rolls of cloth, of which fine qualities were highly valued in later periods. This proposal is plausible but necessarily speculative; the tags could also have marked other prestigious goods. They bear two types of inscrip-

tion, one primarily of hieroglyphs and the other numerical, which might have been attached to different categories of material. Objects made of wood were not recovered, but their presence is suggested by features of the distribution of finds in the tomb. Hundreds of tiny fragments of cylinder seal impressions were found in a chamber that had contained pottery of Canaanite type but likely local manufacture (Porat & Goren

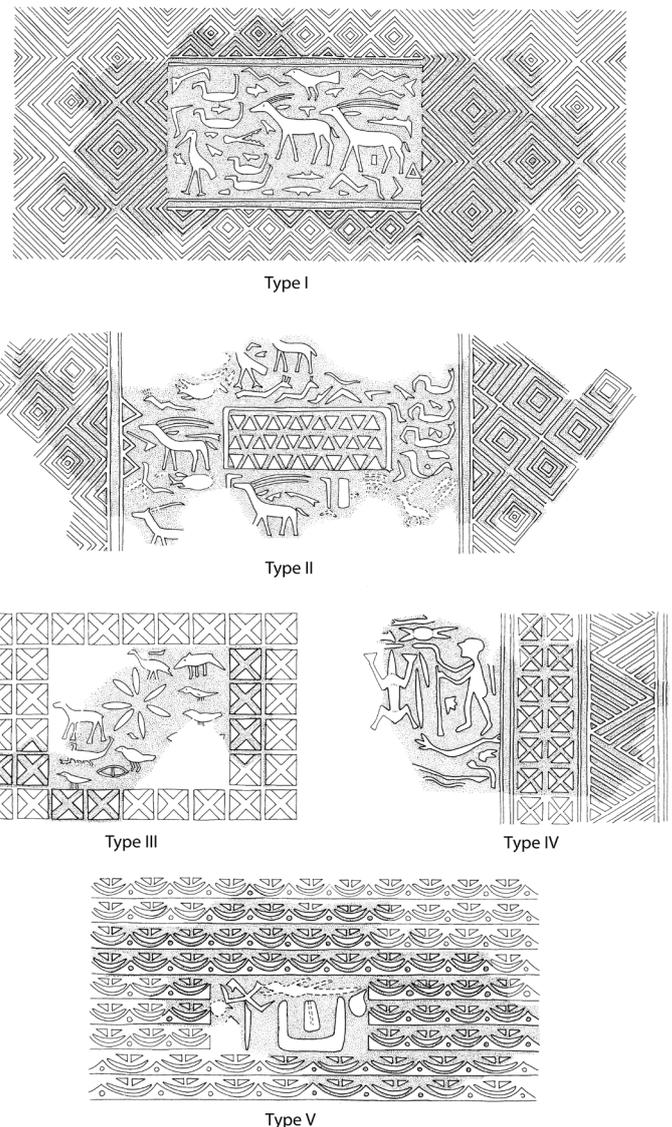


Fig. 3

Cylinder seal designs on mud from Tomb U-j at Abydos, deriving from Palestinian-type pots; reconstructed from fragmentary examples. Reconstructed width of Type II 7.5cm. After Dreyer *et al.* 1998: 109, fig. 72. Courtesy Deutsches Archäologisches Institut, Günter Dreyer, and Ulrich Hartung. Naqada IIIA.

⁷ The description below is based on Dreyer *et al.* 1998, which is referred to simply by figure and plate numbers.

2001). These have been reconstructed as deriving from just five patterns (p. 109, fig. 72), all of which have a rectangular main field set against a background of very small repeated motifs (**fig. 3**). In four designs, the background is geometric and suggestive of a material like basketry or patterning on leather; one design has two different background patterns. Certain of the “signs” in the rectangular fields (see below) resemble the main element in one of the background patterns, evoking something like a fringe of cloth, as if ground and background were being reversed in a playful and sophisticated way. To offset a central rectangle against an ornamental background runs counter to normal cylinder seal design because it makes it impossible to roll out a uniform run of the pattern. There must have been a strong reason for developing this layout, perhaps relating either to analogies with decoration in other materials or to a desire to give special prominence to the central motifs.

