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EDITORIAL

The sixth issue of PCA presents the material from two conferences held in different European countries last year.

The volume opens with some of the papers presented at The British School at Rome (April 2014) at a conference on The Recycling and Reuse of Materials during the Early Middle Ages. The meeting – organised by Alessandro Sebastiani (who has collaborated as guest editor for this section), Elena Chirico and Matteo Colombini – dealt mainly with productive structures related to the transformation of glass and metal in Italy (papers by Alessandro Sebastiani, Stefano Bertoldi, François-Dominique Deltenre and Lucia Orlandi). Other international experts have agreed to add their contributions to the subject: Robin Fleming on the reuse of construction material in early medieval graves, Sarah Paynter and Caroline Jackson offering a synthesis on the reuse of glass, and the team of Carmen Fernández-Ochoa in Spain presenting the early medieval productive structures at the villa of Veranes (Gijon). Two papers by Florin Curta and Michele Asolati, dealing with exchange in the Byzantine Mediterranean, have been published in the Variae *section.*

After the catastrophe of World War II, many international institutions were founded: the United Nations, UNESCO, the European Community. All these organizations are today immersed in a transitional phase in the systemic crisis which affects the entire Western world, a crisis to which the nihilist and relativist positions have contributed and which has (rightly) delegitimated the imperialism on which the West had built its dominant position. In this crisis, the recovery of shared historical memories is increasingly revealed as a central element in the defence of a rational world, which, although it may have abandoned the utopias of the 1900s, at least safeguards the principles of freedom and the pluralism of values. Today, there is wide debate, even among archaeologists, over how to present cultural heritage in a globalized society while nevertheless pre-

serving its multiple identities and cultures. The discussion of these matters was the purpose of the papers dedicated to the World Heritage List. This collection, guest edited by Margarita Díaz-Andreu, results from a workshop of the EU-project JPI—JHEP Heritage Values Network (H@V) held at the University of Barcelona in February 2015. The main question, summarized in the title of the paper by Díaz-Andreu, is whether the inclusion of social values and local communities in the management of cultural heritage is an impossible dream. Is it a utopian vision, typical of the historical processes which gave birth to the international organizations and their initiatives to hold back the spectre of a World War III? In many of these contributions, the watchwords still conform to this direction: the participation and involvement of stakeholders in the hope that local communities will be led to a positive valuation of assets and their public use.

The different directions of the debate move between the two poles of economic management and cultural enrichment of local communities. Too often, it is difficult to find a balance between touristic exploitation and a useful cultural proposal for local communities, as happened in the telling example of the Daming Palace in China, developed by Qian Gao, winner of the 2016 PCA young researcher award.

Direct involvement is often difficult in a globalized and multicultural society that has lost its historical roots. Most of the contributions consider that a proper balance can be found between global strategies promoted by UNESCO, based on the decalogue of general principles under which to file an application for protected sites, and the feeling and evaluation expressed by the local community (the focus of Torgrim Sneve Guttorsen, Joel Taylor, Grete Swensen on Heritage Routes and Matthias Maluck and Gian Pietro Brogiolo on organizational proposals in the interventions).

Also related to the subject of cultural heritage and the public is the project section of this issue, a homage the Poggibonsi Archeodromo. A project developed in recent years by the team of Marco Valenti (University of Siena), this is a unique living archaeological park recreated from archaeological evidence, presenting the life of an early medieval village, an initiative that clearly demonstrates the social and economic benefits of good practices in public archaeology in Italy.

Finally, the retrospect section, which addresses the history of early medieval archaeology in different European countries, is this year devoted to the fascinating recent history of early medieval Archaeology in Russia, with an extensive study by Nadezhda Platonova (St Peterburg).

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research

The ritual recycling of Roman building material in late 4th- and early 5th-century Britain

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Much of the scholarly literature on late and post-Roman recycling focuses on either the pragmatic or the ideological reuse of *spolia*. This article, however, examines the widespread late- and post-Roman practice in Britain of including recycled Roman building material in ritual activities, especially in closure deposits made in wells. Deposits like these, which are found in more than forty wells, and which dated between c. 370 and c. 430, are described and analysed.
Keywords: late-Roman, post-Roman, Britain, recycling, closure deposits.

Molta della letteratura scientifica riguardante il riuso nel tardoantico o in età postclassica si focalizza o sugli aspetti pragmatici o ideologici del riutilizzo di spolia. Questo articolo esamina la pratica, nella Britannia tardoantica e postclassica, di riutilizzare materiale costruttivo romano nelle attività rituali, in particolare nei depositi di chiusura dei pozzi. Il contributo descrive e analizza questi tipi di depositi, trovati in oltre 40 casi e datati tra il 370 e il 430.
***Parole chiave**: tardoantico, altomedioevo, Britannia, riciclo, depositi di chiusura*

The literature on late- and post-Roman recycling most familiar to scholars focuses on the ideological uses of *spolia*. Numerous studies have analyzed the ways great men deployed recycled building materials to bolster claims that they were true heirs to a past Golden Age. Elites regularly engaged in this practice in the West from the late-3rd century through the Carolingian era, and we find generations of strivers across Continental Europe embellishing their own monumental buildings with *spolia* taken from earlier Roman structures[1]. Not only were great men

[1] Heckscher 1937-1938; Brenk 1987; Alchermes 1994; Saradi 1997; Elsner 2000; Kinney 2001; Hansen 2003; Greenhalgh 2009, pp. 484-493.

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reusing decorative elements taken from ancient buildings, but they were repurposing antique metalwork, gemstones, and ivory carvings as well, adding them to "modern" liturgical vessels, book covers, reliquaries, and jewelry (Nees 2002, pp. 228-235; Hahn 2012, pp. 67-72). Although some of this recycling was spurred on by economic necessity, much of it was driven by programmatic and ideological concerns and was the result of active choice. Less has been written about recycling in less august circles. Much of it was pragmatic, and although evidence for this activity is less dramatic in the material record, it is clear that many people recycled to compensate for a decline in the production of basic goods and materials, such as iron, problems apparent in many places in the West by the 5th century. I will not rehearse the arguments I have made elsewhere for the ubiquity of metal recycling in early medieval Britain, except to note that there is both abundant evidence for the scavenging of Roman iron objects in the post-Roman period and for the precipitous decline by c. 400 CE of iron smelting in Britain. There is also convincing evidence that the majority of copper-alloy and lead objects made and used in lowland Britain in the 5th and early 6th centuries were fabricated from recycled, scavenged Roman objects (Fleming 2012). A number of articles that follow in this issue of the *European Journal of Post-Classical Archaeologies* investigate the sites and scale of pragmatic recycling across the post-Roman world.

