BONE CYLINDERS, DISCS AND TERMINALS-SCROLL HOLDERS FROM ROMAN FUNERARY DEPOSITS?

¿Cilindros de hueso, discos y sujeta rollos de pergamino procedentes de depósitos funerarios romanos?

STEPHEN GREEP* and MARLOES RIJKELIJKHUIZEN*

ABSTRACT Complete and fragmentary elements of well made, composite, bone objects have been excavated in funerary contexts from the Roman period in North-western Europe; our work suggests that these forms belong primarily to the mid second and earlier third centuries. Researchers have described different possible functions of these objects, but to date none have been entirely satisfactory. The assemblage consists of several lathe-turned bone elements —two connected cylinders, and on both ends a disc and small knob or terminal. This paper considers the small number of complete assemblages recovered as secondary grave goods and uses this evidence to interpret a wider range of similar but incomplete finds, sometimes also placed in graves as secondary grave goods, but mainly recovered as primary, pyre debris. Previous interpretations of their use are rejected in favour of an identification as papyri scroll holders.

> Keywords: Roman Period, North-west Europe, Bone, Scroll Holders, Papyri, Cremation Deposits.

RESUMEN

Elementos completos y fragmentados de objetos de hueso compuestos y de manufactura cuidada han sido documentados en contextos de época romana en la zona Noroeste de Europa; nuestro trabajo sugiere que estas formas pertenencen primeramente a la segunda mitad del II y comienzos del III siglo. Los investigadores han descrito diferentes posibles funciones para estos objetos, pero ninguna ha sido hasta la fecha satisfactoria. El conjunto analizado consiste en varios elementos de hueso torneado —dos cilindros conectados, en cuyos sendos extremos se observa un disco y un pequeño pomo o terminal. Este artículo considera un pequeño número de elementos completos recuperados como elementos funerarios secundarios y emplea esta evidencia para interpretar un conjunto mayor de items incompletos, a veces también procedentes de sepulturas como ofrendas secundarias, pero mayormente recuperadas como restos de

Independent researcher. sjgreep@gmail.com; marloesrijkelijkhuizen@hotmail.com Fecha de recepción: 14/04/2018. Fecha de aceptación: 07/05/2019. http://dx.doi.org/10.30827/CPAG.v29i0.9774

la pira funeraria. Interpretaciones previas de su uso han sido rechazadas a favour de su identificación como sujeta rollos de papiro.

Palabra clave: Período Romano, Noroeste de Europa, Hueso, Sujeta rollos, Papiro, Depósitos de cremación.

INTRODUCTION1

Elements or fragments of a particular composite bone object have been excavated from a number of sites of the Roman period in North-western Europe. These are well-made, longitudinal staff-like objects, comprising of two cylinders, closed on each side with a disc and terminal. The cylinders, manufactured from cattle metapodia, are lathe-turned, occasionally with decorative grooves, slightly "flared" and with a collar at one end. Their length, where complete, is between 95mm and 120mm, their maximum length being dictated by the material from which they were manufactured. The terminals may be described as having a lathe-turned baluster-shaped profile, often with collared mouldings, and a short "peg" at the end. They are normally between 20 and 25 mm long. The discs are a distinctive shape; like the other elements they are lathe-turned with a profile which might be described as a truncated cone (usually between 20 and 30 mm in diameter), with a turned groove(s) for decoration and a central perforation (usually between 4 and 6 mm in diameter) into which the terminal was placed.

The assemblage is relatively well known and was first described by Fremersdorf (1940) basing his discussion on a grave group dated to the third century AD from Köln, reproduced here as figure 1. More recently excavated examples from the Netherlands enable a clearer and more detailed discussion of both form, function and chronology of this group of objects. That from Schagen is particularly interesting in that it retained in the centre of the tubes a further, wooden, cylinder; together with the examples from Bemmel, Huissen (3; here fig. 2) these show that the two cylinders adjoin to form a complete, staff-like, object. The example from Huissen (3; here fig. 2) and the recent find from Bemmel also show that it was not necessary for the two terminals to be identical in form, although that from Köln shows that it was equally possible for the two to be identical.

