# Rethinking the date and interpretation of the Thetford treasure: a 5th-c. hoard of gold jewelry and silver spoons

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**Abstract:** This re-evaluation of the Thetford hoard proposes a new date for its burial in the 5th c. CE (ca. 420s–40s), significantly later than the established date of the 380s–90s. The redating is based on comparative material from context-dated grave and hoard finds from across the western Roman Empire. At least 17 hoard artifacts are argued to have been made within the 5th c. The Thetford treasure is a key point of reference in dating artifacts, and therefore a new date, if accepted, will prompt further re-evaluation of material and significantly change our understanding of this key transition period.

The interpretation of the hoard is also revisited. The wide cultural connections that can be demonstrated in the jewelry reflect its assembly in a period of migration and displacement, and there is evidence that its economic value may have become paramount in the latest phase of the assemblage's use. Moreover, the revised date sets a new context for the hoard burial, after economic collapse and political breakdown in Britain. The article advocates for the potential role of wealthy religious sites like Thetford in filling the vacuum left by the collapse of Roman state authority in Britain.

**Keywords:** hoards, Roman jewelry, Roman spoons, end of Roman Britain, treasure, post-Roman Britain

The Thetford treasure was found by a metal detectorist trespassing on a construction site at Fison's Way on Gallows Hill, Thetford in 1979. Its context is documented both in the hoard catalogue and in an excavation report. Although the circumstances of recovery were difficult, and it is possible some objects were lost, the internal associations between the objects in the hoard (technological, compositional, and stylistic) documented in its initial study mean we can be confident the surviving objects belong together, and they were published and interpreted as such.

Previous activity on the site included the construction of a large enclosure complex interpreted as an Iron Age shrine. The next significant activity was Late Roman, unfortunately poorly recorded. Several thousand Roman metal objects were apparently recovered by metal detectorists, including many Roman coins. Only a small proportion were documented. Of these, most coins dated to 364–78, with only one from 395–402. The hoard itself was associated with a post-built timber structure, possibly within it, although the evidence is ambiguous and the deposit could have occurred after the dismantling of the building.<sup>3</sup> Two Late Roman coin hoards are also reported from the area. The first is a Theodosian (Period 20) hoard, found ca. 450 m from the treasure findspot (Portable Antiquities Scheme [PAS] IARCH-E569F9) near one of a pair of mounds (Historic Environment

Gregory 1991, 1–9 and 111–14; Johns and Potter 1983, 15–19.

Johns and Potter 1983.

<sup>&</sup>lt;sup>3</sup> Johns and Potter 1983, 18.

<sup>1</sup> 

Record nos. HER5744 and HER5745) that would have been extant features at the time of burial. The second is a later, poorly documented hoard from the same area, with a reported terminus post quem (TPQ) of 392–94.

The treasure consisted of 81 objects, including 22 gold finger-rings, other gold jewelry, and 36 silver spoons or strainers. A shale box contained some jewelry, with the other objects found close to it.<sup>4</sup> Unfortunately, no coins were present among the recovered objects, presenting a dating problem for its researchers, but Catherine Johns and Tim Potter eventually concluded that "manufacture and burial probably took place in the 380s or early 390s."<sup>5</sup>

## The dating in the catalogue

In Johns and Potter's publication, the difficulties of dating the artifacts were extensively discussed. Many of the finger-rings and bracelets were described as unusual and hard to parallel.<sup>6</sup> The spoons were easier, with some later 4th-c. or early 5th-c. contexts for parallel objects. In dating the hoard, the most important and, to Johns and Potter, latest-dating artifacts were a set of gold finger-rings with filigree spiral decoration (cat. nos. 10, 11, 12, 14, 15), finger-ring no. 16, and the gold belt buckle (this last paralleled in the Ténès hoard, thought to be early 5th c. in date). For the finger-rings, comparative material from Romano-British coin-dated hoards (Canterbury, ca. 400; Whorlton, ca. 410-25; Tuddenham St Martin, early 5th c.; and Terling, ca. 420) apparently formed a robust evidence base. All of these except Terling are Reece Period 21 hoards and have latest coins of 395–402; Terling, exceptionally, is a Reece Period 22 hoard, with coins minted 404–8. A similar early 5th-c. date for the burial of the Thetford hoard, however, was not proposed by Johns and Potter. In their view the filigree-decorated rings dated to the second half of the 4th c.8 With both manufacture and burial proposed to have been within the same decade (above), any use-period would be short according to this timescale. Many hoards of a similar period show, by contrast, evidence of assembly over a long period of time (discussed further below). Moreover, since the catalogue's publication, the burial dates of the Romano-British hoards used as comparative evidence by Johns and Potter have been questioned. Older scholarship on hoards dating after 388 CE (Reece Period 21 onwards) suggested hoard deposition shortly after the mint dates of the coins. 9 More recently, debate on likely circulation periods, and evidence from the physical appearance of the coins, has cast doubt on this. It is now accepted that silver coins may have continued to circulate later into the 5th c., giving a later possible end date for the assembly of Period 21 hoards, <sup>10</sup> and so also for any assemblages with comparable objects, like Thetford.

The overall dating of the Thetford jewelry was clearly problematic, and a wide range of parallels were discussed by Johns and Potter. These included objects of later stylistic date,

<sup>&</sup>lt;sup>4</sup> Johns and Potter 1983, 11–14.

<sup>&</sup>lt;sup>5</sup> Johns and Potter 1983, 11.

<sup>&</sup>lt;sup>6</sup> Johns and Potter 1983, 24–25, discussing cat. nos. 1–6 and 8–9; see also individual catalogue entries.

<sup>&</sup>lt;sup>7</sup> Johns and Potter 1983, 44.

<sup>&</sup>lt;sup>8</sup> Johns and Potter 1983, 24, 26.

<sup>&</sup>lt;sup>9</sup> See summary by Guest 2005, 16–21; Burnett 1984.

Abdy 2020; Abdy 2013; Abdy 2009; Reece 2015; Lockyear 2012; Guest 2005.

in the 5th c., as well as further context-dated finds. In fact, more than 30 of the 81 objects in the hoard (37%) are noted as having parallels to objects with either a stylistic or a contextual date of the 5th or even 6th c. in the published catalogue (1–7, 10–13, 15–16, 21, 26–27, 30, 50–65). For example, a 6th-c. parallel was cited for cat. nos. 2–3: a finger-ring from Torriano (along with two similar examples without context). Johns and Potter ultimately dismiss this ring group by saying the dating evidence is not definite and, furthermore, question whether the manufacturing method is the same as for the Thetford rings. The Torriano ring was, however, from a dated grave, not mentioned by Johns and Potter, and descriptions now available make clear it was made in the same way as its Thetford comparators. Finger-rings of this type will be further discussed below.

The 5th-c. Ténès hoard was an important comparator. Johns and Potter cite an early 5th-c. date for it, compatible with the proposed 380s–90s date for Thetford. Items from the Ténès hoard have since been the subject of wider study. An unusual crossbow brooch in the hoard (a near-identical example comes from the early 6th-c. Desana hoard) has been dated anywhere between the early 5th c. and early 6th c., for example. If we examine Heurgon's original dating of the Ténès hoard, the date of 429 is only one possibility that he proposes (although the one widely accepted in subsequent literature). He also considers a later date, pointing out that the cross pendants attached to a Ténès brooch are anachronistic in this early 5th-c. context and only find parallels after 450 CE. The pendants may have been added to the brooch later. This is no doubt why jewelry historian Jeffrey Spier cites the late 5th c. for the date of the Ténès hoard. Given the number of comparisons made between Ténès and Thetford items by Johns and Potter, this strengthens the case that the deposition date of the Thetford hoard needs reassessment.

Since some relevant new finds have been published since 1983, new evidence can be introduced, as well as extant older literature that was previously overlooked. The Hoxne hoard, for example, found more recently than Thetford, contains many very similar objects, but also, importantly, coins dating to 407–8. It was accordingly given a later TPQ than Thetford, of possibly 410–20, or at the earliest, after 407–8. By the time it was published, scholars were increasingly questioning Roman Britain's conventional end date of 410 CE. Yet despite the new evidence from Hoxne and the re-evaluation of Period 21 hoards

<sup>&</sup>lt;sup>11</sup> Johns and Potter 1983, 81, 24.

<sup>&</sup>lt;sup>12</sup> Aimone 2010, 175–78.

<sup>&</sup>lt;sup>13</sup> Johns and Potter 1983, 28, 71–72.

Eger 2012, 106; Aimone 2011, 580–81, 609–10; De Palol and Ripoll 1989, 61; Pröttel 1988, 370; Bierbrauer 1975, 123, 205. All agree the brooch type is transitional between Keller/Pröttel Type 6 (depicted on the Stilicho diptych ca. 390) and Pröttel Type 7 (from Childeric's grave, dating to 481), but they diverge in their estimates of its dating.

<sup>15</sup> Heurgon's exact date of 429 is unduly influenced by the date of the Vandal invasion of Africa.

<sup>&</sup>lt;sup>16</sup> Heurgon 1957, 75–79.

Spier 2012, 65, 94. According to Spier, cross pendants become popular in the late 5th c. (Spier 2012, 93). Examining context-dated examples, cross pendants of the same shape as those from the Ténès hoard (flat, with flaring arms) generally occur in archaeological contexts from 400 onwards, with gold examples among the earliest material; e.g., from the Reggio Emilia hoard (Khairedinova 2012, 422–27).

Johns 2010, 201. In what follows, I refer to the TPQ dates of the Romano-British hoards only, as burial dates are problematic.

more widely, the date of the Thetford hoard has never been reconsidered. This paper attempts to do just that. Firstly, the dating will be re-evaluated, and following this, a new interpretation of the hoard will be proposed, considering both new evidence and new interpretative perspectives. I make no attempt to re-evaluate every single object. Most attention is given to those objects important in establishing the TPQ of the hoard overall, following the good practice of Johns and Potter by making evaluations mainly based on context-dated comparisons, rather than relying on parallels that only have a stylistic date. Unfortunately, Britain is a province that lacks rich grave assemblages that include precious objects in this period, so most of the comparative material comes from continental Europe. Grave contexts are felt to be considerably more reliable than hoard contexts for comparison (although the latter have inevitably had to be used too). It is becoming increasingly clear that hoards often contain non-coin objects of widely disparate date, which were evidently in circulation over a long period. Grave contexts are more likely than hoards are to represent contemporary assemblages. They can be assigned closer and more accurate dates, although they can sometimes contain curated objects.

## Re-evaluating the dates of the finger-rings and bracelets

Thetford cat. nos. 10, 11, 12, 13, 15

We will first examine this group of finger-rings, important to the original dating. Setting aside the Romano-British hoard contexts above, further context-dated comparisons can be made (Fig. 1). Comparative material must be closely similar to the Thetford rings, since gold filigree-decorated rings continued in production throughout the 5th and 6th c., with ongoing stylistic development.<sup>21</sup>

Parallels (not identified by Johns and Potter) from Late Roman cemeteries in northern Gaul exist for cat. no. 15 in this group, which has a cable-decorated hoop edged with milled wire ending in ramshorn spirals next to the bezel, and a relatively high rectangular box bezel with a green glass setting. The first example is from a female grave at Villers-sous-Erquery. From the brooch types that the grave contains, this ring can be placed in Böhme's Stufe 2, 400–35. The second is from grave 56/A at Spontin, not specifically dated, but the cemetery is thought to have been occupied ca. 380–420. Although only antiquarian drawings of the rings are available, these are sufficiently detailed to show that both are a close match with Thetford, with a rectangular bezel with stone or glass setting surrounded by a roped flange and a flat hoop with a central cable pattern edged with wire. The comparable Thetford ring has noticeable use-wear, suggesting long use before deposition.

The evidence from this group of rings, collectively assessed, does not provide strong grounds for a significantly different date for Thetford. It does suggest, however, that Johns and Potter should have allowed for a longer use period, especially since most of the evidence for wear occurs in this group of rings (cat nos. 11, 12 and 15; wear is discussed further below).

<sup>&</sup>lt;sup>19</sup> Further examples that have provenance but are less well dated are discussed below.

See, for example, Aimone 2010 (Desana hoard), plus the Ténès hoard discussed above, and the La Alcudia hoard with latest coins of 408–10 but 6th-c.-style jewelry (Folqués 1949, 512–13).

<sup>&</sup>lt;sup>21</sup> Illustrated in Hadjadj 2007, 94.

<sup>&</sup>lt;sup>22</sup> Johns and Potter 1983, 91 and fig. 14.

<sup>&</sup>lt;sup>23</sup> Böhme 1974, 336–37, pl. 146 no. 7; Böhme 1974, 24, 155–57 and Böhme 1987 for revised dating.

Vrielynck 2015, 70 no. 1; 51–52 on dating.

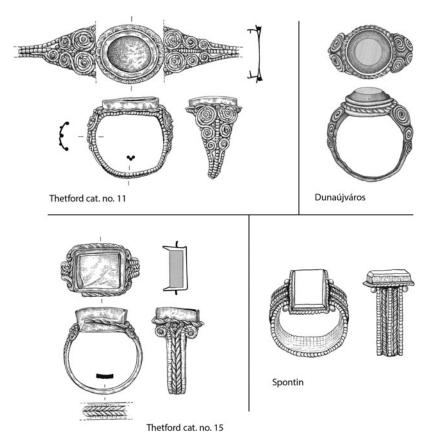


Fig. 1. Thetford cat. nos. 11 and 15 (© The Trustees of the British Museum [used online under a CC BY-NC-SA 4.0 license]), left, compared with finger-rings from Dunaújváros /Intercisa and Spontin, right (Bóna & Vago 1976, pl. XXVI gr 19a and Vrielynck 2015, 70 no.1, redrawn by Lloyd Bosworth).

Yet the ring group is not, from new evidence, the most important for dating the hoard. Comparable material for multiple further Thetford finger-rings (all described as unusual by Johns and Potter) plus additional objects, can be found in context-dated artifacts from grave and hoard finds dating further into the 5th c., considered next.

Thetford cat. nos. 5, 6, and 7

Cat. nos. 5 and 6 feature dolphins clasping the ring bezel in their open jaws (Fig. 2). The only dated parallel cited is a ring set with a mid-5th c. coin, which has crouching hares on its shoulders and so is not very similar. The catalogue also mentions a just-discovered dolphin-shouldered ring from Canterbury.<sup>25</sup> Published details are now available for this; the animal has closed jaws, and what appear to be ears and a crest/mane. The context date is 350–450.<sup>26</sup> Dolphin motifs are also common on Late Roman belt fittings of similar date range.<sup>27</sup> A much better comparative example, however, comes from a grave at Kudiat-Zateur in Tunisia (Fig. 2).

<sup>&</sup>lt;sup>25</sup> Johns and Potter 1983, 83.

<sup>&</sup>lt;sup>26</sup> Blockley et al. 1995, 1003–4, cat. no. 217, fig. 420.

<sup>&</sup>lt;sup>27</sup> Henry 2022, 81–89; Sommer 1984, 20–40 and 74–80.