Both the ideologically-charged recycling of architectural *spolia* and the pragmatic recycling of things like metalwork help us characterize and understand the political cultures and economies of regional societies in the late- and post-Roman West, and studies about these categories of reuse provide us with crucial empirical data on the production and control of basic materials and goods during this period.

There was, however, another category of recycling taking place in Britain in the decades on either side of 400 — recycling that was neither drearily pragmatic nor showily ideological — that has not, to my knowledge, been considered alongside these other forms of recycling. The recycling that interests me here is the reuse of Roman building material in ritual activities. I will present evidence from a closely dated series of graves and closure deposits, mostly consigned to the thirty years on either side of 400 CE, although some of the practices I will be discussing are, in fact, the tail end of a long-running complex of activities, some of which pre-date the Roman conquest[2]. I will first present evidence for the more standard, pragmatic reuse of building material in Britain in the late-

[2] Ross 1968; Merrifield 1988, pp. 22, 45-48; Scott 1991, pp. 118-119; Fulford 2001.

and post-Roman periods and then explore its deployment in ritually-charged events between c. 370 and c. 430. We will look briefly at the place of scavenged building material in funerary contexts and then examine, in more detail, the large amounts of stone, slate, and ceramic building fabric deposited in decommissioned Roman wells, in what were likely highly choreographed act undertaken to mark the deaths of buildings and settlements that were being abandoned in large numbers in Britain during these decades. The patterns of reuse witnessed in the archaeologically visible remains of these acts remind us that many communities in lowland Britain, although living through serious political and economic dislocations, chose to deploy recycled Roman material in ways that had little do with either invocations of the past for future political gain or attempts to make up for the loss of no-longer manufactured, but still necessary objects of everyday life.

* * *

Between the last quarter of the 4th century and the end of the first quarter of the 5th century, large numbers of Roman towns, manufacturing sites, forts, villas, and temple complexes were abandoned (Fleming 2010, pp. 25-32), and these places would have contained (literally) tons of reusable building material. Just how much material was available in lowland Britain is suggested by the mountains of recycled Roman quarried stone found in English churches constructed between the 7th and the 11th centuries. It has long been established that almost all the stone used in England before the Norman Conquest had been salvaged from abandoned Roman buildings; and this is as noticeable in naturally stone-rich regions (where people could have quarried new stone, if they had had a mind to) as it is in stone-poor ones[3]. Indeed, it was unnecessary to quarry new stone in Britain for at least 600 years after Rome's fall, because so much worked stone was available from derelict Roman sites.

Extraordinary amounts of Roman brick and tile were also used by medieval builders (fig. 1). Indeed, as late as the 14th century — nine hundred years after Rome's fall in Britain — masons continued to build churches from salvaged Roman brick and tile (Smith 2001, p. 116). One recent architectural survey has found Roman brick in the walls of over three hundred still-standing medieval churches in the London basin (Potter 2001); and another overlapping study, which examined almost 400 me-

[3] Sutherland 1990; Stocker, Everson 1990; Borradaile, Brann 1997; Potter 2000. There was, however, some small-scale quarrying taking place in the later Anglo-Saxon period, probably for local projects (Cadman with Audouy 1990; Lang 2002, pp. 14-15).

Fig. 1. 11th-century doorway of Holy Trinity Church, Colchester, built with recycled Roman brick (photo Christian Etheridge, licensed under Creative Commons).

dieval churches in the county of Essex, has established that something on the order of 350 of them contain Roman tile and brick (Ryan 1996, p. 107; Minter *et al.* 2006). This can only mean that as late as 1300 there were still-standing Roman walls in Britain. If this were the case after people had been using Roman ruins as quarries for nine hundred years, imagine the number of still visible derelict buildings there must have been in the first couple of generations after Rome's fall.

In places that had served as important late-Roman administrative centers, like Colchester, in Essex, long runs of town walls and ruined late-Roman government buildings would have provided builders with near-bottomless quarries of brick and stone. But it was not only former Roman towns that harbored useful stores of building material: smaller rural sites did as well. Take, for example, the not very large, not very glamorous Roman bath at Beauport Park, in East Sussex, which had been built to serve a state-owned iron works. Soon after the bathhouse was abandoned in the 3rd century, it was engulfed by a looming slagheap, and its ruins lay hidden until the late-19th century. This event prevented people in later generations from robbing the site of its building material,

and when the bath-house was excavated in the 1970s, it still contained all the tile and brick used to construct the building in the first place: just over thirteen tons of brick and tile in all (Brodribb 1979; Brodribb 1987, p. 1). This was not an exceptional building in any way, and there would have been thousands of similar-sized abandoned and increasingly ruinous masonry or part-masonry structures like this available for scavenging from the 5th century onwards.

In spite of the ubiquity of abandoned Roman buildings, it seems that only a few people in the years after the Roman state's withdrawal from Britain bothered to repurpose even small amounts of Roman building material in pragmatic ways[4]. Occasionally, in the post-Roman period, we find householders using a few scavenged Roman bricks or tiles in the construction of their hearths or furnaces[5]; and a handful of people fashioned ingot molds out of Roman tiles (Jones 1977; Hall 1984, pp. 56-57). Stone quarried in the Roman period was reused on settlement sites only slightly more often. Excavations have uncovered a little of this material at three of the hillforts reoccupied in the post-Roman period (Alcock *et al.* 1995 p. 140-141). It was also occasionally employed by people building rubble platforms for new timber structures that were being put up in the immediate post-Roman period next to derelict villa buildings (e.g. Price 2000, vol. 1, 113-118; Whyman 2001, p. 295; Johnstone, Dicks 2014, pp. 65-70); or people sometimes used it to build dry-stone walls to divide once posh villa rooms as they transformed these spaces into sites of crop and livestock processing or metal working (Rogers 2011, pp. 130-138). In short, Roman stone and brick were never used in the 5th century for the construction of whole, new buildings, the way they were elsewhere in the post-Roman West. Like literacy, Christianity, and Latinity, the ability to construct Roman-style masonry buildings was lost in this period, and would only be reintroduced into eastern Britain in the early seventh-century by foreign missionaries, who revived the practice. So, Roman quarried stone and Roman-period brick and tile — however omnipresent they might have been and however useful to builders from the 7th century on — were for the most part left untouched in the 5th and 6th centuries by those constructing new buildings.