In this article we describe the finds from North-western Europe, bringing together the available evidence and discuss function, associations, contexts and chronology. In order to answer these questions, we have focused firstly on the small number of complete examples and then looked for the combination of the different elements from the same context elsewhere. Since there is difficulty in identifying individual cylinders, discs and terminals from non-funerary contexts, our list of examples concentrates on grave finds, but it is clear from the large number of non-funerary examples we are aware of, that a wider piece of work could significantly

^{1.} Throughout figures in bold relate to entries in the section entitled 'The Evidence: finds and context'.

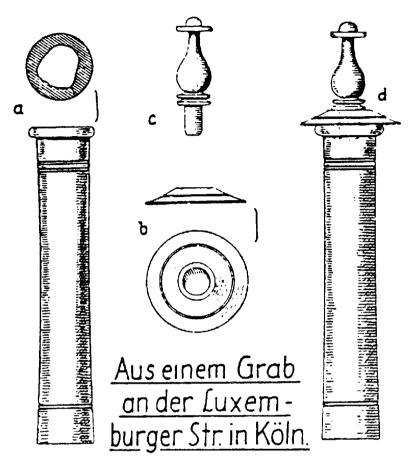


Fig. 1.—Grave from Köln, Germany, showing a complete set.

broaden our knowledge of these finds. The key issue here is, however, that each of the three elements are not necessarily unique to our arrangements. The use of turned discs holding a central baluster shaped moulding may be found, for example, on the lids of bone and wooden pyxides. The terminals on these pieces can be very close in size and shape to those found on our objects and the profile of the cylinder also very similar, if not of the same length (e.g. Béal and Feugère, 1983; Pugsley, 2003:66-84). Furthermore, there is a very wide range of turned cylinders from throughout the Roman period, making identification of our objects recovered from non-funerary contexts and, in particular, fragmentary examples, very difficult. The one element of our object which does seem fairly distinctive is the shape of the discs, although even here one cannot always be sure from isolated examples that they originally belong to our assemblages.

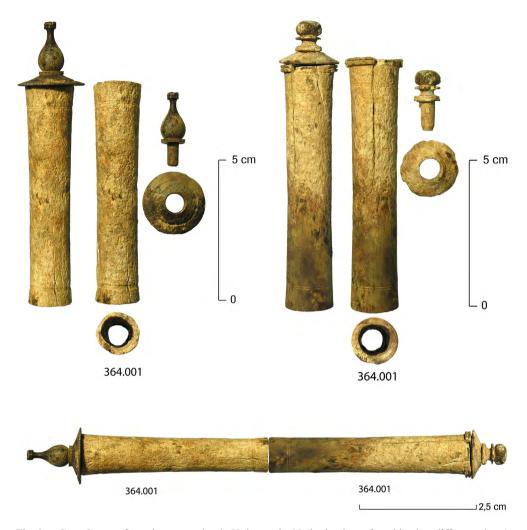


Fig. 2.—Complete set from the excavation in Huissen, the Netherlands, as found in situ (different views).

THE EVIDENCE: FINDS AND CONTEXT

As outlined above, we have concentrated on the relatively closed context of graves, where more than one element of the cylinder/disc/terminal arrangement is present. Where possible, a distinction has been made between primary (pyre debris) and secondary deposits (where objects have been placed in the grave but not been through the pyre). We do not claim the following list as comprehensive, and it is very likely that a more detailed search of the literature will produce many further examples. There are very many isolated examples of cylinders, discs and terminals from non-funerary contexts which we have not attempted to catalogue here.



Fig. 3.—Cylinder, disc and terminal from Huissen, the Netherlands.

Complete Examples

Three complete finds have been published; all recovered, unburnt, but associated with cremations; each presumably secondary grave goods rather than pyre debris. However, at the time of writing at least two new, complete, examples have been uncovered in cemetery excavations at Bemmel (2; here fig. 4). Although these finds have yet to be conserved it is clear that they follow the same pattern as the examples from Huissen and Schagen.

Germany

1) Köln (Fremersdorf, 1940; Mikler, 1997:Abb. 7; here fig. 1). Two cylinders, turned with a collar at one end. Two discs and two identical terminals. Third century AD (Fremersdorf, 1940, Abb. 12). Not burnt and presumably therefore, secondary grave goods rather than pyre debris.