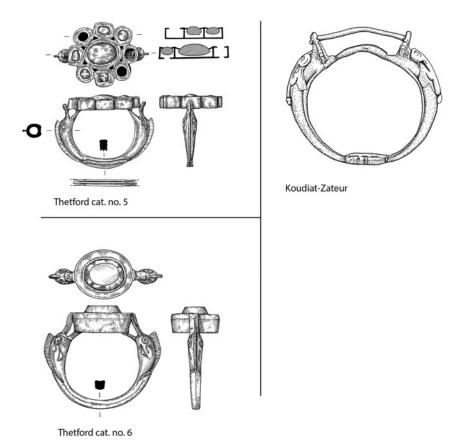


Fig. 2. Thetford cat. nos. 5 and 6 (© The Trustees of the British Museum [used online under a CC BY-NC-SA 4.0 license]), left, compared with finger-ring from Kudiat-Zateur, right (redrawn by Lloyd Bosworth from photograph on website Foreigners in Early Medieval Europe, https://www.rgzm.de/foreigners/frame.cfm? Language=UK)

Christoph Eger describes the ring, noting Thetford material as the best parallel; the grave is dated to the middle third of the 5th c. from its brooches and belt-fittings.<sup>28</sup> The roughly triangular shape extending from the dolphin's eye is a point of detail shared with Thetford cat. no. 6, while the varying ring shape at the back of the hoop, and the decoration of this area with punched dots, are shared with Thetford cat. no. 5. Two further dolphin-shouldered rings come from hoards of the second half of the 5th c.: one from Ratiaria, Bulgaria; the other from Piazza della Consolazione, Rome.<sup>29</sup> Like the Thetford

Eger 2001, 367, 370, fig. 5 no. 4; the Kudiat-Zateur grave includes material of diverse cultural origin including gold appliqués and unusual brooch types associated with the middle Danube region. It has been suggested it relates to Germanic settlement in northern Africa (Kazanski 2020, 207; Eger 2001, 378–89). Germanic cultural influence would be more widely agreed upon (see Von Rummell 2007, 249–56, 270–337, 404–5). A bias towards precious jewelry being found in Germanic-influenced 5th-c. grave contexts results from the burial rite, dressed burial, when more widely, unfurnished graves were becoming the norm, as observed by Schulze-Dörrlamm and Pülz (2020, 7). The contexts thus tell us nothing about the range of putative wearers.

Manière-Lévêque 1997, 81–82, pl. 1B; Giorgetti 1988, 30–32, figs. 2–3; Spier 2012, 154; Anon. 1957, no. 93; on the hoards' dating, Baldini Lippolis 1999, 35; Manière-Lévêque 1997, 82–83.

rings, in each case the dolphin has wide open jaws, and a varying, narrower ring shape is seen at the back of the hoop. Both have high circular bezels that look stylistically later than Thetford cat. no. 6 (high bezels are typical of rings of the late 5th and 6th c.). These bezels are more similar to Thetford cat. no. 7 (which has birds rather than dolphins supporting a ribbed cantharus). A further dolphin-shouldered ring with a stepped bezel and vertical strips that give the effect of a ribbed cantharus comes from a dated grave at Ossmannstedt (dated 460/70 CE, from the grave assemblage as a whole).<sup>30</sup> The dolphin has a slight crest, and eye detail similar to the Thetford ring. The Ossmannstedt ring's stepped bezel, not shared with the Thetford rings, is characteristic of other rings dated to the late 5th c. (see below). Remarkably, a letter by Avitus of Vienne, dated to 506/7, describes a commission for a dolphin-shouldered ring, specifying a ring with "miniature dolphins" and a diamond-shaped stone setting. The ring was to be made with a doublesided, pivoting signet.<sup>31</sup> This corresponds well to the extant Kudiat-Zateur ring, which has a diamond-shaped setting (now empty) and a gold wire forming an axis for a perforated gem. These examples, together with the lack of 4th-c. parallels for rings with modeled dolphins, make it unlikely that the Kudiat-Zateur ring is a curated, heirloom item.

The number of parallels from dated contexts encourage confidence that the Thetford dolphin- and bird-shouldered rings belong to 5th-c. types. The middle third of the 5th c. is most likely, based on the context date of the closest example, from the Kudiat-Zateur grave. One of the dolphin rings has a large bezel set with multiple gems (Thetford cat. no. 5), which feature will be discussed next, along with the other Thetford jewelry with multi-cellular gem settings.

## Thetford cat. nos. 5, 8, and 27

The objects in this group all feature multiple gem settings: on cat. nos. 5 and 8, forming a flower-shaped bezel, and on cat. nos. 8 and 27, also constituting the hoop, with the cells soldered together side to side to create this. The best-dated parallel for this feature is a Ténès hoard bracelet. As noted above, the TPQ for the Ténès hoard is probably late 5th c.; however, since this hoard also includes 4th-c. material, further context-dated parallels are desirable. The dolphin-shouldered ring from Kudiat Zateur, above, is the best parallel for cat. no. 5. Further comparative examples from dated contexts for cat. nos. 5 and 8 have also been identified. A bronze ring with a cross-shaped multi-gem setting from Bregenz (cast, but with the effect of individual cells) comes from grave 868, dated to 410–30. A finger-ring from Ephesus features a multi-gem flower-shaped setting and (possibly) zoomorphic shoulders, although the bezel is not as close to the Thetford material as the previous examples (Fig. 3). The shoulders possibly depict snakes. It was found in a (probably late) 5th-c. context.

<sup>&</sup>lt;sup>30</sup> Rettner 2004, 268–69, fig. 10; see also Timpel 2003, pl. 11d.

Avitus of Vienne, *Epistula* 87 (96.17 Peiper) (Shanzer and Wood 2002, 253–55, and 251 on the dating of the letter from a historical reference).

Johns and Potter themselves noted that cat. no. 5 was far more similar to Late Antique and migration-period jewelry than to Roman Imperial styles (Johns and Potter 1983, 83).

<sup>&</sup>lt;sup>33</sup> Johns and Potter 1983, 97; Spier 2012, 65.

<sup>&</sup>lt;sup>34</sup> Konrad 1997, 85–86, 245, fig. 8; the grave has no artifacts other than the finger-ring but can be dated from its spatial location in the cemetery (144–45).

Pülz 2020, 78, cat. no. S 184 and color pl. 26; on dating of building phases, see Lang-Auinger 2007, 7; Alzinger 1972–75. A ring with a multi-gem setting from the Ratiaria hoard of the second



Fig. 3. Multi-gem jewelry from Ephesus, left (Pülz 2020, color pl. 26, cat. no. S184, https://creativecommons.org/licenses/by/4.0/deed.en), and Hoxne, right (© The Trustees of the British Museum [used online under a CC BY-NC-SA 4.0 license]).

Multi-gem panels attached to other types of jewelry such as the Hoxne body chain (Fig. 3) provide further comparisons.<sup>36</sup> Although Johns suggested a late 4th-c. date of manufacture for the Hoxne item, a 5th-c. date for these panels has been suggested based on contemporary depictions as well as context-dated finds.<sup>37</sup>

Thetford cat. nos. 2-4, 9, 17, and 19

Three rings with hoop decoration representing wreaths of lanceolate leaves, visible, especially, on their expanded hollow shoulders (cat. nos. 2–4, shown in Fig. 4) are said in the catalogue to have designs with "no close parallel."<sup>38</sup> Nor do extensive catalogues or typological surveys of Roman rings published since then contain any parallels.<sup>39</sup> They were described as unworn and in pristine condition, and were probably buried soon after manufacture, making them crucial to our re-evaluation. Furthermore, Thetford cat. nos. 9, 17, and 19, although differently decorated, share multiple features with this ring group: hollow shoulders, the varying form of the hoop, and the appearance of the bezel.<sup>40</sup>

Well-dated comparative examples exist for the wreath-decorated rings in Late Antique material from continental Europe – with one example already noted by Johns and Potter, the ring from the Torriano grave mentioned above. Bierbrauer sets out the dating evidence. The grave contains brooches that are dated 450–500, as well as 5th c.-style bracelets. He dates the ring form, the same as that of Thetford cat. nos. 2–3 (with convex, semi-circular sectioned hoop made from sheet metal, expanding towards the bezel) to the late 5th to mid-6th c. based on context-dated examples from mostly northern Italian grave and hoard finds including Torriano. 42

half of the 5th c. is less similar, with fewer settings projecting individually (Manière-Lévêque 1997, 81–82, pl. 1C; Giorgetti 1988, 31–32, figs. 4–5).

<sup>&</sup>lt;sup>36</sup> Johns 2010, 27–28.

<sup>&</sup>lt;sup>37</sup> Schulze-Dörrlamm and Pülz 2020, 11–13.

<sup>&</sup>lt;sup>38</sup> Johns and Potter 1983, 81.

<sup>&</sup>lt;sup>39</sup> For example, Cool 1983; Guirard 1989; Riha et al. 1990; Henig and Macgregor 2004.

<sup>&</sup>lt;sup>40</sup> Cat. no. 9 was confirmed hollow by an X-ray commissioned by senior curator Richard Hobbs (O'Flynn and Mongiatti 2023).

<sup>&</sup>lt;sup>41</sup> Bierbrauer 1975, 111, 175–76.

<sup>&</sup>lt;sup>42</sup> Bierbrauer 1975, 177–78; see also Spier (2010, 13–15 and pl. 2–3), who suggests a late 5th-c. date; and Aimone 2010, 176, who proposes a date of ca. 450–500.

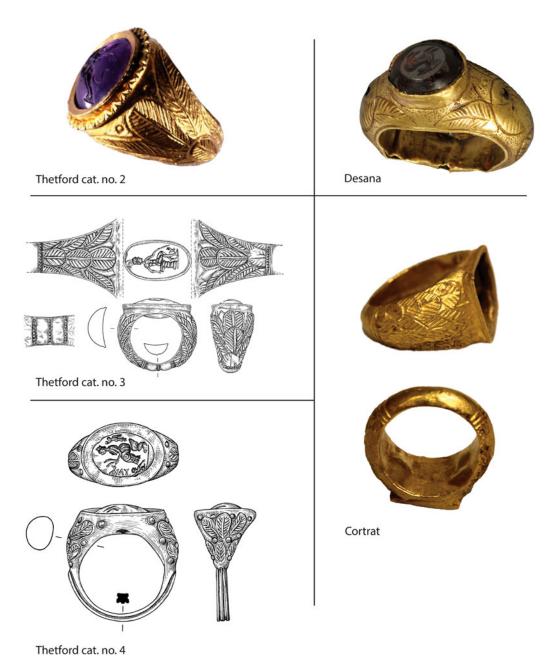


Fig. 4. Thetford cat. nos. 2, 3 and 4, left, (© The Trustees of the British Museum [used online under a CC BY-NC-SA 4.0 license]) compared with finger-rings from Desana (Turin, Palazzo Madama – Museo Civico d'Arte Antica. By courtesy of Fondazione Torino Musei) and Cortrat, right (photo and copyright © Musée d'Art et d'Archéologie de Châtillon-Coligny).

Among the rings of this group discussed by the above authors, examples from northern Italy exist that have closer decoration to the Thetford rings than the Torriano find, with its inhabited scroll motif. In these, both the ring form and the wreath pattern of symmetrical lanceolate leaves springing from a point at the center back of the ring match Thetford cat. nos. 2–4. The first comes from the Reggio Emilia hoard, with earliest possible deposition

date of 474–91 CE from associated coinage. <sup>43</sup> The second comes from the Desana treasure (Fig. 4). Aimone notes the close similarity between this ring and the Thetford leaf-embossed rings; it has both embossed and engraved decoration. <sup>44</sup> Unfortunately, the Desana objects span a wide date range. The latest objects are late 5th–early 6th c. in style. <sup>45</sup> I have identified a further example from grave 6, Cortrat, now in the collection of the Musée d'Art et d'Archéologie de Châtillon-Coligny (Fig. 4). This ring has the same form and embossed wreath decoration as Thetford cat. nos. 2–4. It has a square rather than oval or circular bezel, a feature it shares with Thetford cat. no. 9. The grave dates to ca. 400–435 based on the tutulus brooches. <sup>46</sup> Other objects it contains, such the large bronze bowl with pearl-embossed rim and a zoomorphic comb fragment, are artifact types that are typical of this date range but also found in later contexts. <sup>47</sup>

Another dated finger-ring diverges more from the Thetford examples, but still shares multiple features with them. Discussed by Spier, it has a hollow hoop widening towards the bezel, an embossed lanceolate leaf pattern, a high, flaring stepped bezel, and a gem shape typical of the second half of the 5th c.<sup>48</sup> The ring is unfortunately unprovenanced but can be dated by an inscription and portrait of Theodosius II (408–50), depicted in his mature bearded portrait style, current only from ca. 421 CE onwards.<sup>49</sup>

Thetford cat. nos. 4, 9, and 17 can be compared with a finger-ring from Rezé (a suburb of Nantes) decorated with vine-scroll decoration made from applied wire (Fig. 5). It was found in a sarcophagus in a Merovingian-period cemetery, but unfortunately there is no further dating evidence. It is set with a hexagonal emerald stone, sharing this feature, as well as its overall shape and rectangular bezel, with Thetford cat. no. 9.<sup>50</sup> Its decoration is different, though, and like Johns and Potter, I have not been able to find a finger-ring with similar embossed face-mask decoration.<sup>51</sup> The face mask, though, is a motif that became popular on jewelry and other objects in the 5th c., found in Germanic areas beyond the (former) Roman frontier and inside it, and with mixed cultural origins.<sup>52</sup> Good parallels can be identified, with the same schematic frontal presentation, narrow face, and detail of brushed-back hair, straight mouth line, and in some cases lentoid eyes. A gold necklace

Spier 2012, fig. 10.2, described as repoussé (that is, embossed); Bierbrauer 1975, 177–78, pl. 34, 1–1b; Degani 1959, 32, cat. no. 3.

<sup>&</sup>lt;sup>44</sup> Aimone 2010, cat. no. 27, 175–78 and fig. XV; Bierbrauer 1975, 177–78, pl. XII nos. 8–9.

<sup>&</sup>lt;sup>45</sup> Aimone 2010, 352.

<sup>&</sup>lt;sup>46</sup> Böhme 1974, 24, taking account of revised dating from Böhme 1987.

Escher 2005, 437–40; MacGregor 1985, 83–85; France-Lanord 1963, 28–29; Böhme 1987.

<sup>&</sup>lt;sup>48</sup> Spier 2010, 15; Spier 2007, 26.

<sup>&</sup>lt;sup>49</sup> Spier 2010, 15, pl. 3a–c; Carson et al. 1984, 74 on the portrait date.

Musée Dobrée, Nantes, acc. no. Pareanteau no. 22; Inv. 882.1.469; Pareanteau 1878, 56, pl. 28 no. 2. The museum catalogue description, consulted 21/11/2022, was formerly at https://www.musee-dobree.fr/jcms/navigation/collections/online-databases/general-collections/field/gallo-romain/bague-episcopale-en-eja\_115790. The filigree decoration is a point of comparison with Thetford cat. no. 17 but is more figurative in nature on the Rezé ring.

Johns and Potter comment that "in both form and decoration, this ring appears to be completely unique." The style of representation was felt to be non-Roman, featuring so-called Celtic characteristics, but this was judged difficult to account for given the late Roman date assigned to the hoard (Johns and Potter 1983, 86).

See Opreanu 2010.



Fig. 5. Thetford cat. no. 9 (© The Trustees of the British Museum [used online under a CC BY-NC-SA 4.0 license]), left, compared with a finger-ring from Rezé, Nantes, right (Numéro d'inventaire 882.1.469 © H. Neveu-Dérotrie / Musée Dobrée - Grand Patrimoine de Loire-Atlantique).

from a small hoard found near Pavia, for example, with TPQ from coins of 444–77, features multiple embossed masks with brushed-back hair. Further examples from northern Italy probably date to the end of the 5th c. (one depiction features brushed-back hair and a straight mouth line; the other is more schematic).<sup>53</sup> From beyond the frontier, comparisons can be made to gold bracteates with embossed masks dating to the second half of the 5th c. from Gerete, Dödevi, Fride, and Riksarve in Sweden (Fig. 6).<sup>54</sup> The Fride and Riksarve bracteates also have punched decoration of overlapping circles that is the same as that found on the back of the hoop of the Thetford ring.