People in the period did, however, reuse Roman-period building material in two distinct ritual contexts — occasionally in burials and much more frequently in closure deposits associated with the de-commissioning of

[4] This level of activity should be compared to the extraordinary large-scale campaign of pragmatic recycling of Roman building material in late-antique Ravenna (Cirelli 2011).

[5] Haslam 1980, p. 55; West 1985, vol. 1, pp. 57-81; Williams 1993, p. 125; Blackmore *et al.* 1998, p. 62; Evans, Loveluck 2009, p. 442; Lucy *et al.* 2009, pp. 34, 428.

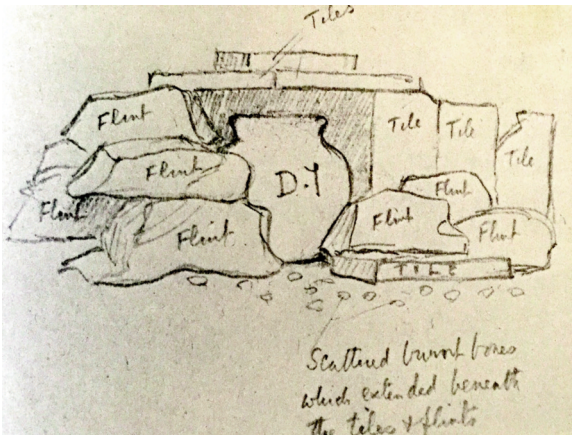

Fig. 2. A post-Roman cist made from repurposed Roman tile for a cremation burial at Caistor-by-Norwich (from Myers, Green 1973, plate 15a. Reproduced with permission of the London Society of Antiquaries).

Roman-period wells. Small amounts of scavenged Roman building material were included in a few late- and post-Roman period graves[6]. Ceramic building material and slate roofing tiles were sometimes redeployed for the making of grave structures. A cremation urn found in the early medieval cemetery at Caistor-by-Norwich, for example, was placed in a cist made from Roman tiles and flints (Myers, Green 1973, p. 126) (fig. 2), and at a cemetery at Irchester, in Northamptonshire, a couple of cists were built from Roman-period slate roofing-tiles (Haverfield 1902, p. 182). In the 5th century, when the west wing of the partially demolished villa at Redlands Farm, in Northamptonshire, became the site of infant burial, the tessellated pavement originally laid in the floor of room 1114 was removed, and some of its *tesserae* were used to seal the graves (Keevil 1992, pp. 53-54; Biddulph *et al.* 2002, vol. 1, pp. 55, 70-72). Burial parties sometimes used Roman-period worked stone in graves as well. Two late-Roman burials in a cemetery outside Ancaster had cists or grave covers made from repurposed stone carrying inscribed dedications to the god Viridius (Burnham *et al.* 2002, pp. 355-356), and one of the cists in the Irchester cemetery was made from pieces of a broken Roman tombstone (Petts 2000, vol. 1, p. 48). At the 6th-century cemetery at Broughton Lodge, in Nottinghamshire, a few graves were lined with what look like cobbles from a nearby defunct Roman road, and another had stones salvaged from a ruined Roman building, including part of a column base (Kinsley 1993, p. 70). Roman-period quarried stone (one piece with bits of plaster still adhering to it) were also used to make

[6] This practice is more visible in other parts of the post-Roman world (see, for example, Krsmanovic, Anderson 2012, pp. 70, 83-84 and Fig. 8a and 8b).

a grave structure in the post-Roman period at the cemetery at Wasperton, in Warwickshire (Carver et *al.* 2009, p. 292). And at the early medieval cemetery at Butler's Field, Lechlade, a couple of graves included worked limestone, probably brought to the cemetery from the nearby ruined villa at Roughground Farm (Boyle *et al.* 2011, pp. 5, 63, 74). Occasionally, more than token amounts of repurposed Roman masonry were employed in grave structures. Worked, Roman stone, for example, including a pedestal and a limestone column, was used in an impressively large post-Roman cist found near the once grand temple-mausoleum at Bancroft, in Buckinghamshire (fig. 3), and another contemporary Bancroft grave was lined with fragments of limestone, pieces of *tegulae* and *imbrices*, and a chunk of *opus signinum* (Williams and Zeepvat 1994, vol. 1, pp. 116, 119). Thus, Roman-period building material played some role in the funerary practices of a handful of communities; but its deployment in graves was never more than a minor rite in lowland Britain.

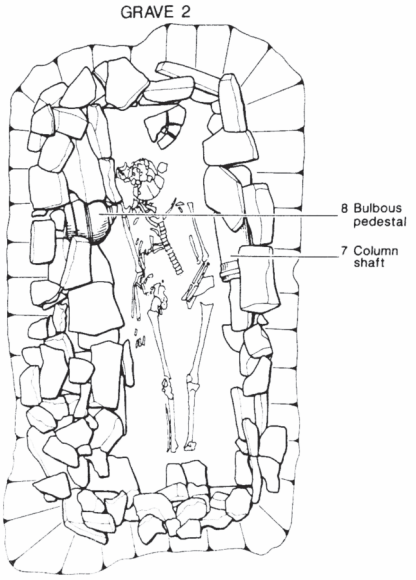

Fig. 3. A post-Roman cist burial made from repurposed building material near the defunct temple-mausoleum at Bancroft, Buckinghamshire (from Williams, Zeepvat 1994, vol. 1, plate 31. Reproduced with the permission of the Buckinghamshire Archaeological Society).