The rectangular fields are complex. In most of them the largest elements are figures of animals and birds, in one case with a man (Type IV). In one design the field consists of a small group of elements strongly reminiscent of hieroglyphs, although they cannot be identified with specific signs either in the script variants recovered from Tomb U-j or in later material (Type V; the resemblance of the largest form to the later *k3*-sign  may be misleading). In addition, two rectangles have prominent central features. One is a rosette-like motif (Type III) that can be compared with a symbol of kingship known on the Brooklyn knife handle (see below) and somewhat later as a hieroglyph captioning King “Scorpion” of Dynasty 0 (a later king, not the owner of Tomb U-j; see e.g. Baines 2007: 287, fig. 32). The other (Type II) is a framed pattern of alternating triangles that interrupts the animal-based remainder of the composition. This too

suggests play between figure and ground because the triangle pattern, which has no close parallel, is unlikely to be an important symbol.

The animals shown are mainly antelopes and birds. A number of further shapes help to fill the rectangular fields with an even density of pattern. Some of these shapes resemble snakes and scorpions, while others appear to be geometric. One must be cautious in interpreting such elements, because of the very small scale and the seductive ease of attributing meanings to them or “reading” them in terms of later usages. The range of animals depicted suggests the world of hunting and the low desert, and this is in keeping with the salience of hunting as an elite institution. The animals do not include lions, which were probably both the premier prey animals and associated with kingship. Their absence might mean that the iconographic repertory on seals was subject to constraints of decorum (see Baines 2007: 14-25). To go further and suppose that the seal patterns are non-royal would, however, be hazardous.

Characteristics of the U-j writing

The first essential feature of the writing is that it has two script forms: a “hieroglyphic” form written on tiny bone “tags”, of which more than 150 were recovered (**fig. 4**); and large signs written in ink on crude pots of the wavy-handled type (**fig. 5**; Dreyer *et al.* 1998: figs. 33-54, pls. 12-22), which survive in more than 100 examples (for forerunners suggested by Dreyer, see n. 5 here).

I see the large ink signs as the earliest known examples of “cursive” writing, but some scholars view the matter differently, so I should explain my position⁸. The ink signs are very large, up to about ten centimetres

⁸ See e.g. Regulski 2009. Regulski notes that the U-j ink signs are different in character and execution from other ink writing of the same general period and suggests that they form a separate system. It seems risky, however, to posit the existence of a unique system on such a basis. I prefer to understand the material as a display application of a mode of writing whose primary use was in other contexts. Regulski announces publications arising from her re-examination of the pots themselves; these may be valuable for the kinds of question I discuss below. I have not yet seen her book on the palaeography of the period (Regulski 2010).



Fig. 4

Selection of bone tags from Tomb U-j at Abydos. Average height ca. 1.5cm. Courtesy Deutsches Archäologisches Institut and Günter Dreyer. Naqada IIIA.



Fig. 5

Two pots with a raised pattern bearing inscription from Tomb U-j at Abydos. Heights of vessels 25.7cm (left) and 33.5cm (right). Courtesy Deutsches Archäologisches Institut and Günter Dreyer. Naqada IIIA.

high, and they are lightly and painstakingly inscribed on pots around 30cm high. Such a ratio between any but very small supports – such as the U-j tags – and the signs they bear is unusual almost anywhere, and it produces an effect a little like an advertising logo or a Chinese character used as a slogan. The signs must have been visible from a distance, constituting a mode of display. It seems unlikely that writing in ink was invented for this purpose. I therefore suggest that the display on the pots is a secondary usage and that the ink script was written principally at a smaller scale, and probably in a more rapid style, on other media of which nothing happens to be preserved. Elements among the signs on the pots fit with a display function. Here as with the tags, I would argue that the choice of elements to use as signs was not completely arbitrary, as would be the case with an exclusive focus on representing language: the originals of the

signs were salient features of material culture that could convey the required meaning. The palm frond (fig. 45a), a common motif on the prows of boats on Naqada II Period pottery, the bucranium (figs. 45-48, combined with a frond), and perhaps the “tree” (figs. 34, 43-44), relate to contexts of display and procession.

