# A Late Roman well at Heslington East, York: ritual or routine practices?

**Abstract**

The supply of fresh water is a central requirement for human settlement. This paper discusses evidence associated with the construction, use and demise of a late-Roman well recently excavated at Heslington East near York, UK. It seeks to suggest that, by a holistic analysis of all archaeological evidence, we can distinguish the ideological from the functional dynamics that made up the site formation processes within this feature. The assemblages that evidence these activities might be considered mundane in some respects but their integrated assessment, along with a detailed examination of depositional and formation processes in the feature, produces compelling evidence for what has been termed ‘structured deposition’.

**Introduction**

All humans require access to water, but how this is achieved varies hugely. This basic importance, far from leading to an exclusive focus on functional needs, has meant that such practices are often deeply imbued with symbolic associations and activities (discussed below in *Water supply, ritual activity and structured deposition*). In what follows, we explore the particular way in which these process were played out in the context of a late-Roman well at Heslington East, a site just outside the Roman city of *Eboracum* (*Heslington East and the Well in Context*). Selected assemblages from the well, notably coarseware ceramics and faunal material, are used to elucidate these processes, enhanced by assessing their relationship with site formation processes evidenced by the fills of the feature (*Assemblages from the Well*). This allows us to draw some conclusions about this evidence in relation to similar features, and to broader theories of depositional practices (*Discussion*).

The argument presented below emphasises the need to delve into detailed evidence to fully understand the life history of this feature. This process is positively facilitated by publication in Internet Archaeology, which gives the reader the opportunity to access underlying evidence by linking directly to the site’s digital archive, hosted by the Archaeology Data Service.

**Water supply, ritual activity and structured deposition**

*Water and Ritual*

Access to water, alongside food acquisition and shelter, is fundamental to human existence, being arguably the most critical engagement between ‘culture’ and ‘nature’. Thus how this was organised in past societies has been, unsurprisingly, of considerable interest to archaeologists for a long time (Clark 1944). A significant stage in this process occurred when people started to make use of subterranean, rather than surface, sources via the digging of wells. This required technical knowledge e.g. depth of water table, the ability to revet the sides of any intrusion and make equipment such as ropes and containers. It also implies control of the well’s immediate landscape setting, and is thus likely to correlate with increased social complexity and perhaps sedentism (Thomas 2003).

These relationships are clearest in desert regions such as Arabia (Al-Thenayian 1999, 101ff) and the Sahara (Mattingly 2003, 235ff) which lack surface water. Yet can be equally important in other contexts, for example the Yorkshire Wolds near our site, where dew ponds and other artificial features have greatly influenced settlement and movement of animals from prehistory onwards (Fenton-Thomas 2005). Many studies of water access have focussed on technological matters (Wikander 2000) but a symbolic element is often apparent in creating, using and curtailing supplies.

In the Roman period, social control of water was clearly of general significance (Ellis 1997), although most studies have focused on the use of aqueducts (Hodge 1992). Creating these hugely expensive systems in the city of Rome itself, for example, was of decisive interest to those remaking its image during the age of Augustus (Favro 1996) and later. Elsewhere, in Pompeii, the arrival of pressurised water from aqueducts had considerable social impact, fountains being set up in the streets to give inhabitants a sense of district identity (Wallace-Hadrill 1994) and piped water used in the ‘House of the Vestals’ to increase, and express, the social status of the owners (Jones and Robinson 2005): water clearly mattered to Rome.

Our knowledge of the core of Empire and its elite has influenced expectations of how water and society interacted in more peripheral regions and at lower social levels. Thus general commentaries on archaeological evidence from towns in the marginal province of Britain list places where there are good grounds for the use of aqueducts (Dorchester, Leicester and Lincoln) and others where such features can be postulated on the basis of evidence for bathhouses or related infrastructure: fountains, sewers, distribution pipes etc.. This has led at least one author to expect aqueducts in ‘*quite small towns and villages*’ (Wacher 1976, 100). In reality, however, their impact seems limited in British civilian contexts (Stephens 1985), such restricted supplies explaining, for example, the rarity of water-features in townhouse gardens (Perring 2002, 182).

Where major urban centres have been intensively investigated, it is quite clear that wells fulfilled most needs. Thus in York, adjacent to our case study, a bathhouse and associated sewer system within the fortress, plus possible fountain base and lead pipes beyond, have led to the suggestion that the town must have been supplied by an aqueduct, leading to speculation on possible sources in the region (Whitwell 1976, 29). However, even that author admits that there have been no archaeological finds to support this notion, an absence reinforced by a similar lack of evidence in a recent synthesis of findings from 30 years of work in the city (Ottaway 2011). What we do find in York are wells, ranging from the very simple (and thus difficult to distinguish from pits) to the much more sophisticated, for example the fine timber-lined feature at Skeldergate (Carver *et al.* 1978), inserted as part of a development involving a riverside road and terracing of the hillside to allow construction good-quality townhouses.