Very large collections of repurposed building material, on the other hand, are frequently encountered in the back-fills of late-Roman wells[7] (fig. 4). In the decades on either side of 400, when large numbers of buildings and, indeed, whole settlements were being abandoned, people across the former diocese were taking part in events in which participants purposefully filled wells and ended these features' lives as viable water sources. Included in these deposits are stone roofing shingles, *tegulae*, *imbrices*, *pilae*, worked stone, building rubble, cement, and plaster, as well as wooden building fixtures: this in spite of the fact that at

[7] This article does not include in its discussion wells decommissioned earlier in the Roman period and then transformed into pits, which acted as sites of ritual deposition over many generations (Grimm 2007).

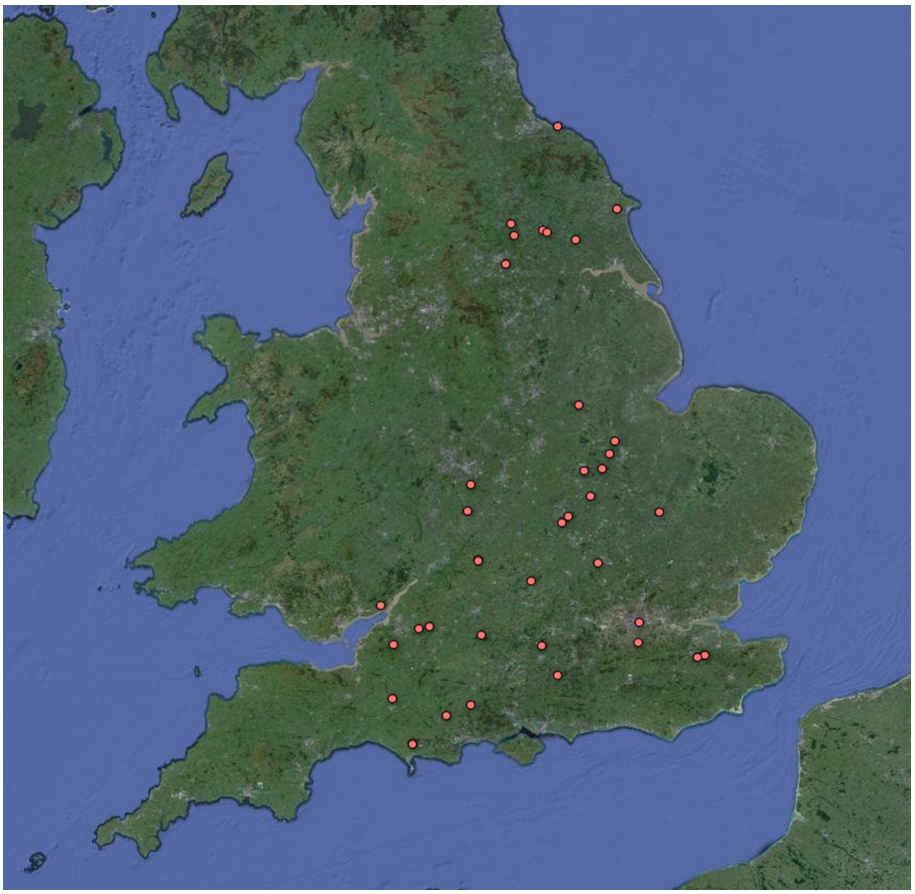

Fig. 4. Map of closure deposits discussed in this paper, which include recycled Roman building material.

the time these deposits were made, newly fabricated Roman building supplies were increasingly difficult to secure.

Alongside this recycled building material, people backfilling wells also deposited at least some of a standard package of objects: partial or whole animals and/or animal heads, notably dogs and deer, but also cattle, sheep, goats, pigs, horses, and birds; human remains, especially skulls; coins, quern stones, and shoes (more often left than right!); complete or nearly complete ceramic pots and pewter vessels; and oyster shells and hazelnuts. Included in this list of deposits are objects that were unlikely to have been considered rubbish — human remains and whole or nearly whole herbivore carcasses (Clarke 1997, p. 75), undamaged pots, and metal containers — and this argues that the events that

stood behind well closures were not the result of mundane, everyday activities[8]. At the same time, these deposits were made in a specific context – a well – and they commemorated a particular event – an abandonment. The predictable grammar of these depositions, the lack of utilitarian explanation for their contents, and their repeated focus on wells helps us interpret these events as something more than routine. Indeed, they meet Catherine Bells' definition of a ritual act: "a way of acting that is designed and orchestrated to distinguish what is being done in comparison to other, usually more quotidian practices" (Bell 1992, p. 74). In short, well deposits are an example of the way people in this period sometimes chose to use Roman building material – alongside a suite of other objects – in purposeful activities undertaken to mark the deaths of buildings and/or settlements which had depended on water from these wells, and which through these acts were obstructed and fouled.

Closure deposits have a very long history in Britain, and since the Iron Age people living there had used many of the same, non-utilitarian collections of object in structured deposits (Ross 1968, p. 283). Across the Roman period, moreover, deposits like these had been used to mark the end of the working lives of wells[9]. Similar deposits were also sometimes made when pits (Booth, Diez 2006, p. 212), corn dryers (Powell 2011, pp. 31, 61), kilns (Cooke, Powell 2012, p. 47), ditches (Cool, Mason 2008, pp. 309-310), watering holes (Millett 2006, pp. 314-315), and buildings (Lawrence, Smith 2009, pp. 334-335) were decommissioned[10]. Scholars in recent years who have written about closure deposits have, by and large, replaced more functionalist explanations for the objects found within them – e.g. cat-and-dog fights (Hammerson 1978, p. 209), dog population control measures (Maltby 1993, p. 59; Lovell 2006), Pictish raiders (Branigan 1972, p. 84), building-site clearance schemes (Yule 1982, p. 248), accidental falls (Oliver 1992, p. 76; Maltby 1993, pp. 61-62), etc. – with the idea that they were important components of meaningful and special acts (Fulford 2001 pp. 214-215). This work, however, has focused on the pottery, small finds, and faunal and human remains recovered from these deposits, and it looks past or ignores the recycled Roman-period building material that often makes up

[8] Ross 1968; Millett, Graham 1987, p. 159; Merrifield 1988, pp. 22, 45-50; Poulton, Scott 1993; Fulford 2001; Black 2008; Seeley, Wardle 2009; Gerrard 2011; Collie 2013, pp. 39-62, 78-79; Roskams et *al.* 2013; Cool, Richardson 2013, p. 192; Haynes 2013.