The rings discussed above are the closest comparative examples to the Thetford group that have been discovered, and the clustering of dates, as well as late stylistic features on some examples, such as high bezels, makes it unfeasible that they were all produced much earlier and represent curated items. The examples closest to the Thetford leaf-decorated rings (cat. nos. 2–4) are the Reggio Emilia, Cortrat, and Torriano rings, with Cortrat's first third of the 5th-c. and Torriano's late 5th-c. context-dating the most reliable, as they are from graves rather than hoards. An early 5th-c. date seems unlikely given the clustering of this ring form otherwise in late 5th- and early 6th-c. contexts, but the Thetford

For examples from Italy, see Peroni 1967, 105, cat. no. 57, pl. X (Pavia necklace); Annibaldi and Werner 1963, 357–59, pl. 37, 39, and 42, cat. nos. 1–2 from Acquasanta; pl. 42 also shows a further example from Aquileia. Mask designs also occur on late 4th- to 5th-c. belt fittings, e.g., Hellenkemper 1979, 128–29, cat. no. 33, from Köln; Hawkes and Dunning 1961, 57, cat. no. 24, fig. 18 K, from Saltersford.

<sup>&</sup>lt;sup>54</sup> See Tóth 2016, 39–48 and figs. 33–37, 39, and 41–42; Axboe 1999 confirms the dating.

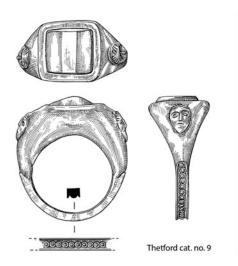




Fig. 6. Thetford cat. no. 9 decoration, left, (© The Trustees of the British Museum [used online under a CC BY-NC-SA 4.0 license]) compared to face masks and decoration on bracteate from Fride, right (from Toth 2016, fig. 42, © Balint Toth, by kind permission). Note also the similarity of the circle motif at the bottom and the hoop decoration on the Thetford finger-ring.

rings have no late stylistic features, so a date before the mid-5th c., perhaps the 430s or 440s, is probable.

Thetford cat. no. 21

Thetford cat. no. 21 is a gold ring with a narrow, ribbed hoop and circular box bezel embellished with two large pellets either side (Thetford cat. no. 23 is the same type but with a multigem anthropomorphic bezel). The bezel contains enamel with gold wire inlay of four pelta shapes around a central dot. Johns and Potter give a range of parallels for the ring form in Roman-period catalogues. None are from dated contexts nor match the Thetford ring exactly (most have oval bezels; none are circular). More broadly, rings with pellets either side of a box bezel, but without the specific feature of a ribbed hoop, can be best categorized within Guirard's Type 4. This ring form is long-lived, 3rd to 5th c., and Guirard notes that 28% of her finger-rings that are classified as Type 4 occur in "barbarian" graves.

Further evidence to date Thetford cat. no. 21 relates to its enamel setting (Fig. 7). The method of manufacture is described in the catalogue. The wire forming the pelta shapes was laid in a mold and the glass added (either in molten form or in powdered form, melted later). In the resulting setting, the wire is flush with the front surface of the enamel. For Johns and Potter describe the enamel setting as "extremely rare" and are unable to cite any context-dated parallels. Ancient enamel has, however, been the subject of

<sup>&</sup>lt;sup>55</sup> Johns and Potter 1983, 93; Marshall 1907; Henkel 1913.

Guirard 1989, 188, 191, fig. 25 no. 4c, 203, fig. 53 for chronology. There are no close parallels from dated contexts in Cool's compilation of finger-rings from Roman Britain (Group XXV Sub-group A, Cool 1983, 277–78, 1140–41, fig. 24).

<sup>&</sup>lt;sup>57</sup> Cowell et al. 1983, 60.

<sup>&</sup>lt;sup>58</sup> Johns and Potter 1983, 93.

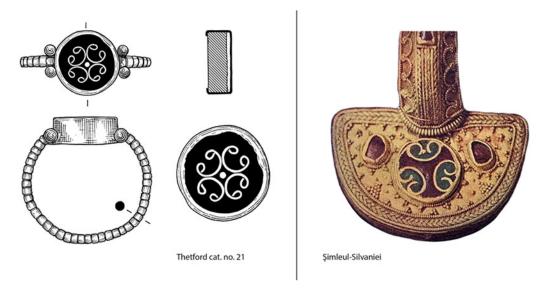


Fig. 7. Thetford cat. no. 21, left (© The Trustees of the British Museum [used online under a CC BY-NC-SA 4.0 license]), compared with the detail of enamel on a brooch from Şimleul-Silvaniei, left, now in the collection of the Hungarian National Museum (Brown 1915 pl. Gii, public domain).

further study since. From the above description, the Thetford enameled jewelry (this ring, and a Hercules club pendant, cat. no. 28) exhibits a different technique to Roman-period enamel from Egypt, in which wire is used to create cells, but the enamel fills only the cell bottom.<sup>59</sup> Nor is it like Roman enamel-set finger-rings from the western provinces, in which cast cells are filled with enamel. 60 It shows, conversely, a technique in which wire is used to construct the cell walls, but the enamel fills them flush to the surface.<sup>61</sup> The earliest-dated example of this technique discussed by Haseloff consists of roundels of enameled decoration on a pair of radiate brooches from Şimleul-Silvaniei (formerly Szilágysomyló) hoard II (Fig. 7). These are in a style that he dates to the 5th c.<sup>62</sup> The hoard itself dates to 425/433-450/66, based on the forms of the multiple pairs of brooches that it contains. Schmauder clarifies, from their shape, that the brooches with enamel roundels are among the earliest material in the hoard, dating to approximately 380/ 90-400/410.63 On the head-plate of each brooch is a circular, enameled roundel, with three outward-facing pelta shapes arranged around the edges. Since the roundels form a matching pair, they seem unlikely to have been re-set from earlier objects, and in any case, there are no earlier known parallels for this enamel technique, as Haseloff explains, so it is most likely the roundels were manufactured at the same time as the brooches.<sup>64</sup> Both the details of the enamel technique and the decorative motifs are shared by this brooch pair

<sup>&</sup>lt;sup>59</sup> Haseloff 1990, 16.

<sup>&</sup>lt;sup>60</sup> Guirard 1989, 186, fig. 23 no. 3c.

<sup>61</sup> Haseloff 1990, 16.

<sup>&</sup>lt;sup>62</sup> Haseloff 1990, 16; Schmauder 2002, vol. 2, 83, cat. nos. 6.1 and 6.2, pl. 171.

Schmauder 2002, vol. 1, 41–42. The comment about enamel in the footnote references the wrong brooches, cat. no. 5, instead of cat. no. 6.

It is Haseloff's view that the technique of the enamel roundels does not stem from the Germanic world but was probably borrowed from the eastern Mediterranean (Haseloff 1990, 16–17).

and Thetford cat. no. 21 (apparently unknown to Haseloff), which features a design of four outward-facing pelta shapes. The enameled roundels on the Şimleul-Silvaniei brooch pair are the best-dated parallel for the Thetford finger-ring enamel, and context dating available for the ring form, above, fits with this.

# Re-evaluating the dates of the necklace components

Thetford cat. no. 34

Cat. no. 34 is a necklace made from flanged beads (mostly conical), plus three oval beads with flanged ends (Fig. 8). Two of these oval beads are ribbed longitudinally (that is, on the same axis as the perforation) and the other has embossed circular decoration. The necklace is described as "very unusual." Johns and Potter compare its conical beads to a few ("much larger") beads from the Wincle hoard, dated to the 3rd c. from a ring and crossbow brooch. We can clarify that the brooch type (Keller/Pröttel type 1) is late 3rd—early 4th c. and is regional to the upper Danube. Roman-period necklaces composed of gold beads only, rather than gold spacers combined with other beads, became more popular from the 3rd c., and were particularly favored in the lower Danube region, which was strongly influenced by Hellenistic culture. It is here that we can also identify new parallels for all the bead types comprising Thetford cat. no. 34 (Fig. 8).

The conical bead type occurs in the Nicolaevo hoard, Bulgaria, with a 3rd-c. TPQ from coins. <sup>68</sup> In a catalogue of material from Serbia, conical and biconical gold beads are described more generally as common Roman-period finds. <sup>69</sup> The flanged type with embossed circular decoration has multiple parallels, such as a grave-find from Ostrov in southern Romania dated from the mid-3rd c. to the beginning of the 4th, gold beads attached to a cameo pendant found at Kostolac (Viminacium), Serbia, gold beads from Ušće, and gold beads on a necklace set with a coin pendant dated to the beginning of the 3rd c., from Dubravica (Margum), Serbia, all now in the collection of the National Museum of Serbia. <sup>70</sup> The latter coin-dated item also includes many beads that are similar to the Thetford conical type, formed from cones with their narrow ends attached to each other. Flanged longitudinally ribbed gold beads occur in the late 5th-c. Ratiaria hoard from Bulgaria. <sup>71</sup> A range of other examples of similar metal beads can be cited from both the middle and the lower Danube, with dates between the 3rd and the 5th c. <sup>72</sup> Another necklace with biconical gold beads similar to the Thetford conical ones and

<sup>&</sup>lt;sup>65</sup> Johns and Potter 1983, 101; Johns et al. 1980.

<sup>66</sup> Swift 2000, 13–15, 30–31, and fig. 22.

Deppert-Lippitz 1997, 76; Ruseva-Slokoska 1991, 11.

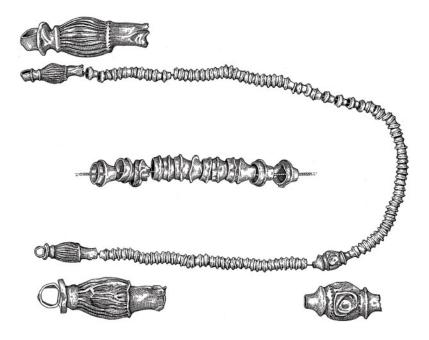
<sup>68</sup> Ruseva-Slokoska 1991, 209, cat. no. 288.

<sup>&</sup>lt;sup>69</sup> Popović 1996, 134–36.

Arbunescu 2017, 191, 195, 201, cat. no. 8; Popović 1996, 186, cat. no. 118, 192, and cat. no. 144; Popović (2001, 227–29) clarifies that the site location for cat. no. 118 has now been identified as Dubravica. See Popović 1996, 186, cat. no. 116, no provenance, and cat. no. 120, from Ušće near Obrenovac, Serbia, for further parallels with no context dating.

Giorgetti 1988. Johns and Potter date this type by comparison with two longitudinally ribbed flanged beads from a 5th-c. coin-dated grave (TPQ AD 411–13, grave 9) at Samson (Johns and Potter 1983, 26, 101; also noted by Deppert-Lippitz 1997, 69).

Ruseva-Slokoska 1991, 51–54, 145, 152, cat. nos. 112 and 137; Arbunescu 2017, 195;
 Deppert-Lippitz 1997, 70, fig. 4; Kiss 2001; Kiss 1995, 314–16.



Thetford cat. no. 34



Fig. 8. Thetford necklace cat. no. 34, top row (© The Trustees of the British Museum [used online under a CC BY-NC-SA 4.0 license]), compared with (middle row) gold conical beads from Bulgaria from the Nicolaevo hoard (redrawn by Lloyd Bosworth after Ruseva-Slokoska 1991, cat. no. 288, p. 209), and necklace from Dubravica (Margium), Serbia with biconical and flanged beads (© National Museum of Serbia, Belgrade, Inv. No. 641/III). Bottom row: detail of bead from Thetford cat. no. 34, left, compared with one from Ušće, Serbia, right (© National Museum of Serbia, Belgrade, Inv. No. 4027/III).

flanged gold beads, from Beiral, Portugal, is thought to have originated in the middle Danube area and to be of 5th-c. date. 73 The dating of the Thetford item is hard to refine between the 3rd and 5th c., but the cultural associations with eastern Europe are notable. A particular feature of Thetford cat. no. 34 is its short length of 25.6 cm. 74 This is too short to fit around the neck, even for a very young child.<sup>75</sup> Johns and Potter proposed that some of the individual beads must have been lost, although since the necklace was reportedly found in a shale box (extant), they acknowledge this would be hard to explain. The published figure also shows that both ends of the necklace are present, since two of the ribbed beads have a loop protruding from one end. The short length might instead show this "necklace" was designed to be pinned to the chest. This mode of use originates in Hellenistic jewelry, the styles of which strongly influenced Roman jewelry in the lower Danube region, and pinned necklaces are known there from the Roman period and in the middle Danube region in the 5th c.77 To give an example of known length, the 20-cm necklace from Beiral with some similar gold beads to Thetford cat. no. 34, thought to originate from the middle Danube, includes two looped pins. Pinar and Ripoll suggest the few finds further west of the middle Danube, such as the Beiral necklace, represent marriages with elite women from that area.<sup>78</sup>

## Thetford cat. no. 36

This item is a necklace with a loop-in-loop chain and a clasp modeled as a pair of snake heads with blue glass eyes, each with a protruding loop, fastened with a hook (Fig. 9). Johns and Potter observe that snakeheads are found widely in Roman jewelry and offer no context-dated parallels.<sup>79</sup> When the Hoxne hoard was found (TPQ 407–8 from coins, above), it contained a similar necklace. This has zoomorphic terminals depicting a pair of dolphins, with the same type of hook fastening (Fig. 9) and blue-and-red glass eyes.<sup>80</sup> Another, less similar example can be cited from the Cluj-Someşeni hoard in Romania, now in the National Museum of Romanian History (Fig. 9). This consists of a clasp modeled as a pair of gold snake heads with garnet-set eyes, each with an attached loop, plus a fragment of the chain.<sup>81</sup> The representation is schematic, with beaded gold wire outlining

<sup>&</sup>lt;sup>73</sup> Cardoso 2014, fig. 6; Pinar and Ripoll 2008, 114–15; Pinar Gil 2007, 168–73.

<sup>&</sup>lt;sup>74</sup> Johns and Potter 1983, 101.

<sup>&</sup>lt;sup>75</sup> See Swift et al. 2022, 154.

<sup>&</sup>lt;sup>76</sup> Johns and Potter 1983, 101–2 and fig. 20.

<sup>&</sup>lt;sup>77</sup> Popović 1996, 143–44, 151–52; Pinar and Ripoll 2008, 112–15 and fig. 11.

<sup>&</sup>lt;sup>78</sup> Pinar and Ripoll 2008, 114–15; see also Pinar Gil 2007, 177–78 and fig. 14.

Johns and Potter 1983, 103. A dated example is a relatively realistic snake terminal necklace in the National Archaeological Museum, Sofia (Ruseva-Slokoska 1991, 138–39, cat. no. 98), set with a medallion of Caracalla dating to 215 CE. Openwork roundels adjacent to fasteners are much more common in both the Roman and the Byzantine periods (Baldini Lippolis 1999, 117, fig. 50; 131–42). Chain necklaces and other jewelry with lion head terminals have been found in 5th-c. contexts (Pinar Gil 2007, 173, illustrated 171–72, figs. 7–9); since none have inlaid eyes, they are less similar to Thetford cat. no. 36 than the other examples discussed here.

Johns 2010, 30–31, 212, cat. no. 3, fig. 3.12–13. A close parallel to the Hoxne necklace is a fragment with a similar zoomorphic terminal from Dingley, Northamptonshire, PAS NARC-22EC08, although without inlaid eyes.

Schmauder 2002, vol. 2, 27–28, cat. no. VI 1.1 and 1.4, pl. 45. The similarity is also noted by Hilgner (2016, 4–5) in a discussion of a later, Anglo-Saxon necklace element.



Fig. 9. Thetford necklace clasp, cat. no. 36, above, compared with necklace clasp from Hoxne, below left (© The Trustees of the British Museum [used online under a CC BY-NC-SA 4.0 license]) and necklace clasp from Cluj-Someşeni, below right, from the collection of the National History Museum of Romania (© M.N.I.R. collection).

the head. Cloisonné garnet panels encircle each snake's neck, a notable difference from the Thetford example. The hoard has been dated to the second half of the 5th c. <sup>82</sup> Many comparable objects dating to the 5th c., although they are not necklace clasps, have zoomorphic terminals inlaid with cabochon settings that form the eyes; for instance, the two dolphin-shouldered rings above, from Ossmannstedt and Ratiaria, both from late 5th-c. contexts. The range of context-dated examples supports a 5th- rather than 4th-c. date for Thetford cat. no. 36.