Elsewhere in Britain, recent work in the centre of Silchester (Eckardt 2006, 2011) shows that wells existed in some profusion in association with properties developing there over time. Even London, the provincial capital, used timber-lined wells (Wilmott 1982 and 1984, Williams 2003), although the city did invest in sophisticated bucket-chain mechanisms to raise that water in specific contexts (Blair *et al*. 2006). If this was the case in large towns, such features must have been even more common in the countryside. Thus in order to explore the symbolic associations of water supply, and decide whether they were influenced by the trickle down of core practices or the continuation of pre-Roman approaches, it is to wells that we must turn.

*Ritual and Structured Deposition*

The ritualistic component evident from Roman wells is one of many examples of what archaeology can bring to our understanding of ‘magical’ practices (Merrifield 1987). This has received more attention recently than hitherto, both within the Roman period and beyond, as a result of the post-modernist critique of functionalism. A recent study of remains of ravens and crows found in the base of Iron Age and Roman pits, for example, shows how interpretation has moved from seeing these birds as food or killed for their feathers or when scavenging, to relating their deposition to ritual activity – birds as companions, perhaps familiars having commensal relationships with humans due to their ‘voice’ (Serjeantson and Morris 2011, Table 6. See also Eckardt 2011, 304ff).

One facet of this post-processualist promotion of new forms of interpretation is an increased emphasis on the notion of ‘structured deposition’ (see Garrow 2012 for a discussion of its development as a concept). An initial, brief Neolithic study (Richards and Thomas 1984), followed by more detailed Iron Age analyses (Hill 1995), argued that the placing of particular sets of finds (for example pottery and flint, plus animal or human bones) in specific contexts (for example pits or ditch terminals) was indicative of complex social practices. Others within and beyond prehistory then took up the challenge to define these special deposits, placing both methodological demands on fieldwork and theoretical demands on subsequent analysis and interpretation.

In methodological terms, such studies can only work if stratigraphic and deposit information is integrated with artefactual and ecofactual studies. Excavation in carefully-controlled conditions is needed to generate worthwhile datasets, conditions more likely to be fulfilled in modern fieldwork than before. Thus, for example, Fulford’s study of Insula IX in Silchester (2001, 201ff) suggests links between Roman and pre-Roman ritual practices. Yet interpretation of evidence generated in late 19th/early 20th century work is entirely dependent on more soundly-based knowledge derived from his own, more recent excavations.

Good quality evidence is needed to research structured deposition properly, but it is not sufficient. In particular, there is the question of definition. Chadwick (2012) has recently questioned whether we should attempt to differentiate the ‘technical’ actions of rubbish disposal from deliberately ‘placed’ deposits at all, on the grounds that it is extremely difficult to do this, and that the distinction reflects an inappropriate modern dualism. Instead, he proposes, we should accept that there is a continuum from ‘big’ ritual to small scale, everyday practice. Yet being difficult does not make it impossible. Also all archaeological interpretation imposes modern concepts on the past to allow interpretations to emerge which are relevant to the present. Finally, the existence of a continuum does not, in itself, remove the need to clearly define two ends of a spectrum: the existence of shades of grey does not preclude the utility of concepts such as black vs. white.

How might these limits be defined? Advocates of such investigations, when attempting to delineate suitable deposits, set out a number of characteristics which are deemed to be relevant: ceremonial, deliberate, formal, formalized, intentional, non-utilitarian, odd, peculiar, placed, ritual, selected, special, symbolic, token and unusual (Garrow 2012, 93). For that author, this diverse list ‘*speaks volumes about the adaptability of the original idea*’ (op. cit. 94). Yet, for the present authors, it rather runs together three concepts which would be better kept apart: the social context in which an activity takes place (ceremonial, ritual, symbolic – vs. quotidian, presumably); associated human actions guided by motives (deliberate, placed, formal (ised), intentional); and the character of material remains which might be used to recognise such contexts and actions (non-utilitarian, selected, odd, peculiar, special, token, unusual).

In what follows, then, we accept that many, if not all, archaeological occupation deposits are a product of human intention: thus almost everything we find might be structured in some way. Ritual activity must be a product of collective intentionality, but not all intentional actions are ritualistic in character. The notion of ritual is relational and context specific (Bell 1992), but *one* way to distinguish this sub-set is to look for the placing particular finds in a specific setting for reasons other than the simple disposal of material which one no longer needed to circulate.

This position, however, raises the question of recognition in more explicit form. In deciding whether a group of material has ritual associations, is it the character of particularly unusual finds within it that should count or the overall nature of the assemblage? Articulated animal bones have been used via the first criterion to suggest placed deposits, but how articulated do they need to be to qualify (Wilson 1999)? In similar vein, Cool and Richardson’s recent study of deposition within a late Roman well at Rothwell Haigh, Leeds (2013) was seemingly able to define abnormal aspects of that assemblage (yew bucket, ash spade with iron shoe). Yet, as they acknowledge, these items might be in common use but rarely survive – it could be the anoxic conditions, rather than the material itself, that was special. The best way to define distinctiveness systematically is to compare a defined assemblage with the ‘background noise’ of finds across a site: ritual as a relational concept (Bell 1992).