[9] Cook 1955, p. 29; Pearman 1968; Chapman, Smith 1988; Mackey 1999, pp. 24-26; Maull 2004, p. 15.

[10] For similar depositional practices elsewhere in northwestern Europe during and just after the Roman period, albeit without recycled building material, see Gerritsen 2003, pp. 31-105; Groot 2009, pp. 59-64; van Haasteren, Groot 2013.

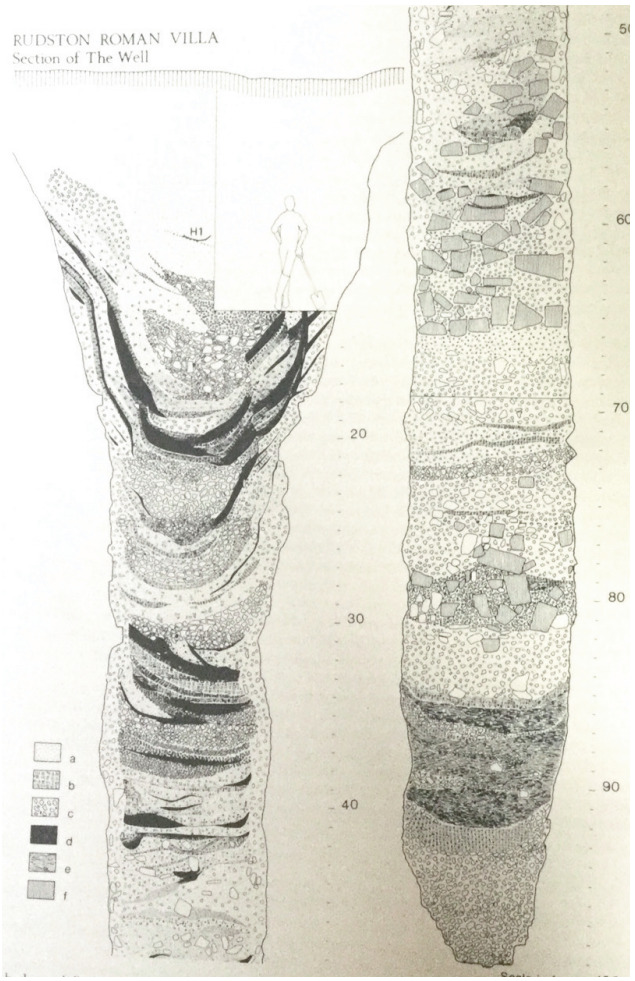

Fig 5. Well with fill at Rudston villa (from Stead 1980, fig. 16. Reproduced with the permission of the Yorkshire Archaeological Society and I.M. Stead).

a significant proportion of the fills. Some studies fail to mention its presence at all, even when it was clearly present, and others only note its existence in passing with phrases like "and the usual rubble". Indeed, only one scholar, Eleanor Scott, has wondered in passing, "if building stone is another deliberate deposit in wells, as opposed to it simply collapsing in" (Scott 1988, vol. 1, p. 212).

Let us begin with the fill found in the impressively capacious well associated with the late-Roman bathhouse at the villa of **Rudston**, in Yorkshire (fig. 5). The well was 30 meters deep and 2.75 meters in diameter (Stead 1980, p. 26). Its fill included massive amounts of building debris, including *tesserae* and wall plaster, much of it probably derived from the dismantled bathhouse, as well as a limestone block carved with a figure

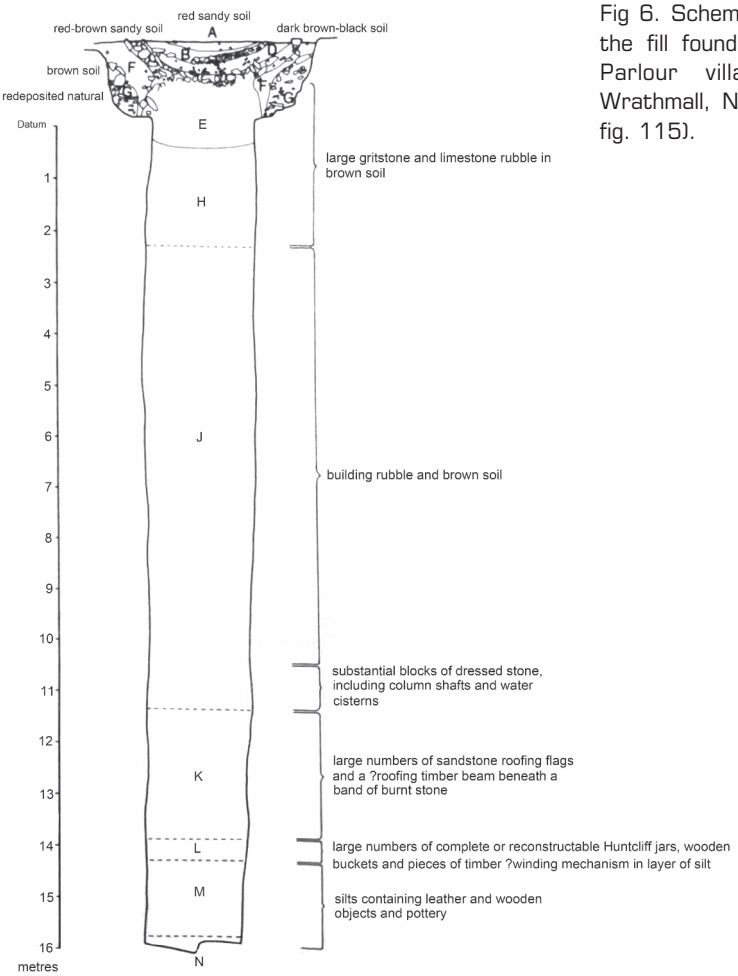

Fig 6. Schematic drawing of the fill found in the Dalton Parlour villa well (from Wrathmall, Nicholson 1990, fig. 115).

of a deity (Stead 1980, p. 216). Parts of at least two red deer were also placed in the well, along with nine lambs and the remains of cattle, horses, and pigs (Stead 1980, pp. 149-151). There was also a large quantity of pottery, mostly late Huntcliff and Crambeck wares, much of it in a layer associated with three coins dated between 364-378, and at least some of the ceramics were likely deposit as whole pots (Stead 1980, p. 29; Scott 1988, vol. 1, p. 216). The pottery assemblage is similar to the one found in the collapsed Building 3 at Beadlam villa, and dates this segment of the deposit to the very late 4th or early 5th century (Neal 1996, p. 85).