## Jewelry manufacture

Before examining the spoons in the assemblage, let us consider the manufacture of the jewelry, which also illuminates chronological relationships between the objects. Johns and Potter proposed one workshop for the jewelry "on typological and metallurgical grounds," possibly in Gaul. The typological and metallurgical evidence that is cited to link the jewelry items in fact illustrates distinct sub-groups (Table 1). There is a difference between objects related stylistically and those linked as products of one workshop through metal composition or technical features. These are separated in the table below, with the latter the best evidence, though not secure proof, of workshop links. From the evidence presented in the catalogue we can establish several groups, summarized in Table 1.

Johns and Potter 1983, 26–27, 70, cat. no. 15 is mentioned as an exception to this.

<sup>82</sup> Schmauder 2002, vol. 1, 53.

Holmes 1983, 66–67. Johns and Potter suggest some jewelry can be linked through use of a small round punch (Johns and Potter 1983, 22); however, in the catalogue, Holmes notes proof of this (such as a repeated irregularity in the mark made) was not found (Holmes 1983, 67) so this has been omitted. Johns and Potter themselves point out a problem: the pendants in this putative group show wear, while the other objects do not, unlikely if they are a group of objects

Table 1. Stylistic and technical relationships among the jewelry

	Objects with compositional or technical links from Johns and Potter 1983, 22–23	Objects possibly linked to same workshop on stylistic grounds from Johns and Potter 1983, 21–23.	Objects also exhibiting significant stylistic similarities with the other rings in this group
Group 1	Finger-ring 12 and bracelet 24 very similar composition	Finger-rings 10 and 12 and bracelets 24 and 25 all share the same unusual hoop decoration	Finger-rings 11, 13, and 15 have related decorative elements (e.g., filigree spirals; roped wire surrounds to bezels)
Group 2	Buckle 1, finger-ring 23, chain necklaces 32 and 33 have similar composition re proportion of gold to silver		
Group 3	Enamel technique links pendant 28 to finger-ring 21	Pendants 28 and 29 linked through shared form and decorative detail	
Group 4		Finger-rings 2, 3, and 4 have same wreath decoration on hoop; finger-rings 5 and 6 both have dolphin shoulders and 7 has birds on shoulders; multi-gem setting of 5 then links further to multi-gem finger-ring 8 and bracelet 27. Cushion-shaped natural glass setting links finger-rings 7 and 17, and multi-gem bracelet 27.	A hoop that is hollow at the front but solid and rectangular or square at the back is a shared feature for 4, 5, 6, 9, 17, and 19, linking the wreath-decorated ring group to the dolphin/multi-gem group.

Chronological differences can be suggested between these groups based on the new dating evidence (except in the case of group 2, which has no particularly well-dated objects). <sup>85</sup> Group 1 is the earliest (parallels for finger-rings 10 and 12 have late 4th- to early 5th-c. grave contexts). <sup>86</sup> Group 3 objects may be of a similar or slightly later date, with a comparable enameled object dating to ca. 380/90–400/410 from a context of 425/

newly made in one workshop. I have also disregarded the link suggested between 9 and 23 on the grounds that both depict anthropomorphic masks, as they are quite different in overall appearance.

Feugère (1992, 130–35) proposes that the type of belt set in Group 2, with pearl-bordered plates, dates end of 4th to beginning of 5th c. but is influenced by the Thetford catalogue date in his assessment.

Johns and Potter also noted a close parallel for bracelets 24 and 25 in a pair from a 3rd-c. hoard from Lyon but argued against this indicating a comparable date for the Thetford bracelets (John and Potter 1983, 95).

433–450/66. Group 4 objects have dated parallels with contexts from the middle third of the 5th c. to the early 6th c.

The evidence of wear to the surfaces of the rings also correlates with these chronological groupings. Four finger-rings in group 1 show evidence of slight, moderate, or extensive wear (cat. nos. 11, 12, 13, and 15). Each of the objects in group 3 shows slight to moderate wear. No objects in Group 4, however, show any wear at all (further discussed below).

The groups may illustrate regional as well as chronological trends. Parallels for finger-rings from group 1 mostly come from Britain and northern Gaul. Johns and Potter give many examples of filigree spiral rings from Britain that are comparable to Thetford cat. nos. 10–12, and wider European examples.<sup>88</sup> Multiple further examples from Britain can now be cited, as well as two more rings from Dunaújváros, one from Spain's La Alcudia hoard, and two from sites in northern Gaul.<sup>89</sup> The large numbers of filigree spiral rings from Britain stem from hoarding practices at the time these rings were in circulation. We have vastly more Period 21 hoards from Britain than any other province,<sup>90</sup> and so they are overrepresented here compared to other areas. Yet one of the northwestern provinces still seems the most likely manufacturing location for the ring types in this group.

The comparative material for many of the finger-rings in group 4 is mainly from northern Italy, with further finds in the adjacent regions of Switzerland and central/western France. <sup>91</sup> Most of the examples are grave-finds, and it is possible the distribution is affected by regional trends in furnished burial in the 5th c.; however, two northern Italian hoard finds are also represented, and so workshops in northern Italy seem likely on the current evidence. The dolphin-shouldered and multi-gem finger-rings in Group 4 have extremely wide comparative material across diverse areas of Europe and in northern Africa, and so no conclusions can be drawn about these. <sup>92</sup> The

Summarized in Cowell et al. 1983, 61, table 7.

<sup>&</sup>lt;sup>88</sup> Johns and Potter 1983, 24, 86.

Further examples from Britain: Bowerchalke, PAS WILT-65BD43; Hoxne, Johns 2010, cat. no. 9; Silchester, Fulford et al. 1989, cat. nos. 3–4; Houghton, Surrey PAS SUR-05A704; east of Colchester, PAS ESS-E2A327. For the two further rings from Dunaújváros, see Alföldi 1957, 414–15 and pl. LXXVIII nos. 1–2. For the La Alcudia hoard, see n. 6. Abbeville: Pilloy 1880–1903, 263, and in the set of Abbeville plates, pl. V no. 5. Sissy: Boulanger 1902–5, pl. 9 no. 3. Parallels to Thetford cat. no. 15 from northern Gaul are discussed above.

<sup>&</sup>lt;sup>90</sup> Hobbs 2006, 53–55.

Most of this material, from dated contexts, is discussed with full references earlier on (three northern Italian sites, one in Switzerland, one site in each of western and central France). A further example of a leaf-embossed ring from the Louvre is thought to originate from Italy. It is close in form and decoration to Thetford cat. nos. 2–4 (Lewandowski 2007; Louvre acc. no. Bj1165). Another embossed ring of the same type comes from Cortona, Tuscany (British Museum acc. no. 1872,0604.313). A further comparator to the form of Thetford cat. nos. 4 and 9 is a PAS find from Bowes Area in County Durham, DUR-885FC8 (Westwood with Hobbs 2019). The solid back of the hoop is decorated with notched lines, and it has an unusual double-bezel set with emeralds in a square cushion-shaped cabochon setting. It can also be compared to a double-bezel ring from the late 5th-c. Reggio Emilia hoard: Degani 1959, pl. XXIa no. 3.

The multi-gem bezels of cat. nos. 4 and 8 have an excellent comparison in a finger-ring from Tournai (Hadjadj 2007, 325, cat. no. 425). See also Johns and Potter for a ring from Athens similar to cat. nos. 8 and 27 (Johns and Potter 1983, 85; British Museum acc. no. 1917,0501.858), and

chronological and regional differences make it clear the jewelry was made in multiple workshops, and it incorporates diverse cultural influences that will be further discussed below.

## Re-evaluating the dates of the spoons

The Thetford treasure includes 33 silver spoons. For most of the spoon types, date ranges are well established through presence in other 4th-c. hoards and late 4th- to early 5th-c. grave finds, and the attributions by Johns and Potter to the second half of the 4th c. are consistent with this. <sup>93</sup> Yet there is one spoon with an engraved cross (cat. no. 69). This motif replaced the chi-rho as the principal Christian symbol used in the 5th c. Taking this into account, the spoon may post-date 400. <sup>94</sup> Other chronologically late features evident on some of the Thetford spoons also need to be further discussed: firstly, the presence of zoomorphic offsets and secondly, handle inscriptions.

## Zoomorphic offsets

Johns and Potter suggest that the spoons have the same production date. In their overall summary, however, they note that long-handled spoons with zoomorphic offsets may be chronologically distinct. Two examples are shown in Figure 10. The animals depicted are not easily identifiable but include horses, and animals with projecting tongues. These spoons share other features too. Spoons with zoomorphic offsets also occur in the Hoxne hoard and the other Romano-British Period 21 and 22 hoards, and in the Dorchester-on- Thames spoon hoard (Oxfordshire). A coin-dated grave with a TPQ of 367–83 is cited for a zoomorphic-offset spoon from St Quentin. Rhe fact that most of the Thetford zoomorphic-offset spoons have bowl inscriptions appears consistent with this, since it is a feature commonly found on 4th- and early 5th-c. spoons and only rarely later on. There is a further example, from a late 5th- to early 6th-c. grave at Ditzingen, of a zoomorphic-offset spoon that is 18.5 cm long and so similar in dimensions to the examples from Romano-British hoards. Whether this represents continued production or a curated

further unprovenanced examples in Spier 2012, 62–65. The dolphin-shoulder rings are mostly from dated contexts and so references are given above.

<sup>&</sup>lt;sup>93</sup> Johns and Potter 1983, 44.

Watts (1988, 59) notes that earlier examples of the Greek cross in a Christian context are uncommon.

<sup>&</sup>lt;sup>95</sup> Johns and Potter 1983, 41, cat. nos. 68–72 and 75.

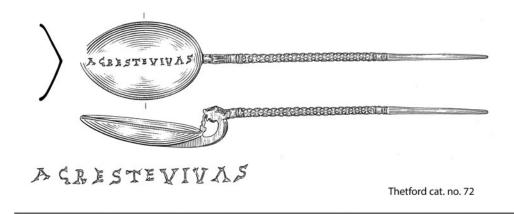
<sup>&</sup>lt;sup>96</sup> Johns and Potter 1983, 41, table 4.

Dorchester, Dorset: Dalton 1922, 90 and Mattingly 1922 for TPQ 395–402; Canterbury: with TPQ 395–402, Johns and Potter 1985, 331–33, 345–50, cat. nos. C8, C9, and C11; Dorchester-on-Thames: Johns and Potter 1985, cat. nos. D3, D4, and D5; Hoxne (TPQ 407–8): Johns 2010, cat. nos. 70–73, 106, 131–37, pp. 101–2, table 5.2, 123–24, 226–27, 232, 236–37.

Johns and Potter 1983, 39; Eck 1891, 299, grave 20, pl. 1.21. From the description (copper alloy coin of Gratian, Reparatio Reipublicae), we can clarify a narrower TPQ of 378–83 for this coin.

<sup>&</sup>lt;sup>99</sup> Martin 1984, 67–68; Böhme 1970, 187–88. The exception is Thetford cat. no. 75, with a handle inscription.

Hauser 1992, 23; Böhme 1970, 195–96; Mack 1967. Böhme places this in his 6th–7th-c. group; a narrower date range can be established from the brooch types in the grave (Mack 1967), dated



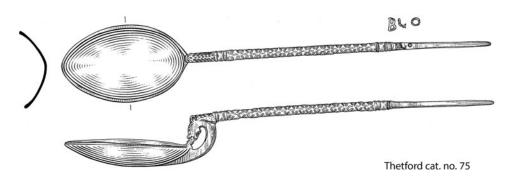


Fig. 10. Thetford spoons with zoomorphic offsets and heavily decorated handles (cat. nos. 72 and 75) (© The Trustees of the British Museum [used online under a CC BY-NC-SA 4.0 license]). Above, cat. no. 72. The head of the animal projects above the line of the bowl, and there is a bowl inscription. Below, cat. no. 75. The head of the animal is in line with the bowl, and there is a handle inscription above the decorated panel.

item is debatable. Unfortunately, I have not been able to identify any further examples from more recently published cemetery reports where spoons have been found in graves. <sup>101</sup>

Spoons with zoomorphic offsets also occur in much later, 6th-c. contexts in continental Europe. Those from the Desana and Isola Rizza hoards have pointed ends like Late Roman spoons, while others end in baluster moldings. Late Roman and early medieval spoons can be distinguished by size and weight. Zoomorphic-offset spoons from 6th-c.

late 5th to early 6th c. (Legoux et al. 2004 for chronology). The zoomorphic offset is rudimentary and there is no inscription.

For example, Krefeld-Gellep (Pirling and Siepen 2006); Eltville (Blaich 2006); Bregenz (Konrad 1997); Gondorf (Schulze-Dörrlamm 1990).

Hauser 1992; Martin 1984; Bierbrauer 1975; Böhme 1970. In addition to the early medieval contexts also noted by others, Böhme (1970, 175–76, 180) mentions a Late Roman grave from Maule and a Merovingian grave from Mertloch with "degenerate animal heads," but from his figs. 4 and 8, these spoons do not actually have animal heads.

All the examples from 6th-c. contexts (including Ditzingen) feature an offset where the animal head is in line with the spoon handle. This is different to the spoon from St Quentin grave 20 mentioned above, in which the animal head projects above the spoon handle (variations in form are also discussed by Johns and Potter 1983, 38–39). The Romano-British hoards contain spoons of both variants, although since the former type eventually replaced the latter, they may be slightly later in date.



Thetford cat. no. 66

Fig. 11. Thetford cat. 66 featuring handle decoration. (© The Trustees of the British Museum [used online under a CC BY-NC-SA 4.0 license].)

contexts are generally larger and much heavier than the British material; see, for instance, those catalogued by Hauser. <sup>104</sup> The persistence of the form into the 6th c. suggests enough spoons with zoomorphic offsets were extant later in the 5th c. to influence the development of the related, heavier form. More evidence is needed to make a robust judgment about the production dates of the Thetford zoomorphic-offset spoons, but considering the circumstantial evidence, an early 5th c. date is certainly feasible.

## Handle inscriptions

Handle rather than bowl inscriptions (Thetford cat. nos. 66 and 75–82) are noted in wider scholarly research as a feature of early medieval spoons. Thetford cat. 66 is illustrated in Figure 11 as an example. There are no spoons with handle inscriptions from the late 4th-to early 5th-c. cemeteries that have produced multiple spoons in continental Europe, and they only become common later, in the 6th c. 105 Martin has suggested handle inscriptions date after 400; the earliest spoon identified by him with a handle inscription was one from the Esquiline treasure, thought to have been buried around that date. Yet the context is problematic as an antiquarian find, and whether any spoons belong to the hoard is doubtful. Hauser comments that this Esquiline spoon, with a solid circular offset, is later than the suggested hoard date. Given these problems, Hoxne's 5th-c. context is the earliest securely dated context for spoons with handle inscriptions, although since it is a problematic British hoard, as already discussed, burial somewhat later than its 407–8 TPQ is a possibility. Five matching long-handled spoons, plus one other, in the Hoxne hoard have handle inscriptions. The first three have solid offsets characterized as a transitional type in the

<sup>&</sup>lt;sup>104</sup> Martin 1984, 83–87; Hauser 1992, 99–100.

Böhme 1970, 186–88 notes that none of his 4th- to 5th-c. group (mostly from late 4th- to early 5th-c. cemeteries) have handle inscriptions, while in his 6th–7th-c. group, handle or offset inscriptions are the preferred types. None of the more recently published cemeteries with spoons listed in n. 101 include examples with handle inscriptions.

Martin 1984, 68; Shelton (1981, 21–23) suggests the spoons became incorporated into the treasure in the 19th c. Thetford was not included in Martin's study, having probably not been published at the time of his research.

Hauser 1992, 108, cat. no. 76 on the Esquiline treasure; 105, cat nos. 56, 58, and 59, for other context-dated examples.

