# CHAPTER 16

# The Traprain objects before hacking: the assembly compared with other late Roman hoards

#### MAX MARTIN

Anybody who works on the Hacksilber hoard from Traprain Law cannot ignore an image from Curle's exemplary publication, which appeared only four years after its discovery.<sup>1</sup> The picture entitled 'The treasure as found' (illus 15.2) is one of the rare photographs which reproduce the fragments of the hoard in their unrestored condition.<sup>2</sup>

No other hoard of the late Roman period, whether found in Britain or on the Continent, contains so many different objects.<sup>3</sup> This is because in the other late Roman deposits which are similar in bulk, we are dealing not with Hacksilber but with intact silver vessels and implements, usually the table silver of a leading family. Unlike the Hacksilber of the Traprain Law hoard, weighing about 22kg, these hoarded whole vessels represent groups (or parts of groups) which are formally and functionally complementary. They were probably buried in order to protect them in extreme danger – and nobody, obviously, returned to reclaim them.

What did late Roman silver look like at that time, and what could reach Barbaricum? What were its most important groups, and what were they used for?

First, I wish to introduce two exceptionally large hoards which have come to light on the Continent. They provide the best picture of the size and main parts of a table service belonging to a leading family in Late Antiquity. I will then use the dishes from Traprain as a case study of what information can be obtained from detailed study and comparison.

# The Roman silver treasure from Kaiseraugst (illus 16.1)

The first example is the treasure from Kaiseraugst, uncovered in 1962 in a late Roman fort on the Rhine upstream from Basel.<sup>4</sup> The burial of the hoard from Kaiseraugst is dated precisely to the year 352 on the evidence of the coins and silver ingots found with it.

A dozen heavy serving dishes, weighing between 2 and 7kg (illus 16.1, A) are the predominant objects in the hoard. In addition, there are a number of smaller plates and bowls (illus 16.1, B), which are clearly serving- and eating-vessels. Eating implements include three dozen spoons (illus 16.1, C) in two shapes (illus 16.3; *cochlearia*, with straight handles, and *ligulae*), wine-strainers and tooth-picks (illus 16.1, D), one of which has its disc cut out to leave an openwork Chi-Rho monogram. Special mention must be made of the expensive candelabrum (illus 16.1, E), and also of the bowl for washing hands (illus 16.1, F). A single example of this type of bowl, which has a ribbed wall, is normally found in every service.<sup>5</sup>

#### The treasure from Trier (illus 16.2)

The second example is a late Roman hoard, which was very similar in its composition, and which was found in Trier in 1628, in a stone chest (vas lapideum) - but sadly it was melted down.6 Today we have only a manuscript inventory, in Latin, with details of weight, of shape, and - cursorily - of the decoration of the forty-nine objects. In illus 16.1 and 16.2 the Kaiseraugst and the Trier treasures are shown in the same way, for better comparison. The reconstruction of the Trier treasure is possible because not only were the objects described, but their weights were recorded.7 If one is told not only the type of a vessel of the fourth and fifth century (such as dish or bowl) but also its weight,8 one can to a certain extent deduce its shape and size. For this reason, in spite of the fact that the Trier service was buried some three to four generations later than the Kaiseraugst treasure (see below), we can be certain, by comparing the illustrations of the two hoards (illus 16.1–2), that the most important elements match each other very well.

#### The Kaiseraugst and Trier treasures compared

In the Kaiseraugst treasure there is one rectangular dish, as against at least ten large, circular servingdishes (illus 16.1, A). Some have a band round the rim decorated with geometric ornament or with figures; some have a central medallion; and some have both. In the Trier treasure there were two rectangular dishes (illus 16.2, 1–2), as against eight circular dishes (illus 16.2, 3–10). The rectangular dishes are described in the manuscript of 1628: *item duae [patinae] in medio habuerunt gladiatores, et circumcirca fabularum dearum imagines ponderabant 23 lib(ras)*. These big rectangular and circular dishes, which were needed for the service of the various courses, were not only decorated



Illustration 16.1 The Kaiseraugst treasure: the whole treasure. From Guggisberg 2003, pl 1 (drawn by Alan Braby). The largest dish is 665mm in diameter



Illustration 16.2

The Trier treasure, found in 1628: the whole treasure, as reconstructed by the author (drawn by Alan Braby). Numbering follows Binsfeld 1979. The size of the vessels is not certain differently. Their shapes also differ, at least partly, according to the course.