In order to accommodate Bell’s second component, ritual as context specific, it is useful to focus on both the finds *and* their stratigraphic and spatial context. This demands, ideally, a detailed knowledge of deposit formation and sequence within features, especially in order to distinguish between activities representing ‘commencement’ from ‘use’ from ‘termination’ in ritual activity (Merrifield 1987, 48). It also requires an understanding of the general distribution of activities across a site, and perhaps comparisons within the region: all big demands on the quality of available site evidence. Finally, analyses will only succeed if diverse evidence types can be analysed as whole assemblages, requiring close collaboration between specialists.

The above represent significant barriers, especially as, in the last 20 years, commercialisation and fragmentation of the fieldwork profession, often our best source of quality data, has made such collective research increasingly difficult. Yet there are some rays of hope. Serjeantson and Morris’ (2011) previously-noted study of corvid burials, for example, shows how zoological and taphonomic research can be combined. Equally, Cool and Richardson (2013) linked artefact and ecofact studies to make significant interpretations of the well at Rothwell Haigh, although this example also shows the challenge of working with salvage recording: its fills were recorded only by absolute depth rather than by clear stratigraphic context and its contemporary ground surface had been truncated, destroying the feature’s broader context and making it unclear whether the uppermost *surviving* fills did actually represent final well activity.

The case study which follows does not manage to jump all of these methodological and theoretical hurdles cleanly. It does, however, provide an account of a feature investigated in its entirety, dug with close stratigraphic control and detailed deposit information, and employing a consistent approach to finds recovery. In addition, a series of diverse assemblage analyses can be deployed in relation to the site-based information, alongside a sound understanding of contemporary activities in areas adjacent to the well.

**Heslington East and the Well in Context**

*Project Background*

Heslington East is a 116 hectare green field site approximately 3.5km southeast of the city of York, owned by the University of York and designated for campus expansion (Figure 1). Fieldwork was carried out here between 2007 and 2011 jointly by York Archaeological Trust, On Site Archaeology and the Department of Archaeology, University of York in an integrated programme of research, training and commercial work.

The site lies on the south-facing slope of the York moraine, immediately east of the village of Heslington. Recent geological research (Cooper *et al*. 2007) has demonstrated that the Last Glacial Maximum was the Escrick moraine to the south. When the ice sheet then wasted back, it left a further moraine complex at York associated with eskers and outwash deposits (*ibid*), resulting in several active spring heads on the Heslington hillside. Detailed geoarchaeological work here has identified a series of early north-south palaeochannels running down the slope, which probably created an area of standing water in the early post-glacial period in a ‘wetland mosaic’ attractive to humans, animals and a range of plants (Carey 2009, 168).

The earliest evidence for human activity at Heslington East is formed by a number of Mesolithic stone implements, although the majority of flint and worked stone found dates to the Neolithic and Bronze Age (Makey 2009). Curvilinear ditches and watering holes evidence the first provable settlement here, from the Bronze Age onwards (Antoni *et al*. 2009: Bruce 2012). The Iron Age saw settlement comprising several roundhouses, some situated within elaborate ditched enclosures and rebuilt on successive occasions, and the first division of the landscape for agricultural purposes (Antoni *et al*. 2009).

Although the fundamentals of the Iron Age landscape seems to be unaltered in the early Roman period, significant developments occurred in the 3rd to 4th centuries activity across the eastern part of the development area, which was terraced and divided up by ditches and cobbled track ways. Stone and timber buildings, one of the former including a hypocaust system, and several kilns were incorporated with these new arrangements, and a probable masonry mausoleum was set up at the point where the main track entered the largest enclosure. This major development of the late Roman period coincided with major shifts in *Eboracum* itself, within both fortress and civilian town (Ottaway 2011, 117), and in the surrounding countryside (Roskams 1999): the period around AD200 represents, arguably, the point at which imperial authority first got a proper grip on the landscapes that supplied its material and fiscal needs.

Finally, the northern part of the monumentalised zone at Heslington then seems to have undergone further substantial changes towards the end of the 4th century. At least some of its larger installations fell out of use, replaced by newly-aligned landscape divisions and a kiln plus crop driers. This period from c.AD350 also sees fundamental transformations in York itself, with fragmentation of the architecture unity of principia and the spatial organisation of nearby barracks in its fortress, and the demise of some of its prestigious townhouses in the colonia (Roskams 1996). Critically, this is also the point at which the well, which is the focus of this article, was inserted.

*The Late Roman Well*

Various methods were used to access natural springs at Heslington East from at least the Early Bronze Age, creating clusters of watering holes and wells along the 22m AOD contour. Some of these features might be considered wells but many were less formal, consisting of areas of cobbling or irregular cuts consolidated with driven stakes and timbers. Split timbers were used as Early Bronze Age ‘well linings’, but several Iron Age features were unlined. A number of late Roman wells on the site were wattle-lined or revetted with timber/cobble.

A well of significantly different character (Figure 2) was constructed on the 26.5m AOD contour, approximately 65m upslope from the springline. It represented a major change to the monumentalisation of this part of the hillside, seeming to mark the demise of a substantial masonry building, associated kiln and other facilities, and its replacement with a framed structure connected with the use of hearths and associated working areas. Stratigraphically, the well must have been dug in the second half of the fourth century. Ceramic assemblages associated with its backfilling (see further below), in particular the Huntcliff type jars and signal station Type 24 jars, as well as the ratio of Crambeck grey ware to calcite-gritted ware (Bidwell and Croom 2010, 30), imply that it probably fell out of use around the end of the 4th century/beginning of the 5th century. This dating thus allows a very short period of use or a lifespan of some decades.