Johns 2010, 167–68, cat. nos. 86–90 and 129; Hauser 1992, 24–25; Martin 1984, 78–79. No other British hoard found to date includes spoons with handle inscriptions.

development of the (later) 5th-c. norm; the others have pierced offsets like the Thetford spoons with handle inscriptions (see Fig. 11). 109

In my view, the assembled evidence places the Thetford spoons with handle inscriptions <sup>110</sup> in the 5th c. and probably after the end date of many of the cemeteries in northern Gaul in the 420s. If spoons with zoomorphic offsets are possibly 5th c., and those with handle inscriptions more definitely so, why are they so rare in contexts dating to the middle of the 5th c.? Wider trends in the available data show that a burial rite that includes spoons falls out of use in the former western Roman Empire after the earlier 5th c. (influenced by wider trends towards unfurnished burial), only becoming popular again from the end of the 5th c. Hauser examines spoons from the 5th–7th c., <sup>111</sup> and irrespective of the type of spoon, those found in grave contexts in this region all date to the end of the 5th c. onwards. <sup>112</sup> Extant hoard finds from continental Europe that have been dated to this period do not generally contain silver tableware at all. <sup>113</sup> This does not mean spoons and/or tableware were not used during this period, although they may have been less widely available. There are records of large amounts of silverware given to the church in Rome throughout the 5th c., for instance, and Sidonius Apollinaris, writing in mid- to late 5th-c. Gaul, mentions both antique and newly commissioned silver vessels in his letters and poems. <sup>114</sup>

Overall, this evidence of disparate dates for the Thetford spoon types also casts doubt on Johns and Potter's interpretation that the spoons were all made in the same workshop, 115 although there is not space here to discuss this further.

## Discussion of dating

The working principles in establishing the dating are firstly that the TPQ of the hoard is set by the latest-dating object in the assemblage, secondly that comparisons to context-dated objects are more reliable than general stylistic judgements, and thirdly that graves are the

These pierced offsets are a long-lived form, occurring in contexts from the mid-4th to the middle third of the 5th c. and perhaps beyond (Martin 1984, 76–78). The latest cited here is a grave at Samson in northern Gaul. Martin suggests a later example from the early 6th-c. Desana hoard is a secondary modification.

Excepting cat. no. 75, which is anomalous in the placement of the handle inscription, as already noted.

Hauser 1992. He does not include in his catalogue spoon types found in the late 4th- to early 5th-c. cemeteries in northern Gaul, which were well covered in Böhme's survey (Böhme 1970), or the Romano-British hoards.

Outside this area, grave contexts at Mečholupy, Czech Republic (cat. no. 46) and Ballana, Sudan (Hauser 1992, cat. nos. 65, 99 and 100) are of mid-5th c. date. Hauser's groups 1–4 with dated grave contexts are as follows: cat. nos. 7, 39, 40, 43, 44, 46, 56, 57, 58, 59, 65, 89, 93, 99, 100, 113, 114, 123, 124, and 125.

Hobbs 2006, 59–67. In his extensive data survey, which included 132 hoards within a date range of 411–90, Hobbs found only one exception: small silver bowls in the Reggio Emilia hoard (Hobbs 2006, 66; Degani 1959, 42 and pl. VIIIa–b). Spoons also seem rare as settlement finds: Hauser only cites three from his groups 1–4, all from 6th-c. contexts: Hauser 1992, cat. nos. 69, 102, and 111.

Leader-Newby 2004, 64–66; Book of Pontiffs 42 and 44–46 (Davis 1989, 30–35); Sid. Apoll. Poem XVII, 7–8; Book 1, Letter II, 6; Book IV, Letter VIII, 4–5; Book IV, Letter 24, 1 (Anderson 1936, 252–55 and 340–41; Anderson 1965, 92–95 and 158–9).

<sup>&</sup>lt;sup>115</sup> Johns and Potter 1983, 34–44, 71.

best evidence when it comes to context dating. On this basis, a date range well within the first half of the 5th c. is estimated for deposition of the Thetford hoard (420s–440s). Some of the jewelry, for which Johns and Potter were unable to find Late Roman parallels, has its best comparators in context-dated objects from the middle third of the 5th c. (cat. nos. 2–6, 8–9). Although the evidence from the spoons is less clear, it does suggest at least nine of the spoons, those with handle inscriptions, were made within the 5th c.

The scholars who have published some of the comparative material described above have noted its parallels with Thetford material, and not thinking to question the date for Thetford given in its catalogue, have struggled to reconcile this with trends in their material that suggest a date well into the 5th c. for particular artifact styles. <sup>116</sup> In his discussion of the zoomorphic finger-ring that parallels Thetford cat. nos. 5 and 6 from a grave at Kudiat-Zateur (described above), Eger judges it an heirloom, as, dated from the comparable Thetford example, it significantly pre-dates the other grave objects, which present a consistent date of ca. 430–60 CE. <sup>117</sup> In a consideration of the leaf-engraved ring type with three examples in the Thetford hoard, Aimone concludes that the finger-ring type must have been long-lived in stylistic terms, since all other examples have context-associated dating that is much later. <sup>118</sup> Yet a simpler and more likely solution exists that solves both these puzzles – the date previously assigned to the Thetford hoard is too early. A later date also makes sense of Johns and Potter's observations about the seemingly unusual nature of the jewelry and its "Late Antique" appearance, and their difficulty in identifying parallels for many of the jewelry items.

In judging the dating, we can also consider the range of stylistically similar finger-rings and spoons discussed above with context dates after 450. This late 5th- to 6th-c. material does not contribute the closest comparative material to the Thetford items discussed, showing stylistic divergence from it. It is, however, important circumstantial evidence. Distinctive objects found in contexts of the middle third of the 5th c., which form the closest comparisons to the Thetford material, can be shown through these later context-dated examples to have continued in use, with stylistic development, in the later 5th and early 6th c. This helps to confirm that their occurrence in earlier to mid-5th c. contexts does not just represent curation of late 4th-c. objects. By contrast, placing Thetford in the late 4th c. creates not only anachronisms in the lack of comparable material of this context-date, but also a puzzling gap between a putative late 4th-c. date and the recurrence of multiple stylistic trends in both jewelry and spoons in the later 5th and/or early 6th c.

Finally, we can turn to the excavation evidence for the hoard find-spot at Gallows Hill, although this is very limited because of the circumstances of discovery. The 4th-c. structure that the treasure was associated with may have been demolished in the same century, although the associated dating evidence is a single greyware sherd. From its spatial position, the treasure may have been placed within the structure, or within a gully dug after its demolition, aligned on post-holes for the structure. More significantly for our discussion of dating, there is some evidence of 5th-c. activity at the site. The enclosure (1b) with double ditches that was the focus of the Early Roman site was located adjacent

<sup>&</sup>lt;sup>116</sup> Eger 2001; Aimone 2010.

<sup>&</sup>lt;sup>117</sup> Eger 2001, 367.

<sup>&</sup>lt;sup>118</sup> Aimone 2010, 174.

<sup>&</sup>lt;sup>119</sup> Johns and Potter 1983, 18; Gregory 1991, 111.

to the Late Roman structure. Both enclosure ditches had wind-blown deposits, in the outer ditch overlaid with "dark earth" containing Late Roman material, thought to be a deliberate levelling fill. Such deposits are now widely understood to represent continued human presence on a site in the post-Roman period,  $^{120}$  and this is confirmed by further site evidence. The windblown layer in the inner ditch had a pit cut into it, and its fill (Pit 3329, context 3304) was radiocarbon dated to  $480 \pm 60$  CE and represents the latest activity identified on the site.  $^{121}$ 

# Wider interpretation

Johns and Potter's interpretations tend to simplify and unite the object groups discussed: the whole hoard assemblage was produced and buried in a 10-year period; all the jewelry was made in one workshop; and so on. The exemplary documentation of the evidence in the catalogue does not actually support these interpretations, as I have argued above. <sup>122</sup> Over the past 40 years, a more nuanced understanding of both hoard evidence and longevity of use for objects with attendant changes in use and meaning has developed. <sup>123</sup> Now we have demonstrated a longer process of accumulation for the Thetford hoard, its further implications need to be addressed, including consideration of different ways that precious objects could hold value.

As an initial step, we need to question some wider common assumptions. Thetford has been interpreted as a religious hoard (from the evidence of the dedicatory inscriptions on some of the spoons), and ritual/religious and economic uses are often seen as polar opposites, with ritual deposition putting objects beyond economic use. There has been extensive debate arguing for either ritual or economic motives in wider hoard interpretation, and this debate has become stale.<sup>124</sup> Yet it has been cogently argued that valuable objects cycle between short-term uses that are often individualistic and economic, and long-term uses (often involving religion) that privilege social functions such as the maintenance of ideologies and the social order. 125 An interpretative approach that is helpful, when allied to careful observation of the material evidence, is that of assemblage theory, which foregrounds how an assemblage (in this case, a hoard) comprises objects in transition: it contains evidence that relates to object functions at both current and previous life stages, as well as the capacity that objects represent for the future, both as individual artifacts and as collections of artifacts. 126 Thus, when we interpret religious/ritual hoards, we should not necessarily view them as terminal votive deposits that have become inalienable, devoid of economic potential. Let us first of all examine the evidence for the religious context of the Thetford hoard, <sup>127</sup> and

<sup>&</sup>lt;sup>120</sup> See Nicosia and Devos 2018 for a summary.

<sup>&</sup>lt;sup>121</sup> Gregory 1991, 111–14.

Johns and Potter stress themselves that their publication presents not a "final interpretation" but a starting point for future research (Johns and Potter 1983, 73).

<sup>&</sup>quot;Object biography," see Joy 2009, Kopytoff 1986.

See Guest 2015 for a discussion.

<sup>&</sup>lt;sup>125</sup> Aarts 2005; Bloch and Parry 1989; see also Johns 1995.

Robinson 2017, 159–61; see also Hamilakis and Jones 2017.

In what follows, "religious" is used in the sense ordinarily understood in the ancient world; that is, primarily involving ritual practice and community relationships, rather than individual beliefs (see Rives 2000, 246–55).

secondly, further consider the evidence that relates to its economic potential, before assessing the hoard's overall significance in relation to its newly established 5th-c. context.

## Thetford as a religious hoard

Many of the Thetford spoons have religious inscriptions linking them to a Faunus shrine, and so the accepted interpretation is that it was a religious treasure. 128 At the point of burial, though, the objects could already have been removed from the shrine, and so further evidence is needed to establish this. 129 Fortunately, associated evidence from Gallows Hill supports its characterization as a religious site. The structure associated with the hoard has been interpreted as a timber aisled building or gate, which could have been part of such a complex. There may be an aspect of continuity with the previous religious complex on the site, of Iron Age origins, although too much should not be made of this. 130 A copper-alloy oak leaf from the Early Roman phase could represent a votive leaf of a kind known from other sites. 131 More significantly, the large numbers of metal finds, especially coins, reported from the Late Roman part of the site (above) are consistent with identification as a shrine. Temple sites often have significant quantities of finds that constituted votive offerings. 132 The two coin hoards buried close to the adjacent mounds on the site could be votive, or assets placed with the temple for safe-keeping. The clinching piece of evidence is a lead curse tablet among the Late Roman site-finds. 133 Its inscription contains a personal name and possibly part of the word defixus ["cursed"]. Although the latter reading is conjectural, the use of an irregularly shaped sheet of lead and inscription written in retrograde, features known from other Romano-British collections of curse tablets, 134 support the identification as a curse tablet. Collectively, all this evidence confirms the religious use of the site independently of the spoons with Faunus-related inscriptions, and shows that all the objects were deposited at a temple on this site.

## The economic potential of the Thetford hoard

In examining economic aspects, Johns and Potter's published interpretation prompts us, first of all, to consider the possibility that some of the objects may have been the economic assets of an individual, stored at the temple, rather than having been in religious ownership. As Johns and others have pointed out, there is ample historical evidence that religious sites sometimes held valuables belonging to individuals, rather like a bank deposit, showing their function as a repository of not only community but also individual wealth. <sup>135</sup> In

Johns and Potter propose a Late Roman Faunus cult is more plausible in Gaul, with its deeper connections to Classical culture, than in Britain (Johns and Potter 1983, 44). The little evidence we have about Faunus worship is from Early Roman Italy (Johns and Potter 1983, 49–52).

<sup>&</sup>lt;sup>129</sup> Johns and Potter suggest the Thetford hoard may ultimately have resulted from theft (Johns and Potter 1983, 74).

Nash Briggs (2017) proposes links between indigenous (including Iron Age Iceni) culture and site finds on the one hand, and mythology related to Faunus on the other, but these associations seem overly speculative.

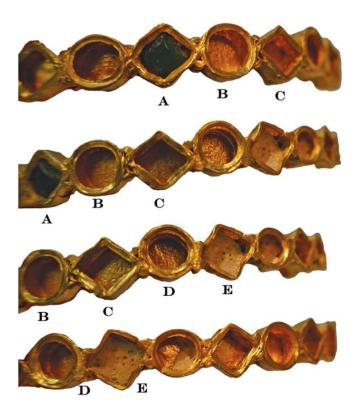
<sup>&</sup>lt;sup>131</sup> Gregory et al. 1991, 131–32 and fig. 116 no. 21.

<sup>&</sup>lt;sup>132</sup> Bird 2011, 286–89.

<sup>&</sup>lt;sup>133</sup> Gregory 1991, 1; Hassall and Tomlin 1982, 410.

<sup>&</sup>lt;sup>134</sup> For instance, the curse tablets from Bath, which also include Late Roman material (Tomlin 1988).

<sup>&</sup>lt;sup>135</sup> Martin 2019; Malrieu 2005, 96–97; Johns 1995; Duncan-Jones 1994, 8–9; Bromberg 1940.



Thetford cat. no. 27

Fig. 12. Thetford cat. no. 27 bracelet, with sulfur backing visible in gem setting E and the circular surround to its immediate right. Setting E is also cracked at top right and distorted, and distortions are also visible in some of the other gem settings. (© The Trustees of the British Museum [used online under a CC BY-NC-SA 4.0 license].)

line with this, Johns and Potter saw the jewelry in the Thetford hoard as a jeweler's economic assets. <sup>136</sup> Their principal supporting evidence was that the jewelry was in "pristine condition" and one necklace (cat. no. 32) was apparently unfinished, lacking a clasp and judged too small to wear. <sup>137</sup> This does not form a strong case. The necklace could just as easily be damaged, with an attempted repair. More importantly, though, it is also described as exhibiting slight wear, which is inconsistent with it being an unfinished workshop item. Furthermore, about half of the jewelry items show evidence of wear, <sup>138</sup> and in some of the examples with missing settings (cat. nos. 11 and 12), there is wear on the artifacts showing they are not unfinished items. Moreover, for some items with empty settings, the backing sulfur remains, showing the gemstones are not missing because the objects were unfinished (Fig. 12). <sup>139</sup> Of course, a jeweler might buy used items to rework, or the

<sup>&</sup>lt;sup>136</sup> Johns and Potter 1983, 74.

<sup>&</sup>lt;sup>137</sup> Johns and Potter 1983, 21–23, 69–70, 101.

<sup>&</sup>lt;sup>138</sup> Cowell et al. 1983, 61, table 7.

La Niece (2010, 187–88) explains the method: powdered sulfur is heated to fix the gem in place. Fused sulfur is visible in empty settings for cat. nos. 5 and 27 (from personal inspection of these objects).

items could be awaiting repair. To be convincing, however, the jeweler hypothesis would need better evidence for unfinished items being present.

If the Thetford hoard represented offerings given to the gods, rather than just objects placed under their protection, economic value is still in play. Most obviously, since a temple could be closed or looted, votive deposition is not necessarily the end of an object's life. The closing of temples after Theodosius's edict of 391 meant the dispersal of many treasures, and it is estimated large amounts of gold were put back into circulation. There is evidence that assets were also removed from temples by emperors in other circumstances, for instance, to fund military campaigns. Widespread looting will also have occurred in the conditions of political breakdown that affected many areas in the 5th c. The particular objects in the Thetford hoard apparently did not suffer this fate, but the potential was there.