The second most important group of vessels in both hoards is formed of eating vessels and other serving vessels. For quite a long time, this group usually consisted of two shapes, one a more or less flat plate, and the other a deeper bowl. In the Kaiseraugst treasure, about AD 350, we find four small plates and four small bowls (illus 16.1, B). In the Trier treasure this category of vessels was very well represented: the vessels (illus 16.2, 15–22 and 23–30) clearly match the older small plates and small dishes in the Kaiseraugst treasure.

A third type of eating vessel, which is encountered only in the Trier treasure (illus 16.2, 31–6), is entirely new. Six vessels were described in the manuscript of 1628 as '*phialae sex cum operculis, ornatu nullo*'. The vessels, which each weigh a little more than 1kg, were therefore undecorated and were each provided with a lid. We may suppose that the vessels of this sort in the Carthage treasure are good comparisons (illus 16.4).<sup>9</sup> They confirm that we are dealing with a shape of the fifth century, which may have later superseded previously typical eating vessels.

The eating implements and toilet implements, which figure in such numbers in the Kaiseraugst treasure, are missing from the find from Trier. It may be, perhaps, that the spoons were re-used elsewhere. The wash-bowl, which doubtless also once belonged to the Trier service, may have been among the crushed fragments of vessels said to have been found. The Kaiseraugst treasure, on the other hand, did not include two typical special vessels, the *amphora* and the *situla*, unlike the Trier treasure (illus 16.2, 11–12), perhaps because the dates of the two hoards differ.

# The Mildenhall treasure and the Sevso treasure

The Kaiseraugst treasure and the very similar Trier treasure each offer a good picture of a more or less complete late Roman table service. The other treasures of the fourth or fifth centuries discovered so far in the late Roman West are more modest in size, and contain



#### Illustration 16.3

The Kaiseraugst treasure: cochlearia and ligulae. Scale 1:2. After Cahn & Kaufmann-Heinimann (eds) 1984, fig 27–8, 30–1

only parts of a former table service. Two examples are the Mildenhall treasure and the Sevso treasure.

The well-known treasure (illus 16.5) from Mildenhall in Suffolk was discovered in 1942.<sup>10</sup> It has three richly decorated dishes, three pairs of decorated bowls and thirteen spoons (eight *cochlearia* and five *ligulae*). As in the Kaiseraugst treasure, these three categories of objects form important parts of the service. On the other hand, there are relatively small numbers of big dishes. Might it be, perhaps, that this group was chosen for a temporary flight in the face of danger? Nearly all the plate is weighty, but of the highest quality, such as the famous Oceanus dish and the highly decorated wash-bowl. There are fragments of several similar wash-bowls in the Traprain treasure.

The so-called Sevso treasure (illus 16.6) is remarkable for its unusual combination of objects.<sup>11</sup> In an inscription on one of the big plates a man called Sevso is named as the recipient of the vessel. This hoard is at present in private hands, and its findplace is not known. The Sevso hoard consists without exception of big vessels. The fourteen vessels comprise four big dishes, five jugs, the wash-bowl and four special vessels: two buckets, an amphora and a toilet-box.

The decorated fields of one of the dishes show the story of the childhood of the Greek hero Achilles, just as on the Achilles dish in the Kaiseraugst treasure.<sup>12</sup> Another dish, with niello decoration, is comparable to the niello dish in the Mildenhall treasure.13 The five jugs are particularly important for the interpretation of the jugs in the Traprain Law treasure, because vessels of this shape are found quite rarely in hoards of silver plate. The hoard also has toilet-boxes, containers in which bottles for perfume and so on were once kept. They were, together with a bucket (situla) and a jug, part of a bath-service, known in Latin as argentum balneare. These bath-services too, appear to have been an important collection of silver plate for leading families at that period. There are good grounds for suspecting that the Sevso treasure originally included smaller vessels, particularly bowls for the service of dinner, and also spoons and other silver. It may be that, after the discovery of the treasure, fourteen show-pieces were selected for sale in the art market.

#### From table silver to Hacksilber

The rich contents of the four hoards of non-hacked (table)silver which have been described provide a



Illustration 16.4 The Carthage treasure: two vessels with lids. Scale 1:2. After Baratte et al 2002, fig 34

striking picture of the appearance and composition of the table silver which was used in Late Antiquity at upper-class banquets; their top pieces were probably also used for presentation.<sup>14</sup> The objects in the Hacksilber hoard from Traprain Law were for the most part hacked silver vessels and implements. Other silver which was deposited outside the empire in similar hoards also originated, for the most part, from the



Illustration 16.5 The Mildenhall treasure. © Trustees of the British Museum

households of high-placed provincial Roman families from the Continent or Britain.