The feature was set within a circular cut, 3.2m in diameter (***1852***), which extended to a depth of 4.35m, intruding into earlier ditches then into a combination of natural clay deposits to the north and free sand elsewhere. Upon excavation, an active spring was encountered c.1m below the current ground surface. The well’s main structure used facing stones of squared-off, roughly-hewn, oolitic limestone blocks, probably from a nearby source such as the exposures near Malton 30km to the northeast, plus occasional sandstones (***1886***). These stones, curved on their outer surface, were set in carefully-defined, regular courses and none had been reused (with the exception of a roof finial – see below). Packing behind them comprised irregular and uncoursed cuboid blocks of variable size (***1887***). There was no evidence of any formal bonding material between the stones, but the whole was packed with mid-brown clay and a little silt, which became increasingly sandy with depth (***1800***). The base of the well was dish-shaped and composed of triangular limestone slabs set directly on natural clay (***2114***) (Figure 3). The engineering employed thus suggests an intimate understanding of the subsoil. The well’s fills are described next in some detail, because only careful consideration of formation processes can elucidate the complexities here, especially in relation to the feature’s demise.

Its primary fill (***2109***) comprised dark grey coarse sand and some silt, 0.30m deep and containing frequent variously-sized pebbles and cobbles. This deposit seems to have accumulated whilst the feature was in use, its limited depth perhaps of implying regular cleaning. Datable material from this deposit thus probably registers only the point at the very end of the feature’s use. The interface between this fill and overlying deposit (***2093***) was diffuse. The latter, 0.75m deep, comprised black, organic, waterlogged silt densely packed with limestone fragments up to 0.15m across, the latter becoming smaller and more rounded towards its base and including some cobbles. The character of this layer, notably in the profusion of building material within it, implies either a deliberate backfilling process, which caused the well to go out of use, or the collapse of some of the superstructure when facing stones were robbed from the top of the structure, and the core then fell in. Either way, this must have happened immediately after the underlying layer stopped forming.

Above 2093, was a 1m deep, brownish-black organic silt containing frequent limestones mostly between 0.10m and 0.15m across (***2046***). A very large, rounded cobblestone 0.75m across in the base of this fill may have been deliberately deposited at its base to mark the well’s demise. Certainly, on its deposition, the well must have ceased to function. Above this lay an irregular c.0.75m deep fill of brownish black organic silt containing twigs and limestone blocks up to 0.20m across (***1979***.). It showed evidence for tip lines running downslope from the north to the south, whilst angled stone elements imply collapse of wall core from above after robbing of facing stones. 2046 and 1979 seem likely to have been deposited as a single event, in a short space of time.

Greyish-brown clay and a little silt, 0.45m maximum depth and containing frequent small limestone fragments (***1978***) covered 1979 with an undulating and irregular interface. This pebbly, clay-rich deposit, shallower than previous fills and lacking obvious tip lines, suggest formation over a more extended period of time. An overlying fill, 0.62m deep, comprised greenish-brown clay containing silty pockets and frequent blocks and fragments of limestone (***1888***). Both fills imply silting in slow moving/stagnant water, something supported by the horizontal attitude of most of the larger stone inclusions, except in the limited area on its southern side.

A 0.30m deep profusion of variously-sized masonry, mostly thin, flat limestones, set in brown clay extended above 1888, lensing out to the north (***1749***). Above this, lensing out to the south, lay a much cleaner fill of greyish-brown sand and some silt containing occasional fine pebbles and small sandstone fragments (**1748**), probably a water-laid accumulation levelling up the dip produced by underlying 1749. Above this was a deposit of limestone and a few sandstone blocks and tile fragments set in brown silt (***1697***), 1m deep in the south but tailing out to nothing before it reached the north side of the well. This is clearly a substantial collapse of the southern wall core. The three horizons thus imply two stages of well disintegration separated by a phase of puddling.

A cleaner deposit of dark brown silt containing frequent small limestone fragments, moderate sand and occasional charcoal flecks (***1160/1181***) covered 1697. Mixed brown and black silt (***1747***) containing frequent charcoal flecks and fragments, moderate sand flecks and occasional fine and medium pebbles and limestone fragments then completed the backfilling sequence within the line of the well to a level of c.26mAOD (Figure 4). Above this were deposits of dark greyish-brown silty clay containing frequent flecks of limestone and sandstone and occasional small fragments of the former plus charcoal in smears (***1188***), then an area of greyish-black silty sand containing burnt cobbles (***1106***). These last two layers were confined to the limits of the well head but had clearly been deposited long after it had long fallen out of use. Stone flecking within 1188 could relate to continued dismantling of the well stone work, which would still have been visible at this point. Traces of burning in 1106 could suggest the dumping of former hearth material in a convenient hollow or activity associated with the dismantling and recycling the well’s stone lining.