The invention of a dual system suggests that the pictorial, hieroglyphic form was devised in order to be integrated with other visual modes. The most important such mode was pictorial representation (broadly understood), notably in aesthetic contexts such as relief decoration. If this interpretation is correct, the script forms that are termed hieroglyphic and hieratic for later periods were always present, and the system was dual from the beginning. This cannot be demonstrated conclusively, because the surviving ink writing shares few signs with the pictorial form, but there is some over-

lap, such as the scorpion (figs. 33-34) and more than one form of bag (figs. 50, 81, nos. 157, 160-163). The seemingly concurrent introduction of both forms, however, makes it very unlikely that they are independent. In rather later times, perhaps from the late Early Dynastic Period onward, the system became triple with the addition of cursive hieroglyphic for recording specialized categories of text (Baines 2007: 140-142).

The large-scale ink writing on the pots does not belong in an everyday or “administrative” context, either in location – on grave goods in the tomb of a ruler – or in manner of inscription. Few of the world’s scripts have had ink on ceramic as their primary medium. The form suggests that administrative contexts existed elsewhere. But to call hypothetical usages in other contexts “administrative” is to make them sound unduly ordinary. The cursive writing was surely used in elite contexts, and nothing points to its being written in groups of more than one or two signs, so that it could only communicate what such groups could express. It may be useful to contrast this limited usage with that of the earliest known Chinese writing (even though it belongs to a more firmly established system that probably had developed over the preceding century or two), which had been devised for other purposes in other contexts; this was already able to represent the Old Chinese language as a whole and is attested in inscriptions up to several dozen characters long⁹. Egyptian writing seems not to have reached a comparable capability until late in the Early Dynastic Period, four hundred or more years after its initial appearance. Because this development took so long, one should be cautious about ascribing to the earliest attested forms capabilities known from later times, even if the

later phase in question was within the Early Dynastic Period.

David Wengrow (2006: 203-207), building on observations of Dreyer, argues that the U-j writing is testimony to complex ceremonial practices. The tags were produced in batches and yet display a range of hands, suggesting that they were created as a communal enactment, most plausibly during the preparations for the funeral and for deposition of the tomb’s contents. If the inscriptions record the names of places or estates, as several scholars have proposed, the marking of that information on the tags would help to show how those places contributed to equipping the ruler for the hereafter. Their “administrative” message would be addressed as much to the deceased ruler in next world as to this one.

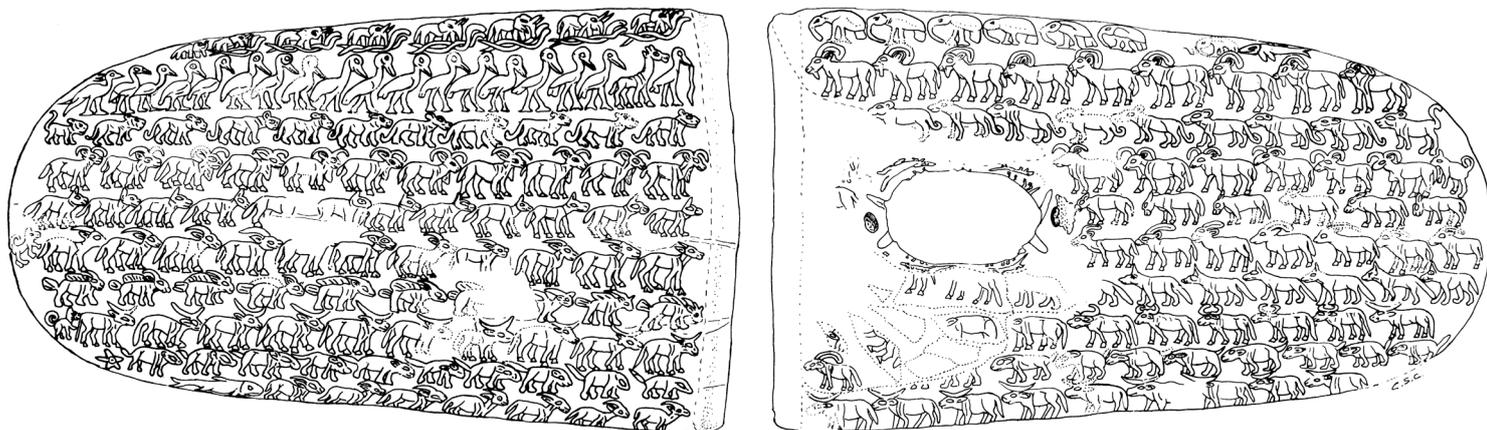
The tags were aesthetic objects, as is shown by their careful (but not uniformly expert) execution and by the filling of the incised signs with black pigment. Since they are legible without the pigment, this extra feature suggests that colour was seen as essential to a properly finished result.