To summarise, in Late Antiquity table silver characteristically included *inter alia* the following components. Amongst the vessels there were both serving dishes and a larger number of bowls with horizontal rims<sup>15</sup> which, as eating-plates and sideplates, formed an important part of the service. In the services described above, such plates and dishes were missing only in the Sevso treasure. Then there were eating implements, represented in the Traprain Law treasure by almost a dozen incomplete *cochlearia* and *ligulae* which, given their different decoration and shapes, may have been collected from various services.<sup>16</sup> The wash-bowl also belonged to the dining table. It normally appears as a singleton in a single family's table service; but in the Traprain Law treasure there are at least six examples, which presumably originate from the same number of plundered table services.<sup>17</sup>

What we should very much like to know today is by what route – in what condition and at what period – the individual vessels and vessel-fragments were finally incorporated in the treasury of the 'Lord of Traprain Law.' How many hands did the various silver objects pass through after their abrupt change of function from fine table silver to fragments of precious metal



Illustration 16.6 The Sevso treasure; the whole hoard. After Mundell Mango & Bennett 1994 (drawn by Alan Braby). The largest dish is 720mm in diameter

divided up or traded by weight? And in what province of the Roman empire were the objects produced, in Britain or on the Continent?

# The chronological spread of hacked dishes with beaded rims from Traprain Law

In order to make more precise statements about the Hacksilber in a hoard, it is necessary to establish the dates at which the various silver vessels were made. From this, it may be possible to evaluate the hoard's origins. In the Traprain Law treasure there are large and small fragments of about twenty to thirty serving dishes. The dishes with beaded rims form a typical and informative group. There are fragments, variously decorated, of five circular and three rectangular dishes (illus 16.7, 8, 10, 11). Dishes with beaded rims are also known from other places in Britain and on the Continent (illus 16.9, 12). Table 1 presents a total of twenty-nine examples, partly from hoards with complete vessels and partly from hoards of Hacksilber.<sup>18</sup> Ten of the eighteen circular examples (upper part of the table) come from hoards and are complete. The fragments of eleven rectangular examples (lower part of the table), on the other hand, have all been found in Hacksilber hoards. In the Traprain Law treasure, in contrast, there are more circular dishes than rectangular dishes.

The twenty-nine dishes with beaded rims listed in the table can be divided into five groups (A-E) according to the decoration which fills the zone with the beading on the edge (Table 1):

- Rim-zones A and B are undecorated (A) or decorated with grooves (B), and are found only on circular dishes.
- Rim-zones C and D are engraved with geometric or plant decoration (C) or figures (D), the engraving being filled with niello; these rims are normally found on circular dishes.
- In three exceptional cases (two of them in the Traprain Law treasure, illus 16.10) rim-zone C, without niello, is found on rectangular dishes.
- Rim-zone E (illus 16.11–12) is decorated with raised, sculpted figures. It is found on circular and, more frequently, on rectangular dishes.
- On one section of the circular and rectangular dishes with rim-zone E kymation decoration (E + K) is found.<sup>19</sup>

Further facts can be deduced from the table. The various diameters of the circular dishes with beaded rims are related to the ancient measurements of  $1\frac{1}{2}$ , 2 and  $2\frac{1}{2}$  Roman feet (at 296mm to the foot). Rim-zones A, B and also (rarely) C are found on smaller examples (with a diameter of c 430–610mm), while rim-zone E is only attested once (on the great dish in the Mildenhall treasure). Larger dishes (with a diameter of c 630–750mm), on the other hand, are combined with rim-zones D and E, and

# THE TRAPRAIN OBJECTS BEFORE HACKING

Table 1

Circular and rectangular dishes with beaded rims, from normal hoards and Hacksilber hoards, grouped according to the decoration of their rim-zones