In sum, therefore, detailed study of deposits [link Appendix 1 Assessment Report: Neal and Roskams] suggests six distinct episodes in the feature’s development:

* The creation of a good-quality, carefully engineered well in a new position high on the hillside (1852, 1886, 1887, 1800, 2114)
* Final usage and dumping at the end of the well’s life (2109, 2093)
* Distinctive, different dumping, and perhaps dedicated ‘closure’ (2046, 1979)
* Accumulations in stagnant/slow moving water (1978, 1888)
* Collapse from well’s south side (1749, 1697) interleaved with puddling (1748)
* The accumulation of deposits on the site of the former well, the latest of which may not be fills proper but once-horizontal layers subsided into the feature and thus preserved from later truncation (1160/1181, 1747, 1188, 1106)

**Assemblages from the Well**

*General Assemblages*

A range of artefacts was found in association with the well deposits (Table 1). Coarseware ceramics and faunal assemblages will be discussed in detail below as whole assemblages. However, certain other, particularly significant, objects are noted here first. A Roman roof finial, in coarse-grained yellow sandstone, was built into the well facing, positioned c.1m down from its top surface and thus breaking up the symmetry of the coursed masonry. Its square base, 250mm across, rose into a cylinder surmounted by a truncated pyramid. Shallow, arch-like openings in two opposite sides of the base suggest that it was placed on the ridge of a roof, most probably that associated with large quantities of lozenge-shaped stone roof slates found in the vicinity[link App 4: Nick Hodgson]. This artefact does not seem to fit any of the common finial categories, lacking the classic four-way arch openings and being simply and crudely executed. It does, however, suggest that a substantial structure was being dismantled when the well was built. This element of *spolia* may have been recycled opportunistically or, more likely, as a deliberate act.

Several small fragments of undiagnostic leather were recovered from lowest fill 2093, along with a rather more significant, near complete bucket or pail (Figures 5 and 6) found on the north side of the well at the interface between 2093 and underlying fill 2109. Having an estimated capacity of c.5l, it comprised twelve individual staves made of yew (*Taxus baccata L.*) and a single base of ash (*Fraxinus excelsior L.*), the former held in place by two iron hoops [link App 14: Steve Allen]. This bucket is unlikely to have been discarded as waste, given that the metal fittings remain, and such a complete vessel might suggest deposition as an offering. Equally, a missing mount and handle could imply accidental loss.

Building material from the well comprised two main elements, remnants of the hexagonal sandstone roof tiles, also seen elsewhere on site, and a smaller group of ceramic brick and roof tile [link App 2: Jane McComish]. Sherd size in the latter assemblage reflects the depositional processes outlined above, with the largest fragments, by count and size, and range of types by function and fabric, in initial dumping 2093 and much smaller fragments from later fills, including a slightly larger number of what must be very residual material from post-Roman fill 1106.

Several of the well deposits contained amphorae sherds, all derived from thin-walled Gallic examples [link App 6iii: David Williams]. Numbers are low, but the larger sherds again came from early fills 2093 and, especially, 2109, whilst the absence of the earlier Dressel 2-4 or Dressel 20 forms testifies to the generally non-residual character of the well assemblages, something also implied by the lack of worked flint. Equally, the absence of medieval or post-medieval pottery and clay pipes suggests intact stratigraphy free from intrusion. Finally coinage, metal finds and human bone, anyway rare on rest of the site, are entirely absent from the well, suggesting that such items were not being selected for specialised disposal practices.

Lastly, turning to material which might indicate broader contexts of deposition, we can consider environmental samples [link App 10: Hall and Kenward]. Early fill 2093 produced evidence for hemlock (*Conium maculatum* L.) and stinging nettle (*Urtica dioica* L.), likely denizens of abandoned waste ground, and of uncharred heather (*Calluna* vulgaris (L.) Hull) and bracken (*Pteridium aquilinum* (L.) Kuhn), potentially from stable litter. Twisted willow (*Salix*) withies might suggest such fencing near the well head. Shoots of some calcifuge mosses, along with weedy and scrub waste elements and also heather root and twig implying heathland, were derived from overlying 2046, along with flax seed, beet and a single uncharred spelt wheat glume base, suggesting the presence of three domesticated plants within this fill as it formed. The assemblage derived from contiguous deposit 1979 also contained an abundance of hemlock and nettle fruits with some hazel and willow roundwood. Thus stands of hemlock and nettles, with some rough grassland, may have surrounded the well when 2046/1979 were deposited.

Insect assemblages from 2093, 2046 and 1979 are all typical of well fills, with abundant remains of ‘pitfall’ species and others which probably entered in flight. They, again, suggest a weedy terrain, with some grassy areas and probably grazing in the general locale, given the dung beetles (scarabaeids). This is supported by the few molluscs recovered, the species being predominantly widespread generalists and those preferring moderately moist habitats, whether open, waste ground, woods or ditches. Importantly, the insect assemblage evidenced no clear synanthropic influence beyond the species that generally favour disturbance. This suggests general abandonment from fill 2093 onwards, and that conditions around the well either remained surprisingly constant overtime or, more likely given other evidence, that the well filled quickly.