Fig. 4.—Complete set in situ from Bemmel, the Netherlands.

Netherlands

- 2) Bemmel (Van der Feijst *et al.*, report in preparation here fig. 4). Two complete examples and possibly three or four. Recent excavations, material not conserved and researched yet. Second-third century AD contexts.
- 3) Huissen (Van der Feijst *et al.*, 2017; Rijkelijkhuizen, 2017; here fig. 2). Two connecting cylinders, both ends closed with a bone disc and terminal. The two terminals are not identical. One is longer and differently shaped suggesting, maybe, a top and bottom end of the objects. Found in the grave of a woman between 20 and 40 years old, dated *c*. AD 125 to 250/300. The body was cremated, but this object and a mirror were placed as unburnt secondary grave goods. The mirror has an inscription: SVRA, possibly a Greek girls' name.
- 4) Schagen (Verhagen, 1993:fig. 2). The find from Schagen was published by Verhagen in 1993 as a comparison for the Valkenburg finds. It consisted of two cylinders, joined with an internal wooden connection piece, which

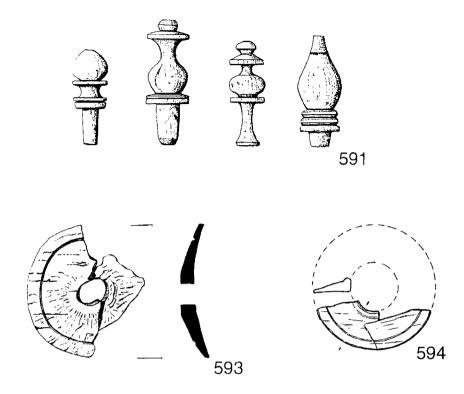


Fig. 5.—A typical collection of secondary deposits from a grave at Winchester, England.

survived *in situ*. Both ends were closed with a disc and terminal (not identical). Its total size was 230 mm; dated in the report to c. AD 50 and 150 AD (Verhagen, 1993:345).

Fragmentary finds and part sets

The following is not intended as a comprehensive list of grave finds. It is, rather, a selection of those currently known to the authors and to demonstrate the variety of complete sets as well as the difficulty of interpretation. Finds are both from primary (i.e. burnt pyre debris) and secondary (i.e. unburnt) contexts. We know from complete examples, wood was used in the final form, therefore where sets are incomplete (e.g. with no cylinders) it is probable that these were originally in wood. Where the material is pyre debris we can, of course, never be sure that everything was collected (so the finds might under or even over-represent that originally burned on the pyre).











Fig. 6.—A typical collection of primary deposits from graves at Caerleon, Wales.

Belgium

- 5) Tongeren (Vanvinckenroye, 1984). In a cemetery at Tongeren, cylinders, discs and terminals have been found, but not always together. Two burnt cylinders were found in a grave dated to the end of the 2nd century until the first half of the 3rd century AD. A disc and terminal were found in another grave, dated to the first half of the 3rd century AD.
- 6) Erembodegem (Rijkelijkhuizen, 2012). Fragments of a disc and a terminal found in a cremation grave of an individual probably between eight and fifteen years old. 2nd half of the 2nd century, or possibly 3rd century AD.

Britain

- 7) Caerleon (Reynolds, 2015; here fig. 6). Cremation cemetery within which three burials had fragments of cylinders, discs and/or terminals. No complete sets. All the remains are heavily burnt pyre debris. Grave I/014 contained a fragment of a cylinder and a terminal (Reynolds, 2015:fig. 14) together with pottery of the mid second to early third century AD. Grave I/200 contained part of a cylinder (*ibid*. 2015:fig. 10) and Grave I/012 (*ibid*. fig. 12) a terminal. Neither are closely dated, but ceramic evidence suggests that the cemetery was in use between the second and early third centuries AD.
- 8) Colchester (Hull, 1963:fig. 81; Crummy *et al.*, 1993:265-266). Five discs and two terminals from a cremation dated *c*. AD 150-200. A rich grave; an amphora burial with many pots and many small finds contained within a wooden box, including a mirror and a bead necklace so presumably a female burial. One of the discs has a central perforation much larger than the other two (and too large for the terminals) and may not, therefore, belong with the others; leaving us with a set, with two dissimilar terminals not unlike the complete examples. There was no evidence of cylinders; none of the items were burnt suggesting they had not been through the funerary pyre.