|                                 |   | Rim-z  | D   | DEK                                 |                     |   |                  |              |                 |      |             |
|---------------------------------|---|--|---|-------------------------------------|---------------------|---|------------------|--------------|-----------------|------|-------------|
|                                 |   | undecorated >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>   | в<br>engraved with geometric or<br>plant decoration | engraved with figural<br>decoration | raised with figures | kymation between beaded<br>rim and rim-zone | Diameter (in mm) | Size (in mm) | terminus        |      | (key below) |
| Find-place with<br>catalogue no |   | und<br>with  | eng   | eng                                 | rais                | kym<br>rim                                  | Dia              | Size         | post quem       |      | (ke)        |
| Traprain Law 70                 | 0 | •  |   |                                     |                     |   | 610              |              | 393+            |      | HF 68       |
| Kaiseraugst 84                  | 0 | •  |   |                                     |                     |   | 470              |              | 350             |      | HF 22       |
| Kaiseraugst 58 a/b              | 0 | •  |   |                                     |                     |   | 485              |              | 350             |      | HF 22       |
| Traprain Law 64                 | 0 | •  |   |                                     |                     |   | 610              |              | 393+            |      | HF 68       |
| Traprain Law 78                 | 0 | •  |   |                                     |                     |   | <i>c</i> 600     |              | 393+            |      | HF 68       |
| Balline                         | 0 | •  |   |                                     |                     |   | ?                |              |                 |      | HF 73       |
| Hammersdorf II                  | 0 | •  |   |                                     |                     |   | 528              |              |                 |      | HF 83       |
| Richmond Mus. Virginia          | 0 | •  |   |                                     |                     |   | 432              |              |                 |      | T/P 49      |
| Kaiseraugst 60                  | 0 |  | ▼   |                                     |                     |   | 427              |              | 350             |      | HF 22       |
| Mildenhall 4                    | 0 |  | IVI   |                                     |                     |   | 556              |              | Second Star All |      | HF 57       |
| Traprain Law 63                 | 0 | 0.000  | IVI   |                                     | 8                   |   | c 690            |              | 393+            |      | HF 68       |
| Sevso treasure 1                | 0 | Station .  | IVI   |                                     |                     |   | 705              |              |                 |      | MM1         |
| Cesena                          | 0 | el de la companya de |   |                                     |                     |   | 630              |              |                 |      | T/P 56      |
| Hammersdorf I                   | 0 | - Allen  |   |                                     |                     |   | c 750            |              |                 |      | HF 83       |
| Traprain Law 43                 | 0 | in the second  |   |                                     | ٠                   |   | 650-700          |              | 393+            |      | HF 68       |
| Mildenhall 1                    | 0 |  |   |                                     | •                   | ٠   | 605              |              |                 |      | HF 57       |
| Sevso treasure 2                | 0 | 6 Manual   |   |                                     | •                   | (•)   | 694              |              | alash ta sha da |      | MM2         |
| Sevso treasure 3                | 0 | - Andrich  |   | and Real                            | •                   | (●)   | 720              | a same ins   | and head hubble |      | MM3         |
| Traprain Law 86                 |   | 1000   | •   |                                     |                     |   |                  | 343×345      | 393+            |      | HF 68       |
| Mileham                         |   | ni ola colo  | ▼   |                                     |                     |   |                  | 375×375      | 1               |      | HF 58       |
| Traprain Law 87                 |   |  | ▼   |                                     |                     |   |                  |              | 393+            |      | HF 68       |
| Traprain Law 88                 |   |  |   |                                     | ٠                   |   |                  |              | 393+            |      | HF 68       |
| Risley Park                     |   |  |   |                                     | ٠                   |   |                  | 490×383      |                 |      | HF 62       |
| Grossbodungen                   |   | all cale   |   |                                     | •                   |   | de l'Altre       |              |                 | 407  | HF 32       |
| Hardenberg                      |   |  |   |                                     | •                   |   |                  |              | Company and     |      | HF 29       |
| Høstentorp                      |   | 11.05  |   |                                     | •                   | (●)   |                  |              | 395+            |      | HF 30       |
| Coleraine                       |   |  |   |                                     | •                   | (●)   | 1 52001 25       |              | สมารรรณกรรร     | 407  | HF 45       |
| Gudme                           |   | A LOCAL AND  |   |                                     | •                   | •   | the case in      |              | the other       |      | HF 28       |
| Simmersted                      |   |  |   |                                     | •                   | •   |                  |              |                 | 428? | HF 31       |

■ = Niello; ▼ = engraved/raised and chased; ○ = circular; □ = rectangular; HF = treasure no (after Guggisberg 2003, 333–46); MM = Mundell Mango & Bennett 1994; T/P Toynbee and Painter 1986



Illustration 16.7 Traprain Law: fragment of the rim of circular dish 64 (rim-zone B). Scale 1:2. After Curle 1923, pl 39

rarely with C. If we look at the few absolute dates (Table 1), we can see that the increase in sizes of the dishes and the development of the rim-zones are related chronologically. The three circular dishes with rim-zones B and C, which were buried in the Kaiseraugst hoard in AD 352, belong to the smaller format. Fragments of rectangular dishes with rim-zones E (and E + K), on the other hand, were associated in three Hacksilber hoards with silver coins for which the *terminus post quem* (on numismatic evidence) is AD 407 (two hoards) and AD 428? (one hoard).