*Coarseware Pottery*

1045 sherds of Romano-British pottery (just under 25kg and 18.48 EVES) were identified from the well [Link App 6ii Ruth Leary].

These included small numbers in fabrics of East Yorkshire grey ware from kiln groups such as those on Holme-on-Spalding Moor and Norton type wares (Halkon and Millett 1999; Hayes and Whitley 1950, or perhaps made nearer York at Stamford Bridge), BB1, colour-coated, shell-tempered, white-slipped and oxidised wares. Forms for these components included one lid, fragments from four beakers, three dishes, seven bowls, two flagons (one face-neck) and a bead-rim deep bowl, plus one lid-seated wide-mouthed jar in calcite-gritted ware (Monaghan 1997 types BF5, DD1, DF3, DF7, DP9, FT, KF2, KM fabric B12 pentice moulded type, LD, YH5 and JH3 wide-mouthed) and a deep subconical bowl (as Perrin1981 nos 386-7 probably from South Yorkshire). These minor types came predominantly from the latest fills above deposit 1979.

The rest of the vessels present in the well, the overwhelming majority of material and concentrated in lower fills, comprised jars of three types: calcite-gritted jars with lid-seated rims of Huntcliff type (c.38% by EVES: henceforth Huntcliff type jars); grey ware jars with constricted mouths and often with lug handles on the shoulders (c.28%: henceforth grey ware jars but predominantly Crambeck grey ware); and small, handmade jars with everted or hooked rims, often with acute lattice burnish decoration on the girth, of so-called ‘signal station’ type (c.27%: henceforth small, handmade jars) (Figure 7 ). Nine of the grey ware jars, plus one of the Huntcliff type and two of the small, handmade ones, had a distinct wear pattern around the edge of the base, suggesting they were often placed on rough ground or a stone. Some were in fabrics which were similar to the East Yorkshire grey ware industries, such as those on Holme-on-Spalding Moor, and thus were either fairly old vessels when deposited or stand as evidence that such industries continued producing pottery on a small scale very late in the Roman period.

Two complete jars were included in the well assemblage (in fills 2093 and 2046) and are discussed in more detail below. Even without these vessels, the profile for wares and vessel types from the feature are quite different from contemporary groups elsewhere, most obviously in the paucity of tableware, mortaria, amphorae, flagons and beakers. This assemblage also differs in terms of wear patterns and fragmentation, there being more fresh sherds here, a greater number sherds from each vessel than normal, and unusual wear patterns on base edge and girth of jars. When looked at stratigraphically, the forms in the lowest four fills are similar. The quantity of pottery from each stratum is quite different, however, notwithstanding their different volumes, with a huge concentration of pottery in the two earliest levels. These individual groups are considered in detail next.

*Early fills 2109 and 2093* generated assemblages which evidenced a number of cross-joins, implying that they were deposited together. The bulk of material from the latter deposit comprised our three main jar types (see above). These had been used but the edges were not very abraded, and they were broken into many sherds of a size that would not be typical if near complete vessels were thrown in to the well. This level of fragmentation suggests that this material was not complete when deposited (Table 2).

Most of this assemblage therefore contrasts significantly with the most prominent aspect of the ceramic group, a virtually complete Huntcliff type jar (Figure 8) deposited on the south side of the well, just above the complete bucket. This patterning could be explained if containers directly associated with the use of the well were thrown in to it at the end of its life, alongside rubbish from the general vicinity comprising fragments of previously broken jars of various forms (see further discussion below of sooting on Huntcliff type jars, however).

Overlying fills 2046 and 1979, in contrast, contained far less pottery than 2109 and 2093 (2046: eight sherds, most Crambeck fabric; 1979: two sherds, one from a Huntcliff type jar). The former did, however, include rim fragment from a long-necked beaker, a vessel of a type that is uncommon in late 4th century assemblages, which are usually dominated by jars. This beaker and the general paucity of ceramics thus distinguish this pair of deposits from those below. In addition, 2046 contained a complete grey ware jar, without lugs, probably belonging to Monaghan’s type JW group and perhaps rather old when deposited. Given its completeness, character and context, this vessel might have some claim to be part of structured deposition practices.

*Later fills*, taken as a group, provided much smaller assemblages but evidenced a far wider range of material. This included vessels in forms/fabrics not present lower down such as beakers, bowls and dishes. Some of these dated to the third/fourth centuries and, in one case, to the second century. The more residual component may have been derived from material through which the feature cut, falling into it as the well lining collapsed with other, more contemporaneous components derived from activity near the well head or during its construction. Taken in the round, none of this material distinguishes itself markedly from the pottery circulating elsewhere on the site in the late Roman period. Finally, uppermost deposit 1106 also contained several handmade sherds of possible Anglian date (and several fragments of suggested Iron Age date, whose dating thus probably needs revisiting) [link App 6i: Peter Didsbury and 6v: Ailsa Mainman]. This post-Roman material implies that this deposit accumulated in what had become a depression above the former well.