The inscribed pots probably had a function analogous to that of the tags, except that their script was more easily adapted to use at a large scale. Presumably the scale served to make the material contributions of different groups evident to participants as the tomb’s contents were either assembled or deposited¹⁰. Their contents, most likely high-value oils (p. 28, 84 with n. 110), were different from the luxury materials to which the tags were attached, and in view of the crude quality of the pots presumably not so precious. The tags are likely to have been the responsibility of a more exclusive group than the one that presented the pots.

As striking as the tags’ miniature scale and mode of inscription is the selection of motifs

⁹ Bagley (2004); Bottéro (2004). Bagley shows in detail that the incised writing on oracle bones, the medium of almost all the known material, does not represent the normal ancient type, which would have been written with brush and ink. The Chinese case is different in other respects too, because the surviving display inscriptions are later than the posited invention of writing, an invention that took place in a context with little pictorial representation, and for purposes that are likely to have been different from those motivating the Egyptian invention.

¹⁰ Here, the persuasive argument of Kahl 2003, that the inscriptions do not record royal names, may open the way to improved understanding.



for the signs of the hieroglyphic variant of the script. As with the pictorial repertory which had developed in the centuries since the Naqada I Period, the motifs include both elements of nature and man-made artefacts (Wengrow 2006: 107-108). Among the natural elements are several species of bird. The artefacts include a building whose form is the ancestor of the later *pr-wr* shrine of Upper Egypt (fig. 77, nos. 61-69) and a throne shape (fig. 78, nos. 103-105), as well as some elements that are less easy to interpret (fig. 81, nos. 156-163). Another sign, an elephant (figs. 76-77, nos. 52-69 – identification not always secure), might be placed in the “man-made” category on the ground that Egyptians kept elephants at least as early as the Naqada II Period (e.g. Majer 2009). The salient man-made elements, however, are two central symbols: the *serekh* motif (fig. 80, nos. 127-129) and the throne form just mentioned. The *serekh* formalizes partly decorative features of buildings that derived ultimately from plant forms, probably through the intermediary of mud brick, which had been used in Egypt since Naqada II. The throne form, seemingly not attested from earlier, has a diamond pattern probably evoking wicker or reed construction and thus belonging in the same symbolic world, which for many purposes valued ephemeral media and contexts over fixed ones.

These two symbols, which signified palace and throne and later acquired important additional meanings, were crucial for kingship (for the Early Dynastic Period, see Baines 1990). The presence of such symbols, whose use in iconography was restricted to royal contexts in later periods, suggests that the script was designed in relation to royalty. Because the evidence from the cursive

writing is limited, one cannot say how far the same was true of it, but the limited overlap between what is known in the two forms points toward differences in their subject matter and contexts of use.

The contrast between the architectural allusions in some of the signs and the miniature scale of the objects bearing the hieroglyphic form of the script, not to mention the presence of an elephant sign, points to a ruling group in transition from the use of primarily mobile symbolic artefacts to one preoccupied with monumental forms (as noted above in the discussion of cylinder seals). However, the only known uses of the script on large-scale objects of the same general date are in the secondary inscriptions on the Koptos Colossi (Dreyer 1995; Kemp *et al.* 2000) and some rock graffiti in the deserts (e.g. Hendrickx & Friedman 2003). Not until the 1st Dynasty were large objects bearing hieroglyphs set up in exterior locations, namely the stelae marking the royal tombs at Abydos (e.g. Lange & Hirmer 1968: pl. 6), and these were in an area probably restricted to those performing funerals and perhaps the mortuary cult.