- 9) London (Barber and Bowsher, 2000:155). A disc and terminal, but no evidence of cylinders found in an inhumation grave dated c. AD 180-300. Unburnt and therefore secondary grave goods.
- 10) Winchester (Rees *et al.*, 2008:108, fig. 54; here fig. 5). A single grave containing four discs and seven terminals (the four illustrated terminals are of differing types), but no cylinders. Burnt and presumably, therefore, pyre debris. Late second early third century AD. The three 'bone cap' terminals found in association and listed in the report as probably from the same arrangements are likely to have been from another object. There were large numbers of copper alloy studs from the burial which the authors suggest represents the remains of a box.

Germany

- 11) Heidelberg (Henson, 2009). A large cemetery with over 1,000 cremations, dating from c. AD 80-190. Forty-nine cremation graves had more than one element of cylinder/disc/terminal, with just under a further 40 having just one. In every example the material was primary, pyre debris; often the fragments were very small making precise interpretation of grave content difficult. Sometimes the number of individual elements was quite large, for example up to seven discs in one grave. The numbers of cylinders, discs and terminals often varied, illustrating the difficulty in interpreting finds from pyre debris deposits. An analysis of the graves containing these finds has been undertaken, although space does not permit further detailed discussion here. In terms of chronology these forms do not appear in the earliest graves and, where the sex can be identified, they always accompany a female cremation —of all ages— there does not appear to be a correlation with other groups of finds
- 12) Novaesium (Muller, 1977). A disc and possible terminal from grave 255 (Muller, *op. cit.*). Pyre debris. Third quarter of the second century AD.
- 13) Rottweil (Fecher, 2010). Three graves contained pyre debris. Grave 294 (Fecher, 2010:Taf. 118) of a juvenile over fourteen with a cylinder (possibly two) and a terminal. Grave 556 (*ibid*. Taf. 214) had fragments of two cylinders and two terminals plus one disc and was dated *c*. AD 140/160-180/200. Grave 563 (*ibid*., Taf. 217), possibly female, contained one disc and two terminals, dated. *c*. AD 120/30-40/60.
- 14) Stettfeld (Schallmayer, 1996:273ff; Mikler, 1997:63). At Stettfeld seventeen graves and other contexts contained cylinders, nine contained discs, terminals were present in four graves. However, only in two graves are all three together. Where it could be determined all the examples were found in female graves.

The Netherlands

- 15) Cuijk (Lauwerier, 2002:fig. 8:2). A combination of cylinder fragment, a disk fragment and two different terminals from the same grave. Burnt. Second half of the 2nd century-first half of 3rd century AD.
- 16) Heel (Hupperetz, 1991). In Heel fragments of bone cylinders, discs and terminals have been found in five separate cremation graves dated *c*. AD 150-175, 125-200, 125-175, 150-175 and 125-200. Hupperetz realised the association of the three elements but published them as hinges.
- 17) Nijmegen (Haalebos, 1990). In Nijmegen several elements have been found in different excavations. Haalebos mentions a grave with two fragments of a cylinder and a disc dated to the first-third century AD. He also mentions many other finds from Nijmegen; these are however not researched yet and unpublished. The exact amount is therefore unknown.
- 18) Valkenburg (Verhagen 1993:figs. 5-6). Although the report is not entirely clear, a disc and two terminals were found together in one cremation grave (Verhagen, 1993, fig. 6, 10, 13 and 15), and a disc and a terminal in another (*ibid.*, fig. 6, 9 and 12) although neither are closely dated. Cylinders, discs and terminals were also recovered as non-grave finds.
- 19) Wijchen (Hendriks and Magneé-Nentjes, 2008:55 and 77). Grave 7 dated to the second century, contained two fragments of cylinders and a possible terminal. Grave 22, dated c. AD 140-180 had two fragments of cylinders and a disc.
- 20) Zaltbommel (Esser *et al.*, 2010). Two cremations, both dated to the second half of the second century AD. One (CR42), a double grave, possibly of a female older than 20 and an unidentified three to five-year-old. Fragments of six (or more) cylinders, at least two discs and three fragments of non-identical terminals. The second grave (CR43), also a double grave, possibly female older than 30 and an unidentified child, under three months. Two fragments of one cylinder and a piece of a disc.