A similar fill was recovered from a well next to the bathhouse of the late-Roman villa at **Dalton Parlours**, in Yorkshire (fig. 6). Here, large

amounts of sandstone roofing shingles, structural timber, dressed stone, gritstone and limestone rubble, *pilae*, and short columns were deposited in the well, along with a threshold stone weighing some 900 kg (Wrathmell, Nicholson 1990, pp. 195-197, 272, 289). As at Rudston, much of this material looks to have come from the bathhouse; and, as with other such deposits, it also included shoes, quern stones, whole and partial animals, and considerable amounts of pottery – mostly coarse wares – including three pots made after c. 370 (Wrathmell, Nicholson 1990, pp. 272, 244).

Archaeologists have uncovered large, late closure deposits in other bathhouse wells at villas, which, like Rudston and Dalton Parlours, had served as luxury accommodations until the last decade or two of the 4th century. Among them is the enormous bathhouse well deposit discovered at the villa at **Brislington**, near Bristol, in the 19th century. Excavators found large amounts of repurposed building material in the well, as well as coins, human skulls, leather shoes, whole pots, pewter vessels, and at least twelve cattle (Barker 1901; Haverfield 1964, pp. 304-305; Branigan 1972, pp. 82-84). The well associated with the late-Roman bathhouse at **Denton**, in Lincolnshire, was also the site of a very large closure deposit, constituted primarily of building material taken from the bathhouse – limestone bocks, building rubble, mortar, clumps of cement, tile, *tesserae*, slate roofing shingles, painted wall plaster, and the base of a stone pillar – and this deposit, too, included shoes and pottery (Smith 1964; Greenfield 1971, pp. 30, 33-34). The bathhouse well at **Tarrant Hinton**, in Dorset, was deliberately back-filled with stone building rubble, mortar, plaster fragments, roof tiles, and dressed sandstone blocks (Graham 2006, pp. 61-62). The well just south of the bathhouse at **North Wraxhall**, in Wiltshire, was in-filled with building material likely taken from the bathhouse, including "a great many broken shafts of columns, with their capitals and bases". These were accompanied, according to the well's 19th-century excavator, by late-Roman coins and human bones (Scrope 1860, p. 65). The late-Roman villa at **Barnsley Park**, in Gloucester, was still undergoing improvements as late as c. 375-380 (Webster, Smith 1982, p. 73). Sometime after c. 400, though, the walls and roof of the villa were taken down, and some of the building material was used to fill two villa wells, including the one next to the bathhouse (Webster, Smith 1982, fig. 20). It is also likely that the bathhouse well at **Marshfield**, in Avon, was purposefully backfilled with repurposed building material (Blockley 1985, p. 65).

Other villa wells contain Roman-period building material, but, in these cases, the wells stood at some distance from these establishments' bathhouses. The villa at **Thurnham**, in Kent, had a deposit of large, re-

purposed building stones, placed in its well c. 400, alongside two roe deer, an owl, and a pig skull (Lawrence, Booth 2006, pp. 115-116, 121-122). Building material was also found in wells at the villas in **Oundle**, (Maull, Masters 2005, p. 59 and fig. 9), **Piddington** (Simpson 2001, p. 34 and fig. 7), and **Stanion**, in Northamptonshire (Walker 2012, p. 32; Clarke *et al.* 2011, p. 28), **Beddington**, in Surrey (Howell 2005, pp. 43-45), and **Rockbourne**, in Hampshire (Royal Commission 1983, p. 149; Scott 1988, vol. 1, p. 219), and these deposits included some combination of shoes, coins, oyster shells, hazelnuts, animal skulls, and whole pots. One of the two wells at the modest villa at **Barton Court Farm**, in Oxfordshire, was deliberately in-filled, perhaps in the early 5th century, with a large amount of stone, as well as a collection of shoes and whole pots (Miles 1986, pp. 14-15; 46-47). Finally, complete pots, a quern stone, and a dump of Roman tile were found in what is likely a post-Roman closure deposit in a feature at the villa at **Rivenhall**, in Kent, that was either a well or a watering hole (Rodwell, Rodwell 1985, vol. 1, pp. 68-69).

Very late or just post-Roman closure deposits were also made in wells located in the period's dying towns. In **Caerwent**, in Monmouthshire, Well 3 in the courtyard of House VII N contained a late deposit of stones, slabs, tile, and mortar, along with pewter tableware, pottery, hobnail shoes, ox skulls, and a human skull (Ashby 1905, p. 130; Ross 1968, pp. 283-284). Two other nearby wells in **Caerwent** were also backfilled with, among other things, building material (Ashby *et al.* 1902, p. 133; Ashby 1904, p. 295, and pl. LXCII3 and LXVII 4). A well at the once luxurious townhouse at **Colliton Park**, just outside Dorchester, contained a six-meter layer of building material taken from the south range of the building, as well as nine Portland stone dwarf columns from its verandah (Corney, Cox 2007, pp. 7-9, 12; Durham, Fulford 2014, pp. 12, 24, 39, 65, and fig. 51). A well in the courtyard of a late-Roman house in **Dorchester** contained a dump of limestone, flint, and mortar rubble, a piece of a column, and *tesserae*. Further up the well shaft were two almost complete pots (Woodward *et al.* 1993, pp. 67, 83). A well associated with a high-status house in **Silchester** was deliberately filled in the late 4th or early 5th century with recycled building material, including flint, tile, and part of a Roman column which carried an Ogham inscription (Fulford *et al.* 2000; Clarke, Fulford 2002, p. 148). A second well in **Silchester** may also contain a late- or post-Roman closure deposit. Its upper fill contains 2.3 meters of flint and tile (Clarke, Fulford 2002, p. 159). Just outside the important administrative town of York at **Heslington East** (fig. 7), a well was purposefully backfilled in the very late- or just post-Roman period, mostly likely in a single episode, with large amounts of limestone rub-