The overlaps in subject matter between the seal compositions, the sign repertory, and the larger forms the signs evoke suggest that those who devised the script drew on core visual forms that were present in their aesthetic environment. Of all these motifs, the *serekh*, which represents a focal point in a brick panelled facade, may be the most significant, because it is a royal symbol that is not known from Naqada II. While this non-attestation could be a matter of chance, for the moment it points toward an invention of writing in association with the kingship of Naqada IIIA.

Fig. 6

Ivory knife handle from Abu Zaidan. Length 9.8cm. Brooklyn Museum 09.8819.118. After C. S. Churcher [in:] Needler 1984: 154. Courtesy Brooklyn Museum. Naqada IIIA.

Discussion

The only parallel that I know for the creation of two forms of a single script at the time of its invention is in Meroitic writing, which uses sign forms modelled after Egyptian ones in the third century BCE (e.g. Millet 1996; Rilly 2010). By contrast, the use of more than one script, often with different content and in different contexts (writing different languages for example), is widespread in complex societies. This feature is unique to Egyptian and Meroitic writing and should therefore be at the centre of an interpretation. To what requirement did the duality respond? Two essential, mutually compatible possibilities seem relevant. First, the integration of writing with other visual modes, especially pictorial ones, is immeasurably enhanced by a script with pictorial signs, which opens up a whole realm of possibilities. This integration must be deliberate, and in pursuing it Egypt went further than any other known civilization, further even than the Mayan world (e.g. Reents-Budet *et al.* 1994; Coe & Kerr 1998; Miller & Martin 2004). Second, the two script forms wrote different content and used different media; the hieroglyphic form was the more restricted and prestigious. This content is evident to some degree in the signs of the two script variants, even in the absence of definitive readings. The introduction of a third script form in the mid third millennium enhanced this differentiation of content in relation to script.

Integration of image and script-like elements (or script) is salient in works that belong to the same general period as Tomb U-j. The Brooklyn Museum knife handle, a small, portable object whose decoration is tantamount to an inventory of real and fantastic animals (Huyge 2004), includes a number of small elements at the ends of some registers that seem to act as disciplining “patrol” figures (fig. 6; cf. Kemp *et al.* 2000: 231 fig. 14). A few, such as dogs, are possible herding animals, but fish (on both faces) and a star or rosette can hardly be understood except as operating on a dif-