Generally speaking the decoration on the beaded dishes develops – doubtless with overlaps – from rim-

zone A or B, through C and D, to E and E + K. The rectangular shape therefore occurred relatively late, because it was usual for rectangular dishes only to have rim-zone E, which can be compared in date with the circular dishes with the same rim-zone. The comparability of their dates is supported by the fact that the kymation decoration (K) is restricted, on both circular and rectangular dishes, to examples with rim-zone E. Known exceptions to this are three small rectangular dishes with rim-zone C (without niello) from Britain (illus 16.10), which appear to be early examples of this form of dish, in contrast to two clearly bigger and later rectangular dishes with rim-zone E (illus 16.11–12).



Illustration 16.8 Traprain Law: fragment of the rim of circular dish 63 (rim-zone C). Scale 1:2. After Curle 1923, fig 31

# THE TRAPRAIN OBJECTS BEFORE HACKING



*Illustration 16.9* The Hammersdorf (now Młoteczno/Poland) Hacksilber treasure: rim-fragment of a circular dish (rim-zone D). After Drexel 1915, Abb 6

Findplaces with at least two dishes with beaded rims can be placed in the following chronological sequence (Table 1). We begin with Kaiseraugst (illus 16.1), with three smaller dishes with rim-zone B (two examples) and C (one example). These are followed by the Hammersdorf hoard I and II, which has a small dish with rim-zone B and an unusually big dish with rim-zone D (illus 16.9), and by the hoard from Mildenhall (illus 16.5), which has two smaller dishes with rim-zones C and E. The Sevso treasure is the last (illus 16.6), with three large dishes with rim-zones C/D and E (two examples).

The prolific Hacksilber hoard from Traprain Law appears different. Here we have not only both shapes of dish, but all the types of rim-zones except D. Presumably the Hacksilber of this hoard was collected in several stages and/or during quite a long period of time. By comparing the silver vessels which we know from late Roman hoards in the western Roman empire, we may conclude that the table service in a leading household consisted as a rule of pieces that were of more or less the same date. At Traprain Law and possibly elsewhere, the collection, hacking and hoarding of table silver in Late Antiquity was obviously an act - to use a neutral word - which was carried out over several generations. The period in which the silver dishes decorated with rims A-E succeeded each other covered, one may suppose, more than a century, most probably the years between c AD 330 and 450.



Illustration 16.10 Traprain Law: fragment of the rectangular dish 86 (rim-zone C). Scale 1:2. After Curle 1923, fig 38



Illustration 16.11 Traprain Law: rim-fragment of the rectangular dish 88 (rim-zone E). Scale 1:2. After Curle 1923, fig 40



Illustration 16.12 Risley Park: fragments of a rectangular dish (rim-zone E). 510×380mm. From Stukeley 1736. © The British Library Board (457.g.10)

Overall, then, the Hacksilber hoard from Traprain Law includes fragments from various services of silver vessels of the fourth and fifth century. Were they used only in late Roman Britain or elsewhere too? We do not know – or, at least, not yet.

# Acknowledgements

I should like to thank the organisers for their invitation to speak at the conference. I am also very grateful to Kenneth Painter for translating the text of this lecture into English.

#### Notes

- <sup>1</sup> Curle 1923; Hobbs 2006, no 1589; Painter 2006.
- <sup>2</sup> Curle 1923, plate 4.
- <sup>3</sup> A detailed catalogue of ninety-seven precious metal hoards of the fourth and early fifth centuries AD from the whole Roman empire and neighbouring areas can be found in Guggisberg 2003, 333–46.