It is also well documented that temples were a hive of economic activity. Religious foundations owned land and buildings that brought in income, and with it influence, in addition to gifts made to the shrine and fees for religious services. A 5th-c. account by Patrick illustrates how religious gifts including votives were regarded as economic assets, as he was worried about being accused of benefiting financially from them. Roman legal and epigraphic evidence also shows that, alongside other income, temple offerings were regarded as fungible assets, under the restriction that their expenditure must benefit the temple. Moreover, there is concrete archaeological evidence from Roman Gaul of "deposit boxes" for the collection of votive offerings as assets. Community benefit could also be a justification for the liquidation of votive gifts. Roman law codes, for example, state that votive offerings could be used to ransom captives, and historical sources recount this use for church treasures in Late Antiquity.

Many types of actions, then, both voluntary and involuntary, would return objects donated to a shrine to commodity status. This means in a period when some or all Thetford objects were owned by the shrine, their future economic use was still in prospect.

At this point, within the 5th c., in any potential economic use, the objects would be likely have been exchanged directly, since coin supply to Britain had ended. It has been observed that spoons, which often weigh one Roman ounce, would function well as a kind of ingot – a set quantity of silver that could be easily exchanged. Some at least of the Thetford spoons conform to this weight and may have been viewed as potential ingots. Other Roman precious objects can also sometimes be shown to correspond to set weights or numbers of solidi because that is how they were made – as a commission from a set amount of precious metal. This would also enhance their utility in any future bullion exchange. For example, two of the Thetford gold bracelets (cat. nos. 25 and 26) weigh one Roman ounce each, and another gold bracelet (cat. no. 26) weighs four

<sup>&</sup>lt;sup>140</sup> Johns and Potter 1983, 73; Malrieu 2005, 114.

<sup>&</sup>lt;sup>141</sup> Malrieu 2005, 108–13; Hendy 1985, 285.

<sup>&</sup>lt;sup>142</sup> Malrieu 2005, 99–104; for evidence from Britain, see Adams 2009, 75–78.

Patrick, Confessions 49 (Hood tr. and ed. 1978, 51).

<sup>&</sup>lt;sup>144</sup> Aarts 2005, 20–22; Malrieu 2005, 107–13.

Martin 2019, 98. The date range of the deposit boxes coincides with a decline in site finds of votives, see Martin 2019, 98; Nouvel 2013.

<sup>&</sup>lt;sup>146</sup> Hendy 1985, 260–61; Klingshirn 1985, 185–91 for late 4th-, 5th-, and 6th-c. evidence.

<sup>&</sup>lt;sup>147</sup> Painter 1997, 99; see also Hobbs 2005, 207.

<sup>&</sup>lt;sup>148</sup> Johns and Potter 1983, 36, 43.

Roman ounces.<sup>149</sup> At set weights, these would have been readily exchangeable. Moreover, since the objects are all quite small, they are easily portable, meaning they could have been readily circulated, unlike earlier Roman hoards, which contained large complete vessels that were much less easy to transport.<sup>150</sup>

Johns and Potter observed that the total weights of the gold and silver present in the hoard correspond to Roman weight standards. The silver totals 3.01 Roman pounds and the gold comes to an estimate of 1.5 Roman pounds - the equivalent of more than 430 siliquae and 113 solidi. 151 Johns and Potter explain these total weights in terms of the manufacturing process described above. We have shown above that both the spoons and the jewelry constitute objects of different dates and/or likely origin. This means that while individual item weights probably do relate to manufacturing decisions, the total cannot be related to the manufacturing stage of the object's lives (for instance, the quantity of silver provided to a workshop for a commission). 152 It reminds us, though, of the enduring economic value of a group of precious objects. 153 For accounting purposes, it would have been useful to make up a hoard assemblage to a set weight of precious metal, so it was known how much had been deposited. Our Late Antique and early medieval historical sources also make clear that religious gifts were recorded by weight and/or value in solidi, indexing piety and generosity at the same time, 154 but still ultimately valuing the objects in monetary terms. 155 Overall, therefore, we can say that many Thetford hoard objects, and the hoard overall, were quantified in a way that facilitated ready economic usage.

To assess whether hoard items were valued *primarily* as economic assets at some stage, which is a slightly different question, we can examine evidence relating to their physical appearance. About half of the jewelry items show signs of damage or missing parts (Table 2). This is explained in the catalogue as partial recovery of objects or damage by the finders, although it seems too pervasive for this. Six of the items have missing elements or damage even though they were found inside the shale box that would have kept any loose elements together and protected objects from harm. Some of the finger-rings were also found inside the shale box, but we do not know which ones. Johns and Potter suggest that in some cases stones may have fallen out and not been recovered by the finders. This appears unlikely since any loose stones would have remained close to the other finds. For cat. no. 27, for example, it would involve 22 individual gems falling out and being overlooked (see Table 2), and from personal inspection, none of the remaining four gems are at all loose. Some of the gold surrounds for the missing gems also appear

<sup>&</sup>lt;sup>149</sup> Johns and Potter 1983, 72.

White et al. forthcoming.

<sup>&</sup>lt;sup>151</sup> Johns and Potter 1983, 72.

Of course, the weights of objects often made to an ounce weight or multiples of it might well coincidentally add up to a recognizable fraction of a Roman pound.

It has been observed that some of the other hoards buried at a similar time to the Thetford hoard also correspond to Roman weight values (Hunter 2022, 367–71).

<sup>&</sup>lt;sup>154</sup> Hardt 2004, 265; Janes 1996, 369–76; Leader-Newby 2004, 63–66.

These examples are Christian, but the parallels between church and temple treasuries are obvious.

<sup>&</sup>lt;sup>156</sup> Johns and Potter 1983, 13.

#### Table 2.

Evidence of damage or missing elements (not including wear or gems cut down for reuse in a different setting). Starred items (\*) were found in the shale box.

	Cat. no.	Description of damage, etc. & reference to Johns and Potter 1983			
Group 1	11 12 15	Setting missing, loose piece of gold sheet at base of bezel (p. 88)			
Group 2	1* 32*	Tongue and hinge-pin missing; no other expected element of a multi-part belt set found, such as a strap-end (pp. 79–81, 101) Clasp missing, ends of necklace fastened with wire (p. 101)			
	33*	Chain broken (fig. 19)			
Group 3	21 28	Part of gold inlay missing (p. 93) Part of gold inlay missing (p. 97)			
Group 4		Hole at side of hoop below bezel (fig. 8)			
	5 7	Three of nine precious gem settings missing (p. 83) Glass setting wrong shape for bezel (p. 84)			
	8	Twenty of 22 precious gem settings missing (p. 83); one gem is damaged (personal observation from museum study visit)			
	9	Gem is cracked across (personal observation from museum study visit)			
	17	Glass setting wrong shape for bezel (p. 84) **			
	27	Twenty-two of 26 precious gem/glass settings missing (p. 97); at least one gem surround is misshapen and cracked			
Other		One of the three settings is damaged			
	20	0 0			
	31*	One bead missing; another damaged			
	34* 35/36*	Large beads "severely damaged and distorted" (p. 101) Gold rivets attaching chain to clasp missing (p. 35)			
	37	Clasp only; rest of necklace missing			
	38				
		Loose beads of marbled green and yellow glass, and emerald, that would have formed part of a necklace the same as cat. no. 31 (p. 105)			

<sup>\*\*</sup>There is a slight query over whether the stone belonged to this ring as it was re-set after discovery; the existence of the same feature in 7, however, supports it as an original element (Johns and Potter 1983, 91).

slightly distorted from levering the gems out (Fig. 12).<sup>157</sup> Similarly, for cat. no. 8, 20 individual stones are missing, but neither of the remaining ones is loose in its setting.<sup>158</sup> Some of the finger-rings in Group 4 may also have been in the shale box and so any loose components would not have been lost.

As for the other items with component parts missing, given the acid soil conditions of the site, <sup>159</sup> the necklaces that are represented only by clasps might possibly have constituted

Since the finders were in touch with an antiquities dealer after the discovery (Johns and Potter 1983, 14), it seems unlikely they would have deliberately damaged the objects or removed stones from their settings.

There is one slightly loose gem in cat. no. 5, held in place by the gold surround. There is no evidence from British Museum records (available from 1990s onwards) that any stones were re-fixed by conservators after arrival at the British Museum. Many thanks to Richard Hobbs for checking this for me.

<sup>159</sup> Gregory 1991, 2.

Table 3. Wear and damage to the jewelry compared (details of wear are from Cowell et al. 1983, 61, table 7).

	No wear, no damage (cat. nos.)	Damage but no wear (cat. nos.)	Wear but no damage (cat. nos.)	Both wear and damage (cat. nos.)
Group 1	10, 24, 25	-	13	11, 12, 15
Group 2	23	-	-	1, 32, 33
Group 3	-	-	29	21, 28
Group 4	2, 3, 6, 19	4, 5, 7, 8, 9, 17, 27	=	-
Other	16, 22	14, 20, 41 (cut down for re-use, Johns and Potter 1983, 105), 42–46 collectively	18, 26, 30, 39, 40	31, 34, 35/36, 37, 38

mainly organic materials that have decayed, such as coral or pearl, but the buckle with missing hinge-pin and tongue (cat. no. 1) found in the shale box is harder to explain. Also from the box, there are multiple beads of the same type as necklace cat. no. 31, but this only has one missing bead, <sup>160</sup> so they must have come from another closely similar necklace.

The evidence of damage and missing components collectively suggests other types of value were paramount at a late stage in the assembly of some hoard objects, since many items could no longer have functioned as jewelry. If we compare the evidence of wear with that of damage (Table 3) we can make some further evaluations. The amount and nature of the damage and wear indicate particular phases in the use-life of individual objects or of the assemblage collectively.

Only about a quarter of the objects are actually in pristine condition (*contra* Johns and Potter). Items such as finger-ring cat. no. 15, described in the catalogue as "extensively worn," were evidently used for a long time, and the cracked glass setting may well have been everyday wear-and-tear. Notably, though, more than half of the Group 4 objects, none of which show any wear, are damaged. This is not a case of removing gems from old-fashioned objects for reuse elsewhere, since there is no evidence the Group 4 objects were old when buried, and some of their jewelry styles were current into the early 6th c. (see discussion of individual objects above). The gems could have been removed because, in themselves, they were valuable exchangeable objects and/or to obtain an accurate weight for the gold component of the jewelry, both suggesting economic activity in a late phase of the hoard's use. The extortion, looting, and violence well attested for this period<sup>161</sup> could account for how some material was brought together and would provide a plausible context for the hoard's characterization as primarily an economic asset. The economic value of the objects would also be latent after jewelry items had been gifted to the shrine or deposited there, however, and some of the damage to the jewelry could have occurred at this stage, during economic use.<sup>162</sup>

Such temple gifts would not just have been an inert possession but would also have generated value for those in charge. Firstly, they demonstrated the regard in which the shrine was held – the power attributed to the god – exemplified through display at the shrine. Both votive deposits and the placement of one's assets in the care of a temple

It could be argued that the artifacts were damaged to put them beyond use as a ritual offering to Faunus, although in that interpretation we might expect damage to be more widespread through the assemblage.

<sup>&</sup>lt;sup>160</sup> Johns and Potter 1983, 105.

<sup>&</sup>lt;sup>161</sup> Brown 2012, 394–407.

were a vote of confidence in the power and permanence of the shrine. Secondly, such donated wealth also brought with it the capacity to act and the power to choose. The economic assets and the religious reputation of a shrine would both have been factors in its wider activities and likely political influence in a particular area.

In the late 3rd and 4th c. in Britain, it has been suggested power was already shifting away from urban areas, with religious sites in rural areas becoming correspondingly more important. 163 In the power vacuum that must have existed after the subsequent Roman withdrawal, there were both opportunities and threats for local leaders. Local elites may have extended their power in rural contexts through continuing involvement with pagan or Christian shrines: as well as Thetford, there is evidence of shrines continuing to flourish in the 5th c. at other sites in Britain, such as Bath and Uley. 164 Religious leaders (pagan or Christian), who probably also had independent status as local landowners, and other opportunistic groups, such as military remnants and groups of mercenaries, may also have seized the opportunity for more overt local leadership. Established influence over those living on their lands could develop into a wider local power-grab for landowners, as Wickham suggests. 165 At the same time, landowners needed to assure the loyalty of local communities who provided agricultural labor for their estates. 166 Support mediated through religious sites would be one way to achieve this. 167 Religious foundations were part of the patronage system just as individual aristocrats were - for instance, through expenditure on festivals - and in the 5th c. in particular, ransom and security payments were in prospect too. As Klingshirn points out, Late Antique written evidence shows apparently beneficial acts such as ransoming captives also created obligations and sometimes dependency thereafter. 168 As tangible assets, precious objects would therefore give those who controlled the shrine social capital in the context of local communities and the potential to intervene in local politics in a variety of ways. 169

## Concluding discussion

Johns and Potter were frank about the interpretative difficulties that the Thetford hoard presented. I hope to have shown in this article that with the benefit of extensive scholarly

<sup>&</sup>lt;sup>163</sup> Smith 2001, 162.

Smith 2001, 150; Cunliffe 1988; Woodward and Leach 1993. Local aristocratic control of rural shrines, including economic activity there such as markets, is likely throughout the Roman period, see Adams 2009, 71–78. It could be argued that more evidence should be extant at Thetford if the site had continued as an important focus in the first half of the 5th c.; for instance, continued evidence for deposition of votives, or other structural evidence. However, as well as the wider issue that durable material culture of the type that survives in the archaeological record became scarce in the 5th c., there are particular site conditions to consider. The area on three sides of the treasure find-spot (perhaps the most likely area for such evidence) could not be examined because it had already been destroyed in building works, and the finds recovered by amateurs from this area are very poorly recorded (Gregory 1991, 1). There are also features on the site thought to be Late Roman but not possible to date securely, such as Building 7 (Gregory 1991, 114).

<sup>&</sup>lt;sup>165</sup> Wickham 2005, 330–31.

<sup>&</sup>lt;sup>166</sup> Gerrard 2013, 261–62; Brown 2012, 20, 397–400.

Suggested by Bowes in relation to estate temples; see Bowes 2008, 36.

<sup>&</sup>lt;sup>168</sup> Klingshirn 1985, 201–3.

Brown (2012) is an extended discussion of Late Antique wealth, power, and patronage, mostly in a (Christian) religious context. See especially 394–407 on social conditions in the 5th c.

research since it was published, at least some of the puzzles it presented to those who originally studied it can be solved; and that it is productive to consider the hoard's economic and religious significance together. There is compelling evidence that it was buried in the 5th c. rather than the late 4th. The new chronology is evidenced through detailed comparisons of multiple objects (both spoons and jewelry) with context-dated finds from continental Europe, and with objects from the 5th c. Hoxne hoard. The hoard contained objects of varying date, and differently dated groups of objects can also be shown to be intra-linked through wear patterns, technical and compositional relationships, and likely manufacturing areas, corroborating their grouping by chronology. Moreover, radiocarbon-dated deposits at the Gallows Hill site, although not available from the immediate find-spot of the hoard, also confirm 5th-c. activity adjacent to it, compatible with the dating proposed. Since wider evidence found at the site confirms the religious context established by the spoon inscriptions, this means, remarkably, we must envisage a pagan cult center surviving into the 5th c. I have argued its economic assets show it may have wielded significant power and authority locally.

Let us consider this new picture of Thetford in the context of the wider debate about the survival of Roman lifestyles and economic prosperity in 5th-c. Britain. <sup>171</sup> It initially appears to offer a snapshot of elite power and wealth counter to a narrative for the 5th c. of abandonment of sites and severely limited access to manufactured goods. Some of the spoons that were commissioned for donation to the temple, for example, are among the latest-dating objects in the hoard and suggest access to artisans or craft networks. Yet the available data for Britain more widely shows both extremes were present in the period. <sup>172</sup> What we may see at Thetford is not evidence for an overall picture of a prosperous Britain in the 5th c., but rather, following the thinking of others who emphasize the complexity and diversity of the period, <sup>173</sup> fragmentation into smaller, regionalized spheres of influence as a result of the withdrawal of Roman authority. This process created economic and political opportunity for some at the same time as it did devastation for others, across all social classes.