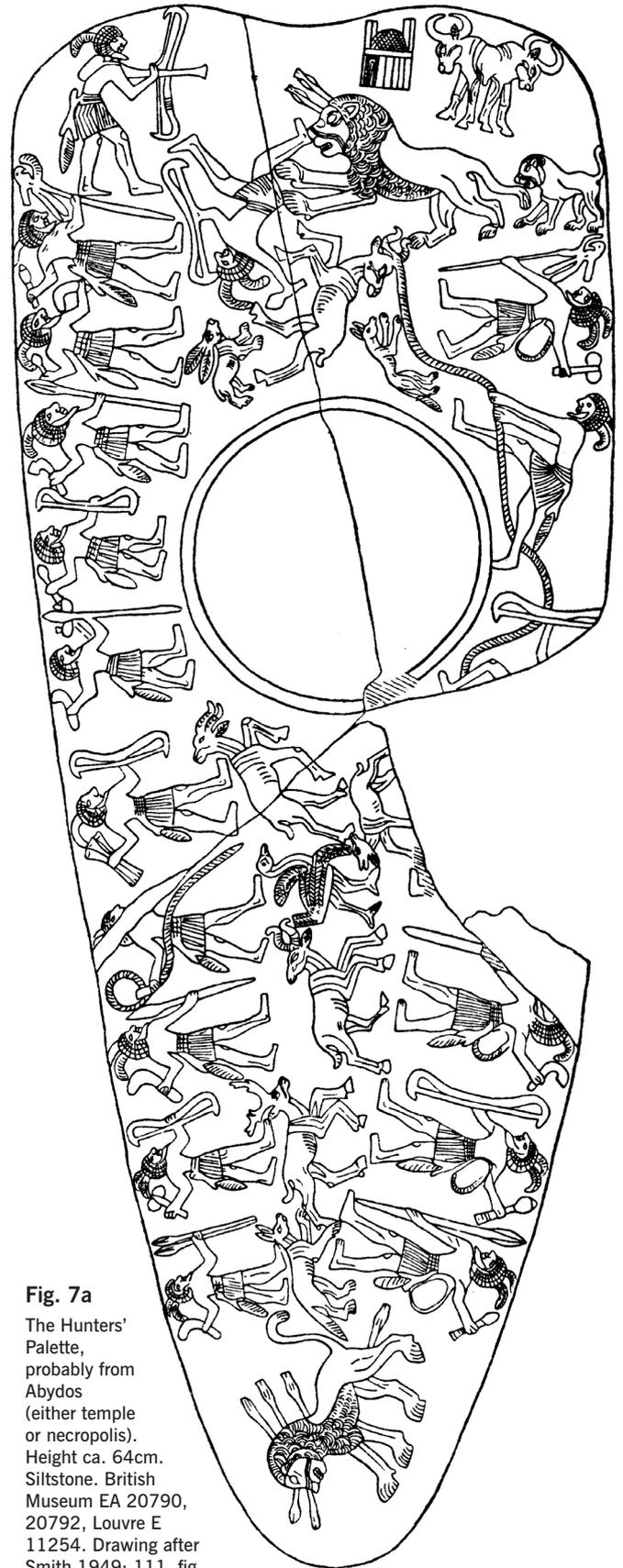


Fig. 7a
The Hunters' Palette, probably from Abydos (either temple or necropolis). Height ca. 64cm. Siltstone. British Museum EA 20790, 20792, Louvre E 11254. Drawing after Smith 1949: 111, fig. 25. Naqada IIIA.

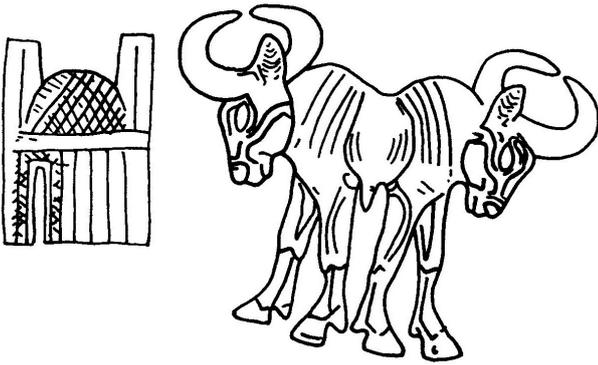


Fig. 7b

Detail of building and double bull at top right of Hunters' Palette. Drawing by Christine Barratt.

ferent level of meaning and signifying the king, who is also probably evoked in the top register on one side by elephants standing on pairs of intertwined snakes. These are symbols of royal agency, relating to signs in the script that happen to be attested from Dynasty 0 rather than Naqada IIIA. The Hunters' Palette, probably also from around the time of Tomb U-j, has at the top a building resembling a reed hall and next to it a double-bull motif (fig. 7a-b). These elements, which are not otherwise attested as hieroglyphs, do not participate in the figural composition and must function in another way. I suggest that they signify the king, even though no human figure in the scene is identified as such iconographically. The building could be a palace or reception space of traditional form, while the bull is a known royal symbol that was again deployed in double form on the Bull Palette (e.g. Malek 2003: 26-27). The two could be hieroglyphic signs writing the king's name, but other explanations are possible.

The integration of script and image developed further during Dynasty 0 with the introduction of emblematic personification, a mode in which hieroglyphs or other symbols acquire human limbs to indicate agency and link them to other elements. The same device is visible within the script, in hieroglyphs that fuse limbs with other elements, such as (Baines 1985: 41-47; 2007: 122). This range of possibilities was exploited more in hieroglyphs than in cursive writing, again pointing to the central

role of the former in the elaboration of early writing. Perhaps soon after the invention of the two forms of the script, the vast majority of writing was in the cursive form (e.g. Dreyer 2007: 214 fig. 301, reign of 'Ka', Dynasty 0), but not until the first millennium BCE did that form determine developments with full autonomy.