#### THE TRAPRAIN OBJECTS BEFORE HACKING

- <sup>4</sup> Cahn & Kaufmann-Heinimann (eds) 1984; Guggisberg 2003; Hobbs 2006, no 1341.
- <sup>5</sup> Martin-Kilcher 1984, esp fig 155; Guggisberg 2003, 253-4.
- <sup>6</sup> Binsfeld 1979; Hobbs 2006, no 2011.
- <sup>7</sup> Shaded areas on the vessels in illus 16.2 depict parts of the vessels with figured decoration, described in the original text as, for example, *venationes, bestiae, ferae, figurae dearum, effigies Caesaris, gladiatores, forma imperatoris et imperatricis.*
- <sup>8</sup> See Martin 1984, 382–7; Mundell Mango & Bennett 1994, 38–54.
- <sup>9</sup> Baratte 2002; Hobbs 2006, no 1983. Illus 16.2, nos 31–6 in this paper takes the shape of the lidded vessel from those in the Carthage treasure; Baratte 2002, fig 26–34.
- <sup>10</sup> Painter 1977; Johns 2002; Hobbs 2006, no 1998.
- <sup>11</sup> Mundell Mango & Bennett 1994; Hobbs 2006, no 2025.
- <sup>12</sup> Cahn & Kaufmann-Heinimann (eds) 1984, Taf 147.
- <sup>13</sup> Painter 1977, 27, no 4, pl 10.
- <sup>14</sup> On Late Antique banquets see Dunbabin 2003.
- <sup>15</sup> Serving dishes: 'Auftragplatten' in German; see below. Bowls with horizontal rims: 'Horizontalrandschalen' in German. Examples: Curle 1923, pl 14.
- <sup>16</sup> Examples: Curle 1923, figs 41-8; pl 26 (nos 97-106).
- <sup>17</sup> Examples: Curle 1923, pl 17, 18B (no 30), 19 (nos 31, 32).
- <sup>18</sup> For the literature cited in the right-hand column of the table see the bibliography and list of hoards (Liste der Hortfunde (HF)) in Guggisberg 2003, 333–46.
- <sup>19</sup> A 'kymation' or 'kyma' (Greek for a 'wave') is a running decorated ornament, mostly used in Greek art and architecture on façades or columns. It consists usually of stylized plant-elements.

#### References

- Baratte, F, Lang, J, La Niece, S & Metzger, C 2002 Le trésor de Carthage: Contribution à l'étude de l'orfèvrerie de l'antiquité tardive. Paris: Editions CNRS (Etudes d'Antiquités Africaines).
- Binsfeld, W 1979 'Der 1628 in Trier gefundene römische Silberschatz', *Trierer Zeitschrift* 42, 113–27.

- Cahn, H A & Kaufmann-Heinimann, A (eds) 1984 Der spätrömische Silberschatz von Kaiseraugst (Kt. Aargau). Derendingen, Solothurn: Stiftung Pro Augusta Raurica (Basler Beiträge zur Ur und Frühgeschichte Bd 10).
- Curle, A O 1923 The Treasure of Traprain. A Scottish Hoard of Roman Silver Plate. Glasgow: Maclehose, Jackson & Co.
- Drexel, F 1915 'Über einen spätantiken Silberteller mit mythologischer Darstellung', Jahrbuch des Deutsches Archäologisches Instituts 30, 192–211.
- Dunbabin, K M D 2003 The Roman Banquet. Images of Conviviality. Cambridge: Cambridge University Press.
- Guggisberg, M A 2003 Der spätrömische Silberschatz von Kaiseraugst. Die neuen Funde. Augst: Römerstadt Augusta Raurica (Forschungen in Augst 34).
- Hobbs, R 2006 Late Roman Precious Metal Deposits c AD 200-700. Changes over time and space. Oxford: Archaeopress (BAR International Series 1504).
- Johns, C 2002 'Mildenhall Hoard', *Reallexikon der Germanischen Altertumskunde*, second edition, 20, 23–7. Berlin and New York: Walter de Gruyter.
- Martin, M 1984 'Stempel, Gewichtsangaben und Inschriften', in Cahn & Kaufmann-Heinimann (eds), 382–92.
- Martin-Kilcher, S 1984 'Römisches Tafelsilber: Form- und Funktionsfragen', *in* Cahn & Kaufmann-Heinimann (eds), 393–404.
- Mundell Mango, M & Bennett, A 1994 *The Sevso Treasure I.* Ann Arbor, MI: Journal of Roman Archaeology (Supplementary Series 12 Part I).
- Painter, K S 1977 The Mildenhall Treasure. Roman Silver from East Anglia. London: British Museum.
- Painter, K S 2006 'Traprain Law Treasure', in Hartley, E, Hawkes, J, Henig, M & Mee, F (eds), Constantine the Great: York's Roman Emperor, 229–46. York: York Museums Trust.
- Stukeley, W 1736 An Account of a Large Silver Plate of Antique Basso Relievo, Roman Workmanship, Found in Derbyshire, 1729. London: G Vander Gucht.
- Toynbee, J M C & Painter, K S 1986 'Silver picture plates of late antiquity: AD 300 to 700', *Archaeologia* 108, 15–65.