*Animal Bone*

The masonry well, already argued to be atypical in its location and construction, and in its ceramic assemblage, also differed markedly in its faunal content. This was true of the whole assemblage in relation to the ‘background noise’ of bone deposition across the site, both from the whole sequence and in relation to contexts broadly contemporary with the well [link App 9: Jane Richardson]. It was equally clear of its Associated Bone Groups (henceforth ABGs: this term, proposed by Hill (1995, 27) and now used to avoid any direct implication that such deposits were ‘ritual’ (Morris 2008, 2010, 2011) refers to the deposition of articulated parts of animals in a single event, hence ‘primary’ deposits). An unusually high number of bone fragments from the well formed into such groups.

In total, 1067 animal bone fragments were recovered (of which 722 (68%) are unrepeatable diagnostic zones: Table 3). This assemblage was much less fragmented, less eroded and better preserved than most of the material from the site (Table 4). In addition, the proportion of gnawed bones was low, whilst burnt bones were extremely rare compared with the site-wide material. Finally, it generated a very high proportion of butchered bone which, although concentrated in only a few fills, dominated the well assemblage as a whole. In particular, 14 of its 39 horse bones were butchered, compared with only three of the 71 from broadly contemporaneous assemblages elsewhere on the site.

Secondly, a total of nine of the ABGs from five taxa contributed a total of 250 bones from the well (Table 5). These groups of undisturbed assemblages were also typically better preserved and less heavily fragmented than disarticulated bones. This may reflect the speed and/or care with which they were deposited, and some may represent ‘special animal deposits’ (Grant 1984a, 1984b, 1991; Groot 2012, 139). ABGs were not unique to the well: other deposits contained a partial dog skeleton recovered from a late Roman ditch; a pig skeleton from a late Roman pit; and a sheep/goat skeleton associated with an undated spread. Yet no other wells on the site contained ABGs, or indeed great quantities of bone (none exceeded 200 fragments). Their fills yielded instead scatters of disarticulated bones, some of which were butchered and some gnawed, suggesting the unintentional redeposition of bone waste.

Finally, the proportion of the main taxa from the well (excluding animals represented by only a few bones and likely ‘pitfall’ victims) can be compared with those from features of similar date. While cattle, horse and pig do not vary significantly, sheep/goat are under-represented from the well, and red deer and dog over-represented, both the latter as ABGs of partial skeletons (Table 6). Thus, as a complete assemblage, the material from the well marks itself out from the rest of the site in terms of bone condition, ABG numbers and taxa represented, suggesting that it should not be interpreted as ‘normal’ domestic rubbish (cf. Morris 2008, 94). The bone content of individual fills is described next in detail, from earliest to latest.

*Basal fill 2109* contained few animal bones and, of the eleven fragments recovered, seven were butchered, one was gnawed and only one was complete. These all suggest the low-level, perhaps unintentional, discard of bone waste into a functioning well, fitting with its interpretation based on deposit character.

*The second fill, 2093*, contained two adult female pig skulls, their unsophisticated butchering indicating the removal of the mandibles. Two atlases and an axis may also be associated with these ABGs. The skulls seem likely to correspond with the decommissioning of the well, as their putrefaction would have fouled the water supply. Whether this was just convenient disposal of unwanted waste in a recently disused feature or an intended outcome is unclear, but the left mandibles removed from both animals were still deposited with the skulls. Many of the other bones from this deposit, however, were disarticulated and appear to be associated with carcass processing and meat consumption, a total of 75 bones being butchered. These included many cattle-sized rib fragments but also eight horse bones that display marks most likely associated with carcass reduction. The presence of nine gnawed bones, unusual in the well, indicates that at least a portion of the bones were redeposited here. While this material together does not preclude structured deposition, it has the signature of redeposited refuse. The solitary red deer bone (a cranial fragment: Skeleton1) recovered from 2093 could belong to the partial skeleton found across fills 2046 and 1979 (but see further discussion, below).

*The third fill, 2046*, was the richest in terms of animal bones, yielding 476 fragments (although 159 were of frogs/toads, likely ‘pitfall’ victims). It included a horse skull (Skull 2) and two horned cattle skulls (Skulls 1 and 3) (red deer bones recorded from this context are part of the partial skeleton derived fill 1979 and are considered fully with the latter, below) (Figure 9). Other, disarticulated bones are essentially those of cattle and horse. All major body parts from both are represented, while numerous paired bones for cattle (hyoid, first and second phalanges, metacarpals and metatarsals) and for horse (pelvis, plus an articulating radius and ulna, and astragalus and calcaneus) suggest rapid disposal. Of the cattle bones, 25 were butchered, including damage to three scapulae associated with hook damage during smoking, and skinning marks on a metacarpal. Six horse bones also showed dismembering marks.

*The fourth fill, 1979*, contained the majority of the bones from the red deer skeleton (Skeleton 1, other elements being noted in 1979, above) and two further skeletons, a dog (Skeleton 2) and a calf (Skeleton 3). The deer skeleton is from a sub-adult individual between 13 and 16 months old. Based on an early summer birth, this animal was hunted in the summer or autumn of its second year. In the absence of any antlers or antler buds, it is presumably female. Cut marks to its left humerus indicate that the carcass was processed to some extent, although with all body parts present the animal was clearly not dismembered and its joints widely distributed. The calf (1 to 8 months old) and the dog (*c*. 6 months old) may indicate that their selection was based on age. This fill also contained a pole-axed cattle skull from an adult animal (Skull 4) and a large, complete red deer antler from an impressively large and mature stag, both clearly contrasting with the age at death of deer, dog and calf. Excluding the small bones from ‘pitfall’ victims, the only other bones comprised a gnawed fragment of sheep/goat metacarpal and a cattle-sized rib fragment. Thus the whole group is markedly different from the discard of general rubbish seen elsewhere.