Evidence has been presented by others for continuing use of Roman-style dress objects at least part-way into the 5th c. in Britain. <sup>174</sup> The disparate origins of the Thetford jewelry, in particular, add to this picture by attesting to the relations that Britain still had at this time with other former Roman provinces where Roman culture continued to flourish: some of the latest-dating finger-rings in the hoard that likely originated in northern Italy or adjacent regions, for example, and the necklace with conical beads from the Lower Danube region. Most of the jewelry is generically "Mediterranean Roman" in style and speaks to a shared culture among elites that had a wide geographical reach. From the existence of PAS finds of similar objects (see above) as well as other 5th-c. hoards such as Hoxne, we can establish that British contexts for such material are multiple, and that 5th-c. Britain was thus part of a shared elite Roman-style culture (for some) in the former Roman provinces that can only be

The new dating of the objects was achieved entirely independently, before consulting the site report for site context details.

For a summary see Gerrard 2013, 5–7.

<sup>&</sup>lt;sup>172</sup> For synthesis, see Fleming 2022; Gerrard 2013; Esmonde-Cleary 1989.

Gerrard 2013, 7, 249–62; see also Fleming 2022, with a particular focus on the impact on ordinary people.

Recently summarized by Gerrard 2013, 167–68.

glimpsed. The diverse cultural influences in the jewelry are typical of this period of cultural interaction and change in western Europe.

How did these objects come to Britain? Did they travel with their wearers, were they acquired through travelling merchants, or were they brought as economic assets forcibly acquired? The latter is plausible for the latest jewelry items in the hoard, which show evidence of damage that puts them beyond use as functional dress objects, but probably a variety of mechanisms were involved in circulation of the objects. Whatever the routes taken that ended at Thetford, at least in terms of personal networks and access to luxury objects, <sup>175</sup> they show some areas of Britain were not as isolated at this time as we might think.

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#### References

Aarts, Joris. 2005. "Coins, money and exchange in the Roman world: A cultural-economic perspective." *Archaeological Dialogues* 12, no. 1: 1–28. https://doi.org/10.1017/S1380203805211625.

Abdy, Richard. 2009. "Patching and Oxborough: The latest coin hoards from Roman Britain or the first early medieval hoards from England?" In *Coin Hoards from Roman Britain XII*, ed. Richard Abdy, Eleanor Ghey, and Celine Hughes, 394–95. Wetteren: Moneta.

Abdy, Richard. 2013. "The Patching hoard." In *Late Roman Silver: The Traprain Treasure in Context*, ed. Fraser Hunter and K. Painter, 107–16. Edinburgh: Society of Antiquaries of Scotland.

Abdy, Richard. 2020. "The phenomenon of coin clipping in sub-Roman Britain." In *Argentum Romanorum sive Barbarorum: Tradition und Entwicklung im Gebrauch der Silbergeldes im römischen Westen (4–6 Jh)*, ed. Jérémie Chameroy and Pierre-Marie Guihard, 135–50. Mainz: Römisch-Germanisches Zentralmuseum.

Adams, Geoff W. 2009. Power and Religious Acculturation in Romano-Celtic Society. Oxford: BAR. Aimone, Marco. 2010. Il tesoro di Desana. Oxford: BAR.

Aimone, Marco. 2011. "Ricerche sul costume dei *chlamydati* nei secoli V e VI. Le fibule a croce latina d'oro e d'argento dei tesori di Ténès e Desana." *Studi Medievale* 522 (Serie 3): 577–638.

Alföldi, Mária R. 1957. *Intercisa II: Geschichte der Stadt in der Römerzeit*. Budapest: Akádemiai Kiádo. Alzinger, W. 1972–75. "Das Regierungsviertel." *ÖJh* 50: 229–300.

Anderson, W. B. 1936. *Sidonius: Poems and Letters* 1. Loeb Classical Library 296. Cambridge: Harvard University Press/William Heinemann.

Anderson, W. B. 1965. *Sidonius Poems and Letters* 2. Loeb Classical Library 420. Cambridge: Harvard University Press/William Heinemann.

Annibaldi, Giovanni, and Joachim Werner. 1963. "Ostgotische Grabfunde aus Acquasanta." *Germania* 41: 356–73.

Anon. 1957. Bedeutende Kunstwerke aus dem Nachlass Dr Jacob Hirsch, Adolf Hess AG and William H. Schab, Auction, Lucerne, 7 December 1957. Lucerne: Adolf Hess AG and William H. Schab.

Arbunescu, Alexandru. 2017. "Late Roman gold jewelry found at Ostrov, Constanța county." *Cercetări Arheologice* 24: 191–208.

Axboe, Morten. 1999. "The chronology of the Scandinavian gold bracteates." In *The Pace of Change: Studies in Early-Medieval Chronology*, ed. John Hines, Karen Høilund Nielsen, and Frank Siegmund, 126–47. Oxford: Oxbow.

Baldini Lippolis, Isabella. 1999. L'oreficeria nell'impero di Constantinopoli tra IV e VII secolo. Bari: Bibliotheca Archaeologica.

Rather than, say, trade in bulk commodities, of which there is declining evidence; see Fleming 2022, 180.

- Bierbrauer, Volker. 1975. Die ostgotischen Grab- und Schatzfunde in Italien. Spoleto: Centro Italiano di Studi sull'alto Medioevo.
- Bird, Joanna. 2011. "Religion." In *Artefacts in Roman Britain: Their Purpose and Use*, ed. Lindsay Allason-Jones, 269–92. Cambridge: Cambridge University Press.
- Blaich, Markus. 2006. Das frühmittelalterliche Gräberfeld von Eltville, Rheingau-Taunus-Kreis Teil 2: Katalog und Tafeln. Kassel/Wiesbaden: Landesamt für Denkmalpflege Hessen.
- Bloch, Maurice, and Jonathan Parry. 2010 [1989]. "Introduction: Money and the morality of exchange." In *Money and the Morality of Exchange*, ed. Maurice Bloch and Jonathan Parry, 1–32. Cambridge: Cambridge University Press.
- Blockley, K., M. Blockley, P. Blockley, S. S. Frere, and S. Stow. 1995. *Excavations in the Marlowe Car Park and Surrounding Areas*. The Archaeology of Canterbury 5. Canterbury: Canterbury Archaeological Trust.
- Böhme, Horst W. 1970. "Löffelbeigabe in spätrömischen Gräbern nördlich der Alpen." Jahrbuch der Römisch-Germanischen Zentralmuseums Mainz 17: 172–200.
- Böhme, Horst W. 1974. Germanische Grabfunde des 4. bis 5. Jahrhunderts zwischen unterer Elbe und Loire. Munich: C. H. Beck.
- Böhme, Horst W. 1987. "Gallien in der Spätantike: Forschungen zum Ende der Römerherrschaft in den westlichen Provinzen." Jahrbuch der Römisch-Germanischen Zentralmuseums Mainz 34: 770–73
- Bóna, István, and Eszter B. Vágó. 1976. Die Gräberfelder von Intercisa I: Der spätrömische Südostfriedhof. Budapest: Akadémiai Kiadó.
- Boulanger, C. 1902–5. Le mobilier funéraire gallo-romain et franc en Picardie et en Artois. Paris: Foulard/Leroux.
- Bowes, Kim. 2008. Private Worship, Public Values, and Religious Change in Late Antiquity. Cambridge: Cambridge University Press.
- Bromberg, Benjamin. 1940. "Temple banking in ancient Rome." *The Economic History Review* 10, no. 2: 128–31. https://doi.org/10.2307/2590789.
- Brown, G. Baldwin. 1915. *The Arts in Early England*. Vol. 4. Saxon Art and Industry in the Pagan Period. London: John Murray.
- Brown, Peter. 2012. Through the Eye of a Needle: Wealth, the Fall of Rome, and the Making of Christianity in the West. Princeton, NJ: Harvard University Press.
- Burnett, Andrew. 1984. "Clipped siliquae and the end of Roman Britain." Britannia 15: 163-68.
- Cardoso, João. 2014. "Abel Viana (1896–1964): uma vida de arquéologo." Estudos Arqueológicos de Oeiras 21: 475–510.
- Carson, R. A. G., John P. C. Kent, and Andrew M. Burnett. 1984. *The Roman Imperial Coinage Volume X:* The Divided Empire and the Fall of the Western Parts AD 395–491. London: Spink.
- Cool, Hilary. 1983. "A Study of the Roman Personal Ornaments Made of Metal, Excluding Brooches, from Southern Britain." PhD diss., Univ. of Wales, Cardiff.
- Cowell, M. R., S. La Niece, and N. D. Meeks. 1983. "The scientific examination of the Thetford Treasure. Part 1: Analyses of materials." In *The Thetford Treasure: Roman Jewellery and Silver*, ed. Catherine Johns and Timothy Potter, 56–61. London: British Museum Publications.
- Cunliffe, Barry W. 1988. *The Temple of Sulis Minerva at Bath.* Vol. 2. *The Finds from the Sacred Spring.* Oxford: Oxford University Committee for Archaeology.
- Dalton, O. M. 1922. "Roman spoons from Dorchester." Ant J 2: 89-92.
- Davis, Raymond. 1989. The Book of Pontiffs (liber pontificalis): The Ancient Biographies of the First Ninety Roman Bishops to AD 715. Liverpool: Liverpool University Press.
- De Palol, Pere, and Gisela Ripoll. 1989. I Goti. Milan: Electa.
- Degani, Mario. 1959. Il tesoro romano barbarico di Reggio Emilia. Florence: Edizione Sansoni Antiquariato.
- Deppert-Lippitz, Barbara. 1997. "Spätrömische Goldperle." In *Perlen: Archäologie, Techniken, Analysen,* ed. Uta von Freeden and Alfried Wieczorek, 63–76. Bonn: Rudolf Habelt.
- Duncan-Jones, Richard. 1994. *Money and Government in the Roman Empire*. Cambridge: Cambridge University Press.
- Eck, Théophile. 1891. Les deux cimetières gallo-romains de Vermand et de St. Quentin. Paris: E. Leroux. Eger, Christof. 2001. "Vandalische Grabfunde aus Karthago." Germania 79, no. 2: 347–90.

- Eger, Christof. 2012. Spätantikes Kleidungzubehör aus Nordafrika 1: Trägerkreis, Mobilität und Ethnos im Spiegel der Funde der spätesten römischen Kaiserzeit und der vandalischen Zeit. Münchner Beiträge zur Provinzialrömische Archäologie 5. Wiesbaden: Reichert.
- Escher, Katalin. 2005. *Genèse et évolution du deuxième royaume burgonde (443–534): les témoins archéologiques*, Vol. 1. BAR International Series 1402. Oxford: Archaeopress.
- Esmonde Cleary, A. S. 1989. The Ending of Roman Britain. London: Batsford.
- Feugère, Michel. 1992. "Apollon et Daphne sur une boucle de ceinturon tardo-romaine en argent doré." *ArchKorrBl* 22, no. 1: 125–36.
- Folqués, Alejandro R. 1949. "Un tesorillo bizantino el La Alcudia." In *Crónica del IV Congreso Arqueológico del Sudeste Español*, ed. Antonio Beltrán, 510–13. Cartagena: Junta Municipal de Arqueología y del Museo.
- Fleming, Robin. 2022. *The Material Fall of Roman Britain, 300–525 CE.* Philadelphia: University of Pennsylvania Press.
- France-Lanord, Albert. 1963. "Un cimetière de Lètes a Cortrat (Loiret)." RA 1, no. 1: 15-35.
- Fulford, M. G., A. Burnett, M. Henig, and C. Johns. 1989. "A hoard of Late Roman rings and silver coins from Silchester, Hampshire." *Britannia* 20: 219–28.
- Gerrard, James. 2013. The Ruin of Roman Britain. Cambridge: Cambridge University Press.
- Giorgetti, D. 1988. "Trésor de parures d'or et d'objets d'argent." Archeologiya (Sofia) 3: 30-38.
- Gregory, Tony. 1991. Excavations in Thetford 1980–1982, Fison Way (East Anglian Archaeology 53). Dereham: Norfolk Museums Service.
- Gregory, Tony, G. Lloyd-Morgan, and Graham Webster. 1991. "Other copper alloy objects." In *Excavations in Thetford 1980–1982, Fison Way,* ed. Tony Gregory, 129–34. Dereham: Norfolk Museums Service.
- Guest, P. S. W. 2005. The Late Roman Gold and Silver Coins from the Hoxne Treasure. London: British Museum Press.
- Guest, P. S. W. 2015. "The burial, loss and recovery of Roman coin hoards in Britain and beyond: Past, present and future." In *Hoarding and the Deposition of Metalwork from the Bronze Age to the 20th Century: A British Perspective*, ed. John Naylor and Roger Bland, 101–16. BAR British Series 615. Oxford: BAR.
- Guirard, Hélène. 1989. "Bagues et anneaux à l'époque Romaine en Gaule." Gallia 46: 173-211.
- Hadjadj, Reine. 2007. Bagues merovingiennes Gaule du Nord. Paris: Éditions Les Chevau-légers.
- Hamilakis, Yannis, and Andrew Meirion Jones. 2017. "Archaeology and assemblage." *CAJ* 27, no. 1: 77–84. https://doi.org/10.1017/S0959774316000688
- Hardt, Matthias. 2004. Gold und Herrschaft: Die Schätze europäischer Könige und Fürsten im ersten Jahrtausend. Europa im Mittelalter 6. Berlin: De Gruyter.
- Haseloff, Günther. 1990. Email in frühen Mittelalter: Frühchristliche Kunst von der Spätantike bis zu den Karolingern. Marburger Studien zur Vor- und Frühgeschichte Sonderband 1. Marburg: Hitzeroth.
- Hassall, M. W. C., and R. S. O. Tomlin. 1982. "Roman Britain in 1981. II: Inscriptions." *Britannia* 13: 396–422.
- Hauser, Stefan R. 1992. Spätantike und frühbyzantinische Silberlöffel: Bermerkungen zur Produktion von Luxusgütern im 5. bis 7. Jahrhundert. JAC 19. Münster: Aschendorff.
- Hawkes, Sonia Chadwick, and G. C. Dunning. 1961. "Soldiers and settlers in Britain, fourth to fifth century." *Medieval Archaeology* 5: 1–70.
- Hellenkemper, Hansgerd. 1979. *Trésors romains Trésors barbares: industrie d'art de la fin de l'Antiquité et au début du Moyen Age.* Brussels: Crédit communal de Belgique.
- Hendy, Michael F. 1985. Studies in the Byzantine Monetary Economy, c. 300–1450. Cambridge: Cambridge University Press.
- Henig, Martin, and Arthur MacGregor. 2004. *Catalogue of the Engraved Gems and Finger-Rings in the Ashmolean Museum II: Roman*. British Archaeological Reports International Series 1332. Oxford: Archaeopress.
- Henkel, Friedrich. 1913. Die römischen Fingerringe der Rheinlande und der benachbarten Gebiete. Berlin: G. Reimer.
- Henry, Richard. 2022. Roman Buckles and Brooches: Understanding the End of Roman Britain. Ipswich: Greenlight.
- Heurgon, Jacques. 1957. Le trésor de Ténès. Paris: Arts et Métiers graphiques.