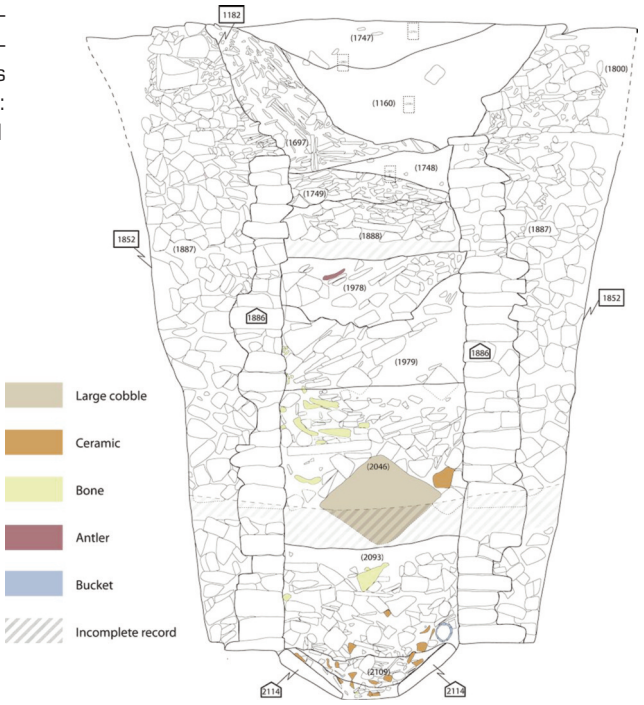

Fig. 7. Well with fill at Heslington East, Yorkshire (reproduced from S. Roskams *et al.* 2013. Online in: http://dx.doi.org/10.1141/ia.34.5, CC BY 3.0).

ble and limestone blocks, sandstone and ceramic roofing tiles, brick, and cobbles (one measuring 0.75 meters across). These were accompanied by, among other things, 25 kg of pottery, some deposited in the well whole, unidentified leather (a shoe?), almost complete carcasses of a red deer, a young calf, and a young dog, as well as a horse skull and two pig skulls (Roskams *et al.* 2013). And inside the walls of the city, at **Skeldergate**, another well was backfilled in the late- or early post-Roman period with building material, including building rubble, *pilae*, plaster, and flue and hypocaust tiles, and cobbles, as well as shoes and pots (Carver *et al.* 1978, pp. 24-27).

There are similar late dumps of building material in wells excavated at the large and diverse category of sites known as "small towns". A deep well at ***Cunetio*** (Mildenhall), in Wiltshire, for example, contained a late- or just post-Roman deposit comprised of bricks, hypocaust tiles, squared freestone, and roof tiles, alongside coins (37 of them issued by Valentinian), shoes, mammal and bird bones, oyster shells, and late pottery, including Oxfordshire roulette ware (Brooke 1920; Cunnington 1920, p. 154; Moorhead 1997). Sometime in the late-Roman period, a well in **Alcester**, in Warwickshire, was backfilled with flue tiles, roof timbers, and two small altar stones, along with the now predictable mix of human

bones, whole pots, quern stones, and animal bones, including those of birds and dogs (Mahany 1994, pp. 108, 144, and fig. 84). A timber-lined well associated with a stone-built bath house at **Hayton**, in Yorkshire, contained "demolition debris," including a large piece of wall plaster, which might have come from a ceiling, along with window glass, pieces of wooden furniture, and a fancy inlaid door or chest lid. Also found in the well fill were a cat, a chicken and a pigeon (Halkon 2013; Jaques *et al.* 2000, p. 5). A well under **Southwark** cathedral, abandoned sometime in the 4th century, contained *pilae*, tile, *tesserae*, ragstone blocks, mortar, painted wall plaster, a couple of small statues, and a votive altar (Hammerson 1978, pp. 209-211). At **Ashton**, in Northamptonshire, a well associated with a building where ironworking took place, was back-filled in the late 4th or early 5th century with 3.5 meters of limestone blocks, pottery, and shoes, below which was a large, lead tank marked with a *chi rho* as well as a couple of pieces of a second lead tank (Hadman and Upex 1977; Guy 1981). A well at **Dunstable**, in Bedfordshire, contained pots, shoes, human skeletons, and oysters, and it was sealed with a small number of roofing tiles and bricks (Matthews, Hutchings 1972). Finally, a well at **Neatham,** in Hampshire, backfilled in the late 4th or early 5th century, included a roof tile and a "slab of limestone", complete pots, coins, a left shoe, part of a rotary quern, and part of a deer skull (Millet, Graham 1978, pp. 32-33, 93, 124, 132, 135, 143 and fig. 27).

Wells associated with shrines, forts, and low-status rural sites also contain Roman building material. This is true for Well 5, near Building 47 at **Lower Slaughter**, in Gloucestershire. In the late-Roman or post-Roman period the end of the well's life was marked with a deposit of building debris, six stone sculptures, and an altar (O'Neil, Toynbee 1958, p. 50; Timby 1998, p. 386). This is also the case for a well at the **Pagan's Hill** temple in Somerset (Rahtz, Harris 1958, pp. 22, 33-36), and for two well near the shrine at **Higham Ferrers**, in Northamptonshire, which were backfilled with limestone rubble, two pieces of limestone colonette, and the usual assortment of pottery, a leather shoe, and human bones (Lawrence, Smith 2009, pp. 135, 334-335). A well at the fort at **Huntcliff** was backfilled in the late or just post-Roman period with stones taken from some structure within the fort, as well as a very large slab of sandstone "32 inches square". There were also pots, fourteen human skulls (as well as other human bones), a coin, and a shoe (Hornsby *et al.* 1912, p. 222). Similarly the late-Roman well at the fort at **Goldsborough**, near Whitby, had a fill of dressed stone, some, according to its excavators "very large", along with three human skulls and the bones of dogs and cattle (Hornsby, Laverick 1932, pp. 208-209). Similar closure deposits also took place at low-status rural sites. This is true

for a well at **Lyndon Farm**, Maxey, Cambridgeshire, and likely for a well in **Yeovilton**, in Somerset (Roberts 2000, p. 27; Lovell 2006, p. 17 and fig. 8). And a well associated with some 4th-century kilns at **Stibbington**, in Cambridgeshire, was filled, probably sometime in the early 5th century, with large limestone blocks, pottery, animal bones, and a human skull (Upex *et al.* 2008, pp. 278-279, 398).