INTERPRETATION AND DISCUSSION

We can identify a complete "set" as two cylinders, discs and terminals; this has been known for some time as they were represented in the burial excavated in 1936 at Köln. The relevance of this find has been masked by their interpretation, as the end segments of hinge arrangements (see below), but more recently excavated examples from Bemmel, Huissen and Schagen in the Netherlands confirm that this complete "set" comprised, two adjoined, lathe-turned bone cylinders, joined by a further central wooden cylinder.

We have been able to list sixteen further sites where graves contain more than one element of these composite objects, yet it is clear that this was never a common burial practice. Apart from our complete "sets" the majority are primary pyre debris and therefore subject to selection; this clearly explains why complete sets are not more common, and it also means that we can never be sure that each assemblage comes from the same cremation process and that all the elements originally on the pyre were collected for the grave.

The rarity of graves containing elements of our "sets" is demonstrated, in the large cemetery at Heidelberg where, although the total number of graves with more than two of the cylinder/disc/terminal arrangements are present is large, as a proportion of the overall cemetery it is under 4%; at Rottweil where only three certain examples were recovered, this represents just 0.5% of all the burials.

An association of the form with female burials has been noted previously (e.g. Hupperetz, 1991; Verhagen, 1993:345). This is confirmed at Heidelberg where partial sets were found in 49 cremation graves and where the sex of buried individuals could be identified it was always female. The age range of the buried is wide, with both children, mature and elderly females represented. Exactly why there is this strong association with females is not immediately clear, although this is briefly discussed further below.

There are, a small number of other burials where the objects are not burnt, and complete sets are not present. For example, the grave from Colchester where not only were cylinders not present, but there was an uneven number of discs and terminals. In these circumstances it is quite possible that the cylinders were originally of wood in their entirety, rather than just having a wooden centre. This grave is also unusual in that one of the discs had a central preformation too large to take the terminal —this feature is also noticeable on some of the discs from the burial at Apt (Dumoulin, 1964:16), listed below.

The widest range of variations in sets and part sets occurred at Heidelberg where graves contained not only bone objects belonging to our forms, but other bone types, such as pyxides, as well. It is important to realise that just because a grave contains different objects made of bone, it does not mean that they are all from the same object. The explanation for some of these variations is, however, elusive, and it is likely that more complete examples are required before we can fully interpret all the finds of this type.

There are three further graves, not included in our list, which are of interest. Each contains the characteristic disc(s) and terminal(s), together with a small cylinder and were in each case secondary grave goods. It may be that the cylinder belongs to another object and is unrelated to the disc and terminals, but this is, as yet, uncertain. At Brougham, near Milton Keynes (Crummy, 2014:180-186) a rich burial containing a disc, terminal and a small cylinder were found together in a cremation dated to c. AD 120-150. The cylinder is quite small, with a circumference much less than the disc. A similar find comes from Huissen (Van der Feijst *et al.*, 2017; Rijkelijkhuizen, 2017; here fig. 3) where a disc and terminal were associated with a small cylinder. Finally, a grave in a cemetery of first or second century date from Apt (Dumoulin, 1964:16), contained four of our discs, seven terminals and two small cylinders.

CHRONOLOGY

Our complete examples come from contexts dated c. AD 50-150, 125 to 250/300 and to the second or third centuries AD. While we acknowledge that the complex nature of terminal/disc/cylinder arrangements makes certain attribution to our type difficult, at Heidelberg where the graves associated with our sets are most numerous graves associated with our arrangements, there are no examples from phase 1 contexts of c. AD 80/85-115/120, but many from phases 2 and 3 of c. AD 115/20-150/55 and c. AD 150/55-185/90 respectively. An examination of finds from other graves demonstrates that the form carried on after the life of the Heidelberg cemetery, into the third century AD. On the available evidence, therefore, we favour a date range of c.AD 125-250, but with further work it may be possible to refine this date further.