- Hilgner, Alexandra. 2016. "The gold and garnet chain from Isenbüttel, Germany: A possible pin suite with Anglo-Saxon parallels." *Antl* 96: 1–22.
- Hobbs, Richard. 2005. "Why are there always so many spoons? Hoards of precious metal in Late Roman Britain." In *Image, Craft and the Classical World: Essays in Honour of Catherine Johns and Donald Bailey*, ed. Nina Crummy, 197–208. Monographies Instrumentum 29. Montagnac: Monique Mergoil.
- Hobbs, Richard. 2006. *Late Roman Precious Metal Deposits c. A.D.* 200–700: Changes over Time and Space. BAR International Series 1504. Oxford: Archaeopress.
- Holmes, R. 1983. "The scientific analysis of the Thetford Treasure part 3: Some observations on the techniques of manufacture." In *The Thetford Treasure: Roman Jewellery and Silver*, ed. Catherine Johns and Timothy Potter, 65–67. London: British Museum Publications.
- Hood, Allan B. E. 1978. St Patrick: His Writings and Muirchu's Life. London and Chichester: Phillimore.
   Hunter, Fraser. 2022. "Hacksilber in the Roman period and beyond." In The Late Roman Silver Treasure from Traprain Law, ed. Fraser Hunter, Annemarie Kaufmann-Heinimann, and K. Painter, 359–80.
   Edinburgh: National Museums Scotland.
- Janes, Dominic. 1996. "Treasure bequest: Death and gift in the early Middle Ages." In *The Community, the Family and the Saint: Patterns of Power in Early Medieval Europe,* ed. Joyce Hill and Mary Swann, 363–78. Turnhout: Brepols.
- Johns, Catherine. 1995. "Treasure: Romano-British precious metal hoards: Some comments on Martin Millett's paper." In TRAC 94: Proceedings of the Fourth Annual Theoretical Roman Archaeology Conference, Durham 1994, ed. David Dungworth, Sally Cottam, Sarah Scott, and Jeremy Taylor, 107–17. Oxford: Oxbow.
- Johns, Catherine. 2010. *The Hoxne Late Roman Treasure: Gold Jewellery and Silver Plate*. London: British Museum Press.
- Johns, Catherine, and Timothy Potter. 1983. *The Thetford Treasure: Roman Jewellery and Silver*. London: British Museum Publications.
- Johns, Catherine, and Timothy Potter. 1985. "The Canterbury Late Roman treasure." Ant J 65, no. 2: 312–52.
- Johns, Catherine, Hugh Thompson, and Peter Wagstaff. 1980. "The Wincle, Cheshire, hoard of Roman gold jewellery." *Ant J* 60, no. 1: 48–58.
- Joy, Jody. 2009. "Reinvigorating object biography: Reproducing the drama of object lives." WorldArch 41, no. 4: 540–56. https://doi.org/10.1080/00438240903345530.
- Kazanski, Michel. 2020. "The migration of the Vandals and the Suebi to the Roman West and archaeological accounts." *Acta Archaeologica Carpathica* 55: 197–214.
- Khairedinova, Elzara. A. 2012. "Early medieval crosses from the south-western Crimea." In *Byzantine Small Finds in Archaeological Contexts*, ed. Beate Böhlendorf-Arslan and Alessandra Ricci, 417–40. Istanbul: Deutsches Archäologisches Institut.
- Kiss, Atilla. 1995. "Die Werkstätten der Gräberfunde des Gepidenkönigs Omharus von Apahida Siebenbürgen." ActaArchHung 47: 305–18.
- Kiss, Atilla. 2001. "Das germanische Frauengrab von Répcelak (Westungarn) aus der zweiten Hälfte des 5 Jahrhunderts." *ActaArchHung* 52: 115–44.
- Klingshirn, William. 1985. "Charity and power: Caesarius of Arles and the ransoming of captives in sub-Roman Gaul." *JRS* 75: 183–203.
- Konrad, Michaela. 1997. Das Römische Gräberfeld von Bregenz-Brigantium 1: Die Körpergräber des 3. bis 5. Jahrhunderts. München: C. H. Beck.
- Kopytoff, Igor. 1986. "The cultural biography of things: Commoditization as process." In *The Social Life of Things: Commodities in Cultural Perspective*, ed. Arjun Appadurai, 64–91. Cambridge: Cambridge University Press.
- La Niece, Susan. 2010. "Roman gold- and silversmithing and the Hoxne Treasure." In *The Hoxne Late Roman Treasure: Gold Jewellery and Silver Plate*, ed. Catherine Johns, 185–88. London: Trustees of the British Museum.
- Lang-Auinger, Claudia. 2007. "Zum Grabungsbefund." In *Die Basilika am Staatsmarkt in Ephesos*, ed. Claudia Lang-Auinger, and Veronika Mitsopoulos-Leon, 4–8. Vienna: Österreichischen Akademie der Wissenschaften.
- Leader-Newby, Ruth. 2004. Silver and Society in Late Antiquity: Functions and Meanings of Silver Plate in the Fourth to Seventh Centuries. Aldershot: Ashgate.

- Legoux, René, Patrick Périn, and Françoise Vallet. 2004. Chronologie normalisée du mobilier funéraire mérovingien entre Manche et Lorraine. Paris: Association française d'Archéologie Mérovingienne.
- Lewandowski, Hervé. 2007. "Bague Bj 1165." Louvre Online Catalogue. https://collections.louvre.fr/ark:/53355/cl010255711.
- Lockyear, Kris. 2012. "Dating coins, dating with coins." OJA 31, no. 2: 191–211.
- MacGregor, Arthur. 1985. Bone, Antler, Ivory and Horn: The Technology of Skeletal Materials Since the Roman Period. Beckenham: Croom Helm.
- Mack, T. 1967. "Ditzingen." Fundberichte aus Schwaben N. F. 18: 134.
- Malrieu, Anne. 2005. "Le rôle économique des sanctuaires Romains: thésaurisation et investissement des fonds sacrés." *Topoi* 12–13, no. 1: 95–116.
- Manière-Lévêque, Anne-Marie. 1997. "L'évolution des bijoux 'aristocratiques' féminins à travers les trésors proto-byzantins d'orfèvrerie." *RA* 1997, no. 1: 79–106.
- Marshall, Frederick Henry. 1907. Catalogue of the Finger-Rings, Greek, Etruscan and Roman, in the Department of Antiquities, British Museum. London: Trustees of the British Museum.
- Martin, M. 1984. "Esslöffel." In *Der spätrömische Silberschatz von Kaiseraugst*, ed. Herbert Adolph Cahn and Annemarie Kaufmann-Heinimann, 56–96. Derendingen: Habegger Verlag.
- Martin, Stéphane. 2019. "Money and the everyday: Multiple moneys for multiple users." In *A Cultural History of Money in Antiquity*, ed. Stefan Krmnicek, 85–104. London: Bloomsbury.
- Mattingly, Harold. 1922. "Find of siliquae at Dorchester, Dorset." NC, 5th ser., 2: 134-39.
- Nash Briggs, Daphne. 2017. "Something old, something new: The names of Faunus in Late-Roman Thetford (Norfolk) and their Iron Age background." In *Celtic Religions in the Roman Period: Personal, Local and Global,* ed. Ralph Haeussler and Anthony King, 79–102. Aberystwyth: Celtic Studies Publications.
- Nicosia, Cristiano, and Yannick Devos. 2018. "Urban dark earth." In *Encyclopedia of Global Archaeology*, ed. Claire Smith, 7532–40. New York: Springer.
- Nouvel, Pierre. 2013. "L'utilisation de la monnaie dans les sanctuaires gallo-Romains." In *Le sanctuaire gallo-romain de Chasseron: découvertes anciennes et fouilles récentes*, ed. Thierry Luginbühl, Cédric Cramatte, and Jana Hoznour, 362–84. Lausanne: Cahiers d'archéologie romande.
- O'Flynn, D., and M. Mongiatti. 2023. *X-Radiography of Gold Ring* 1981,0201.9 (*Thetford*). Unpublished report AR2023/24. 24/11/2023. Department of Scientific Research, The British Museum.
- Opreanu, Coriolan Horațiu. 2010. "Das Medaillon mit Masken von Şimleul Silvaniei (Szilágysomlyó): Ikonographische Präzisierungen und kulturelle Einflüsse." In Zwischen der Steppe und dem Reich: Archäologische Studien für Radu Harhoiu zum 65. Geburtstag, ed. Andrei Măgureanu and E. Gáll, 79–110. Bucharest: Institutul de Arheologie "Vasile Pârvan."
- Painter, Kenneth. 1997. "Silver hoards from Britain in their Late Roman context." *Antiquité Tardive* 5: 93–110.
- Pareanteau, Fortuné. 1878. Inventaire archéologique. Nantes: V. Forest et E. Grimaud.
- Peroni, Adriano. 1967. Oreficerie e metalli lavorati tardoantichi e altomedievali del territorio di Pavia. Spoleto: Presso la Sede del Centro de Studi.
- Pilloy, Jules. 1880–1903. Études sur d'anciens lieux de sépulture dans l'Aisne. Paris and St Quentin: Triqueneaux-Devienne/Dupré/Lagnier-Roze/Lechevallier.
- Pinar Gil, Joan. 2007. "Some remarks on early fifth-century gold necklaces with pin-shaped pendants with regard to an ancient find from La Valleta del Valero (Sose, Lleida, Spain)." *ActaArchHung* 58, no. 1: 165–85.
- Pinar, Joan, and Gisela Ripoll. 2008. "The so-called Vandal objects of *Hispania*." In *Das Reich der Vandalen und seine vorgeschichten*, ed. Guido M. Berndt and Roland Steinacher, 105–30. Vienna: Osterreichische Akademie der Wissenschaften.
- Pirling, Renate, and Margareta Siepen. 2006. *Die Funde aus den römischen Gräbern von Krefeld-Gellep*. Germanische Denkmaler der Völkerwanderungszeit Serie B 20. Stuttgart: Franz Steiner.
- Popović, Ivana. 1996. *Les bijoux romains de Musée National de Beograd II: les bijoux d'or*. Belgrade: Musée National de Beograd.
- Popović, Ivana. 2001. *Late Roman and Early Byzantine Jewelry in National Museum in Belgrade*. Antika: Narodni Muzeji Beograd 8. Belgrade: National Museum in Belgrade.
- Pröttel, Philippe-Marc. 1988. "Zur Chronologie der Zwiebelknopffibeln." JRGZM 35: 347–71.
- Pülz, Andrea. M. 2020. *Byzantinische Kleinfunde aus Ephesos*. Forschungen in Ephesos 18.1. Vienna: Österreichischen Akademie der Wissenschaften.

- Reece, Richard. 2015. "The composition of hoards." In *Hoarding and the Deposition of Metalwork from the Bronze Age to the 20th Century: A British Perspective*, ed. John Naylor and Roger Bland, 93–100 Oxford: BAR.
- Rettner, Arno. 2004. "Baiuaria romana: Neues zu den Anfangen Bayerns aus archäologischer und namenkundlicher Sicht." In Hüben und Drüben: Räume und Grenzen in der Archäologie des Frühmittelalters. Festschrift für Prof. Max Martin zu seinem fünfundsechzigsten Geburtstag, ed. Gabriele Graenert, R. Marti, A. Motschi, and R. Windler, 255–88. Liestal: Archäologie und Museum Baselland.
- Riha, Emilie, W. B Stern, C. W. Beck, and A. R. Furger. 1990. *Der römische Schmuck aus Augst und Kaiseraugst*. Basel: Römermuseum Augst.
- Rives, James. 2000 "Religion in the Roman Empire." In Experiencing Rome: Culture, Identity and Power in the Roman Empire, ed. Janet Huskinson, 245–75. London: Routledge.
- Robinson, David. 2017. "Assemblage theory and the capacity to value: An archaeological approach from Cache Cave, California, USA." *CAJ* 27, no. 1: 155–68.
- Ruseva-Slokoska, Ljudmila. 1991. Roman Jewellery: A Collection of the National Archaeological Museum, Sofia. London: Cromwell Editions.
- Schmauder, Michael. 2002. Oberschichtgräber und Verwahrfunde in Südosteuropa im 4 und 5 Jahrhundert, 2 vols. Bucharest: Editura Academiei Române.
- Schulze-Dörrlamm, Mechthild. 1990. Die spätromischen und frühmittelalterlichen Gräberfelder von Gondorf, Gem. Kobern-Gondorf, Kr. Mayen-Koblenz. Stuttgart: Steiner.
- Schulze-Dörrlamm, Mechthild, and Andrea M. Pülz. 2020. "Alter und Funktion der Goldschmiedearbeiten." In *Byzantinische Goldschmiedearbeiten im Römisch-Germanischen Zentralmuseum*, ed. Mechthild Schulze-Dörrlamm, 7–154. Mainz: Römisch-Germanischen Zentralmuseum.
- Shanzer, Danuta, and Ian Wood. 2002. Avitus of Vienne: Letters and Selected Prose. Liverpool: Liverpool University Press.
- Shelton, Kathleen. 1981. The Esquiline Treasure. London: British Museum Publications.
- Smith, Alexander. 2001. The Differential Use of Constructed Sacred Space in Southern Britain, from the Late Iron Age to the Fourth Century AD. BAR British Series 318. Oxford: Archaeopress.
- Sommer, Markus. 1984. *Die Gürtel und Gürtelbeschläge des 4. und 5. Jahrhunderts im römischen Reich.*Bonn: Kleemann und Schnitzler.
- Spier, Jeffrey. 2007. Late Antique and Early Christian Gems. Wiesbaden: Reichert.
- Spier, Jeffrey. 2010. "Some unconventional early Byzantine rings." In "Intelligible Beauty": Recent Research on Byzantine Jewellery, ed. Chris Entwistle and Noël Adams, 13–19. London: British Museum Press.
- Spier, Jeffrey. 2012. Byzantium and the West: Jewelry in the First Millennium. London: Paul Hoberton/Les Enluminures.
- Swift, Ellen. 2000. *Regionality in Dress Accessories in the Late Roman West*. Monographies Instrumentum 11. Montagnac: Editions Monique Mergoil.
- Swift, Ellen, Jo Stoner, and April Pudsey. 2022. A Social Archaeology of Roman and Late Antique Egypt: Artefacts of Everyday Life. Oxford: Oxford University Press.
- Timpel, Wolfgang. 2003. "Ossmannstedt." Reallexicon der Germanischen Altertumskunde 22: 328–29 and pl. 11.
- Tomlin, R. S. O. 1988. Tabellae Sulis: Roman Inscribed Tablets of Tin and Lead from the Sacred Spring at Bath. Oxford: Oxford University Committee for Archaeology.
- Tóth, Bálint László. 2016. "Small masks on migration period jewellery: Replication traditions of Germanic, Roman, Etruscan, and Greek Goldsmiths." *Journal of Archaeology and Ancient History* 18: 3–70. https://doi.org/10.33063/jaah.vi18.93.
- Von Rummell, Philipp. 2007. *Habitus Barbarus: Kleidung und Repräsentation spätantiker Eliten im 4 und 5 Jahrhundert*. Berlin: Walter de Gruyter.
- Vrielynck, Olivier. 2015. Le cimetière du Bas-Empire et mérovingien de Spontin. Annales de la Société Archéologique de Namur 89. Namur: Société Archéologique de Namur.
- Watts, Dorothy J. 1988. "The Thetford Treasure: A reappraisal." Ant J, 68, no. 1: 55-68.
- Westwood, Benjamin, with Richard Hobbs. 2019. "Finger-ring DUR-885FC8." https://finds.org.uk/database/artefacts/record/id/934024.

- White, R., R. Hobbs, and R. Abdy. Forthcoming. "An initial report on the Wem hacksilver hoard." In *Silver, Status and Society: The Transition from Late Roman to Early Medieval Europe,* ed. M. Goldberg, A. Blackwell, and F. Hunter. National Museums of Scotland.
- Wickham, Chris. 2005. Framing the Early Middle Ages: Europe and the Mediterranean, 400–800. Oxford: Oxford University Press.
- Woodward, Ann, and Peter Leach. 1993. *The Uley Shrines: Excavation of a Ritual Complex on West Hill, Uley, Gloucestershire:* 1977–79. London: English Heritage/British Museum Press.