There is some evidence that on sites without much masonry building material, organic building material was deposited in wells instead. For example, the fill of a late-Roman well in **Cambridge** not only included an articulated horse skeleton, three nearly complete pots, and a human femur, but a large dump of wooden lathes attached to daub (Alexander, Pullinger 2000, p. 52). Preservation here was extraordinary, and one wonders if organic building material like this was deposited in wells more often than past excavation reports suggest, especially those associated with settlements without masonry buildings. A well at the rural site at **Rothwell Haigh**, in Yorkshire, the infilling of which probably dates to the first third of the 4th century rather than the late-4th or early-5th century, contained a human skull, complete pots, a left shoe, quern stones, and whole dogs, cats, goats, and chickens (Cool, Richardson 2013, pp. 208-210). It also included stone roof shingles, a box flue tile, and a stone with a square mortice hole for a timber. Cool and Richardson argue that all of this building material had to have been brought to the site for the event marking the closure of the well, since none of the buildings here used such material (Ayton 2011; Cool, Richardson 2013, p. 212). This, too, argues that recycled Roman building material was viewed by many as an essential element of closure events.

Because so many late-Roman wells were excavated before the late-20th century and because a number were very poorly recorded, we do not have full inventories of their fills, in particular, detailed descriptions of the recycled building material found within them[11]. Nor can we often say with certainty, based on excavation reports, how many episodes of dumping each well-fill represents. Most wells have evidence for what Merrifield describes as "commencement" deposits, often in the form of a whole pot or two placed in the well to mark the beginning of its career as a water source (Merrifield 1987, pp. 48-50). Many well fills also in-

[11] A well at Sewell, in Bedfordshire, for example, included "human bones, Roman tile, pieces of squared sandstone, black flints, red pottery, etc." (White 1874-1875, p. 99), and a well at Aston, in Northamptonshire, contained a stone column (Hadman 1984). The dates of both of these deposits, however, cannot be established from the publications describing them. It is also sometimes unclear whether or not well deposits contained building materials. Several wells at Baldock, for example contain human remains and whole deer, but we are not told if building material was included in their fills (Stead, Rigby 1986, p. 7).

clude objects that may have accidentally fallen in while the well served as a water source, and buckets, ceramic water-carrying vessels, and the like are often found in well fills. And the fills of many wells, in the years after they were abandoned, slumped, and the depressions that resulted often filled with yet another layer long after the well had been abandoned (van Haasteren, Groot 2013, p. 32). Some wells also have distinctive layers within their backfills, which suggest the passing of time between multiple and discrete depositing episodes (e.g. Rudston: Scott 1988, vol. 1, pp. 214-218)[12].

At other times, however, the distinction between layers is not at all clear-cut and may not signal different dumping events (e.g. Dalton Parlours: Wrathmall, Nicholson 1990, p. 195). Painstaking study of a few recently excavated wells, though, suggests that they were backfilled in relatively short periods of time (e.g. Rothwell Haigh: Cool, Richardson 2013, p. 214; Lower Slaughter: Timby 1998, p. 387), and occasionally we can say with some certainty that the bulk of the fill originated from a single event (e.g. Thurnham: Lawrence, Booth 2006, pp. 115-116; Silchester: Clarke, Fulford 2002, p. 159). In short, although well fills may have formed overtime, there is evidence for major dumping episodes in a number of them, and these events likely marked the end of the wells' careers as a water source.

The more than forty well deposits described above – which include recycled Roman building material and date to the late-4th or early-5th century – argue that this practice was very widespread in Britain at the end of the Roman period, and that there was a common understanding across a broad swath of Britain about the elements necessary for proper rites of closure, no matter the site type and regardless of the status of the event's participants.

The inexplicable (to us) individual components of these deposits are suggestive of a series of actions that stand behind them – the selection of still-useful vessels for deposition, the killing of animals, the retrieval of curated human remains, the hard work of dismantling masonry structures and the considerable manpower exerted to haul some portion of them – in some cases several tons of material – to the well. Behind the great events like those that took place at Rudston and the Dalton Parlours, we can sense the presence of powerful individuals who were able

[12] Determining how, exactly, some of these deposits were made is very complex (Maltby 1993, p. 66), and a number of wells not only contain what we might think of as "special" deposits, but more quotidian waste (e.g. Richardson 2011, p. 79). As a result, it is not always possible to separate ritual deposition from rubbish disposal; and it is likely that everyday, as well as special depositional practices helped form some well deposits (Garrow 2012).

to press men into labor, who had the right to destroy property, who commanded the herds from which the slaughtered animals were taken, and who had the leisure time, the skills, or the staff to procure deer. Events like these could be bloody, noisy, dramatic, costly, and monumental in scale. Elsewhere, closure events were less extravagant, but here, too, wells were obstructed and fouled, animals were killed, shoes deposited, and pieces of buildings offered up to wells, because the people presiding over such doings shared the same basic understanding as grander people of what was proper and necessary.

The forty-plus well deposits detailed here suggest that events like these were relatively common in the late-4th and early-5th centuries, and than many people living in the period would have witnessed or heard firsthand about them. Their large numbers and the ubiquity of repurposed building material in them also suggests that well deposits were an important site for the reuse of building material; indeed, this category of reuse was much more prevalent in the years just after 400 than its deployment in the building of new masonry structures. Yet, in spite of evidence for a widespread agreement that recycled building material was a necessary component in the activities undertaken to mark the death of buildings, settlements, and their wells, this practice did not survive past the mid-5th century. Although people in Britain in the late 5th century and beyond sometimes marked the abandonment of buildings with structured deposits (Hamerow 2006), wells ceased to be the site of such activity, and recycled building material no longer featured in them. So, people in Britain not only abandoned, for the most part, the pragmatic redeployment of Roman building material in the early post-Roman period, and not only did they not use *spolia* to claim connections to an ancient past for themselves, but they ceased using it in traditional events that marked the abandonment of buildings and settlements, a sign that old ways and old ideas were loosing their grip as Britain moved from Roman to medieval.

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