Function

Different interpretations of the function of these arrangements have been claimed; some of these may now be rejected after more recent and complete finds have enabled us to re-interpret the evidence.

Hinges

The most common interpretation of these finds has been the last part of a hinge arrangement from an item of furniture, such as a cupboard or box. This interpretation can be traced back to the seminal paper of Fremersdorf (1940, Abb. 26), based on the evidence of the grave from Köln (1). This grave has been reproduced on several occasions (e.g. Mikler, 1997:Abb. 7; here fig. 2) and the interpretation of disc and terminal arrangements typically follow Fremersdorf's suggested reconstruction (e.g. Beal, 1984:250; Deschler-Erb, 1998:Abb. 256; Schenk, 2008:fig. 50). However, where significant hinge arrangements survive in graves, they are rarely² in association with discs or terminals of the form we are discussing, a fact already recognised, for example, by Mikler (1997:62-63). Two examples from Britain serve to illustrate the point. From first century contexts at Piddington (Friendship Taylor and Greep, 2012) a pit contained, amongst other items, eight hinge sections which were clearly part of a box or cupboard; in a

^{2.} At Heidelberg two graves contained both hinge segments and elements of disc and terminals. Grave 66/196 (Henson, 2009:Taf. 323) contained fragments of up to five hinges, as well as 7 terminals, 7 discs and cylinder fragments. The difference in profile of the hinges and cylinders, however, clearly identifies that they are from different objects. A more difficult question is perhaps why there were so many discs and terminals. Grave 69/100 (Henson, 2009:Taf. 498) had fragments of several single hinges, but also small fragments of cylinders and two terminals.

grave at Stanfordbury (Stead, 1967:55) probably of similar date to the Piddington example, and in which at least six hinge sections were found together. In neither of these graves were terminals or discs recovered. Furthermore, in examples of wooden furniture from Herculaneum (Mols, 1999:107-109) surviving wooden hinge arrangements do not have disc and terminal arrangements, rather are finished either by a standard single hinge or a larger double perforated hinge- an arrangement suggested in the Stanfordbury grave mentioned above. This is the arrangement illustrated in the Tomb of Vestorius Priscus at Pompeii (Mols, 1999:108). The well-known sculptural representation from Simpelveld, (Fremersdorf, 1940:Abb. 14; Mols, 1999:fig. 10) of c. AD 175-225, may depict a cupboard with cylindrical hinges, also not closed off with terminals of our form; a similar simple hinge arrangement, also not closed off with our terminals, can be seen on a sculpture from Nimes, France (Friendship-Taylor and Greep, 2012:fig. 5) and on an earlier example from Volterra (Pugsley, 2003:29). Finally, and most conclusively, the complete 'sets' from Köln, Bemmel, Huissen and Schagen show that the cylinders in our arrangements are not symmetrical tubes and as ends of the cylinders could have a turned collar this would make their functioning as turning hinges extremely difficult. We may therefore safely conclude that their use as hinge elements cannot be sustained.

Weaving Equipment

Verhagen (1993:345) interpreted the finds from Valkenburg as distaffs. Although the appearance of our composite object in female burials may indeed suggest they are related to a traditional female task such as spinning, this seems unlikely because they do not appear to be suitable to this particular task as already identified by Jung (2013:116). Wild (1970:31) describes a distaff as *basically a short stick*, 20-30 cms. in length an interpretation which might equally apply to spindles. Objects more normally interpreted as distaffs, for example those from graves in Britain and the Rhineland (e.g. Wild, 1970:fig. 15), Magdalensburg (Gostenčnik, 2005:taf. 52:3) and Hungary (Bíró, 1994:pl. LXI) and specifically Aquincum (Bíró et al., 2012:104-105) are all very different from our arrangement. In any case, the construction with a central wooden connection element is probably not strong enough to have functioned as a distaff and no published examples mention wear patterns consistent with such a use.

A complete disc and terminal from Vindolanda has been published as a spindle and whorl (Alberti, 2016). This was found in a rubble and clay fill with small stones, which made up the aggregate for a fourth century road deposit and is almost certainly redeposited. While lathe-turned discs clearly did function as spindle whorls as some have been recovered still associated (e.g. Béal, 1984:pl. 16, 334-335; Biro et al., 2012:105; Wild, 1970:pl. IIIb) the similarity of the Vindolanda disc and terminal is so close to our examples, that this must be the correct identification.