Conclusion

The invention of Egyptian writing and the subsequent expansion of its capabilities were crucial in two successive cultural transformations perhaps two centuries apart. The first of these was the intensification of elite culture in Naqada IIIA, and the second was the enhancement of kingship and crystallization of dynastic rule during Dynasty 0 and the early 1st Dynasty.

In the latter phase, after the period considered in this article, writing was expanded to notate many linguistic forms (though not yet continuous discourse) and probably to serve as a more widespread vehicle of administration. Intensified economic growth, which may have related to administration, is visible indirectly in the greatly increased size of large necropoleis and the vast deposits both of luxury materials and of standardized goods, notably in the early 1st Dynasty Saqqara mastabas. In the surviving record, the period marks a slight hiatus in the attestation of the hieroglyphic script, a gap that is probably due to chances of preservation and to the media and locations of usage, not to a reduction in use. The intimate connection of hieroglyphic writing and pictorial representation was maintained, as is demonstrated by the largely pictorial organization of the year tags until the reign of Qaa at the end of the dynasty (selection in Schott 1950; Qaa examples: Dreyer 2007: 216 fig. 304).

The much more limited hieroglyphic script of Naqada IIIA found in Tomb U-j appears to be very closely bound up with ceremonial practices, as well as relating to developments in pictorial representation. I argued above that the cursive form attested on the pots is

best understood as an extension, again ceremonial in character, from administrative uses that are not directly attested. In view of the script's limited nature, these uses were probably modest in scope. Proposals of a purely administrative origin for writing do not take the visual and aesthetic context of its invention sufficiently into account. Nor can they easily explain the invention of a dual system in which the hieroglyphic form was the principal driver of change. That form was not used for administration in later periods, and there is no good reason to suppose that it was during its earliest period. Administrative usages of the cursive script form were surely important, but evidence for them is lacking.

Egyptian writing arose within a visual culture in which pictorial representation was developing strongly. I suggest that its pictorial form was intended from the first to be used both in combination with images and by itself. With successive reforms, its sign repertory changed significantly between Tomb U-j and the 1st Dynasty, and again by the later Early Dynastic Period. The cursive form, for which early evidence is very sparse, was probably intended for a wider range of contexts. It served to mark less prestigious media and materials than those inscribed with the hieroglyphic form, in addition to its posited more narrowly administrative uses. Initially, both pictorial and cursive forms seem to have belonged in the royal sphere, which alone has produced significant evidence.

None of this makes it any easier than before to suggest why writing was invented. The script was fully integrated into a rapidly expanding pictorial culture. Writing added a dimension to what could be communicated pictorially, a potential that was

exploited also in specialized contexts that lacked images. Even though the invention opened up the way to notating language fully by visual means, to suppose that what it communicated was only language would be anachronistic. Rather, the new dimension added by writing consisted perhaps in vital symbolic meanings that could be conveyed with a hitherto unknown precision and resonance. This is not to reject attempts to decipher the U-j writing but to say that the relations they propose between it and language should be set in a wider graphic and ceremonial environment, in which language was one of several key elements. Moreover, the social context of state formation during Naqada III was probably multilingual. At some point in the development of the writing system, the Egyptian language was chosen as the sole one recorded in the script, and by a date that cannot be established it also became the primary language of the entire country. In the earliest stages the relationship between written and spoken may have been less rigid, and users of the script may have spoken more than one different language.

Finally, the existence of two forms of the script has not been taken into account when the possibility of Mesopotamian inspiration for Egyptian writing has been discussed. The dual script has no parallel in Mesopotamia. Relevant introductions from the Near East in the period before its invention include cylinder seals and some pictorial motifs, but while these contributed to the aesthetic environment that I see as crucial for the initial development of writing in Egypt, they had no direct connection with the proto-cuneiform script. From this perspective as from several others, the two scripts do not resemble each other closely.

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