Furthermore, the terminal element is so short (in line with all our examples) that it is difficult to see how it functioned as a spindle.

Scroll Holders and infusion devices

The theory that we feel most likely to fit the current evidence is that first published by Nina Crummy (2014:185) in her discussion of the finds from a late second century AD grave at Broughton (see above, page 6) - that these objects functioned as holders for literary scrolls. There is plentiful evidence for the use of papyri scrolls in the classical world, the best-known examples probably being those from the Villa dei Papyri, at Herculaneum (for an easily accessible summary, with further references see Roberts, 2013:109). There are also scrolls illustrated on a number of well know media. The famous wall-painting of Terentius Neo at Pompeii (e.g. Museo Nazionale di Napoli, 1986:72; Roberts, 2013:fig. 112) shows him holding a papyrus scroll; closer to our period are scrolls illustrated on a late second century relief from Neumagen (Cüppers, 1983:264) and an early 3rd century AD mosaic in the Bardo Museum, Tunis (Yacoub, 1993:fig. 125), but neither show holders of our form. Although much later than our examples, we may note a late Roman ivory diptych of Probianus, vicarius of Rome dated c. AD 400; in the lefthand panel, he is unrolling a long papyrus strip in his lap, attached to what looks like one of our cylinders in his left hand³.

Some supporting evidence to this interpretation comes from passages in Martials' Epigrams. Martial describes a scroll as "smartly knobbed" or with "elegant bosses" (*Epigrams* 8.61) and also notes scrolls being placed on the funerary pyre (*Epigrams* 8.44). Based on textual evidence from Pliny, Lewis (1964:56) suggests that the width of scrolls varied widely, from 110 to 240 mm. The combined length of the "double" cylinders (without the terminals) at Huissen (3) and Schagen (4) is 230m and 197 mm respectively. This fits well with our pieces and interpretation.

If this is the most likely interpretation of our objects, we can only wonder at what information the scrolls themselves contained, maybe passages from a favourite myth or even the will of the deceased? The interpretation as scroll holders could indicate that the deceased was educated, supported by the relatively rich nature of some of the burials; the clear association with female burials perhaps that she was a professional female scribe (e.g. Eckard, 2018:44) but they might, for example, contain letters of manumission if they had been slaves who were freed⁴. Perhaps, then, the interpretation lies elsewhere, not in what the scrolls contained in terms of writing, but the function of the overall assemblage. Lewis (1974:96) notes references to incense wrapped in discarded papyrus - maybe it is too fanciful to suggest that

^{3.} Information Roger Tomlin.

^{4.} We are especially grateful to Nina Crummy for these suggestions.

those burned on the pyre were, then, incense infused arrangements designed to released pleasant odours, maybe alongside other scrolls, as the pyre burned?

One further question may be asked - were these objects specifically manufactured for the funerary pyre or the grave? While our catalogue above lists grave finds, there are a considerable number of non-funerary finds of the discs (the most diagnostic of the elements) from throughout the north-western empire. By way of example (amongst many), published discs from Risstissen (Ulbert, 1970:taf. 28, 480), Dover (Philp, 1981:fig. 42, 222; dated c. AD 190/200-208) and Vindolanda (Alberti, 2016) all show the characteristic profile of our terminals and discs and illustrate well the presence of these forms in non-funerary contexts. It seems unlikely, therefore, that they were specifically funerary items, but (uncommon) everyday objects, found to be suitable for funerary arrangements.

Examples are from both urban and rural contexts with a wide distribution in north-western Empire, a distribution noted by Mikler (1997:62). There is nothing to suggest that these objects were not manufactured in the areas where they have been found - there is enough variation in the cylinders and terminals to suggest multiple manufacturers over a period of time.

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Footnote

After the completion of this paper the authors were notified of new finds from excavation at Tiel in the Netherlands. In several graves cylinders, discs and terminals have been found in four graves, although none contain the complete set. The report by M. Groot and M. van Haasteren is in progress (pers. comm. Martijn van Haasteren).

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