When considering material from successive, overlying deposits 2046 and 1979, there are good reasons to see these two contexts as a single episode, a conclusion supported by deposit and ceramic interpretations. Stratigraphic analysis interpreted these fills as representing the ‘closure’ of the well, and the faunal material provides further grounds for seeing a ritual component in this activity. Firstly, the number of paired cattle bones from 2046 suggests that disposal of certain disarticulated elements was rapid: primary butchery waste alongside the more clearly ritualistic components, below? Only a small minority of gnawed bones indicate the incorporation of previously-discarded material in the well filling process at this time. This contrasts with the young deer, young dog and calf ABGs, which may have been selected to contrast with the mature cow skull and the complete antler of a large stag, the latter’s deposition making a statement about ‘sacrificing’ so much valuable raw material.

Recovering elements of the same animal in both 2046 and 1979 is unsurprising, given the links between these contexts noted above. The finding of a red deer cranial fragment in underlying fill 2093 (Skeleton 1) is more problematic, however, especially given the animal’s rarity and the latter deposit having quite different formation processes from 2046/1979. Perhaps this small fragment was first deposited in the upper layers and entered 2093 by settling into a void, although there is no evidence that other material of similar size, but datable, intruded in this way. Alternatively, it may be simple coincidence that a single deer bone was dumped into the well at an early stage and an articulated example placed there later (there is no certainty that the first connects to the second as different parts of a single animal). Or perhaps it was memory of the earlier deposition that led to later repetition: although early fill 2093 is distinct from 2046/1979, this need not mean that they are separated by any great length of time.

*The remaining well fills* produced only nine further bone zones, six of which were frog/toad bones. They thus contrast starkly with the preceding three fills, which contained 96% of the diagnostic zones recovered from the well and all of the ABGs. This paucity might suggest a phase of natural silting after the intense dumping of bones in preceding deposits. The scarcity of bones from all later deposits, though surprising in the general paucity of pitfall victims, support the notion that, above layer 1979, stagnant water, interleaved with periods when masonry collapsed from the sides of the feature, dominated the process of accumulation, with little evidence of intentional human activity, whether of a functional or symbolic character.

**Discussion**

That site saw the creation of a carefully-engineered well in the Late Roman period, positioned high on the hillside and using newly-acquired, good-quality masonry: all in contrast to earlier wells. This occurred at a time of considerable landscape change, marking a significant alteration to the monumentalisation of this zone. Not everything about this feature was new, however. The masonry lining of the well incorporated, in an architecturally awkward way, a finial once used atop a stone roof. The original source of this architectural element is unclear, but the construction of the well signalled its move from an exposed height to a semi-concealed depth: it would have still been visible to users of the well in its new position as a noticeable intrusion into the regular coursing of its lining. This item was, seemingly, the only element from any earlier structure to be reused in this way, and its recycling must surely be seen as symbolic rather than opportunistic.

Finds from the well’s fills, considered as a single assemblage, also mark themselves out from the rest of the site in many ways: there is very little finds residuality or intrusion; jars dominate the ceramic groups; and the faunal material is distinct in terms of bone condition (little gnawed or burnt, much butchered), ABG numbers and taxa represented. This assemblage is thus far from being domestic rubbish, a characteristic which is mirrored in the distinctive filling of other late Roman wells in Yorkshire e.g. at Dalton Parlours (Sumpter 1990) and Rudston (Stead 1980).

Yet it would be wrong to assume that late Roman wells in the region were always filled in such an unusual way. In ceramic terms, at least, the Heslington assemblage contrasts with that from the broadly contemporaneous well at Rothwell Haigh, where a much wider range of tablewares and vessels used in food preparation and cooking were present (Leary 2013). The latter patterning is also true of the waterhole at Shiptonthorpe (Millett 2006), albeit alongside some complete vessels. Animal skulls and complete animal burials, as well as a writing tablet, from the latter feature might suggest ritual activity here. Clearly, where one artefact type has symbolic implications, there is no reason to expect that other assemblages will follow suit.

When individual fills are examined, this diversity of response becomes even clearer. Thus our lowest fill, 2109, yielded larger amphorae than elsewhere and bones suggesting low-level, unintentional discard, together implying deposition in a functioning feature. Pottery cross joins with the overlying fill, which seems to mark the start of the well’s demise, suggest that this initial deposit must belong to the very last use of the well. Thus, assuming that the feature did not have a very short life (as suggested by the investment in its construction), it must have been kept clean before this: any faunal or ceramic signatures from this first layer tell us only about a short moment in time (in contrast, for example, to 1.5m of ‘usage’ deposits in the base of the Dalton Parlours well: Wrathmell and Nicholson 1990, Fig. 115).

Overlying fill 2093, deposited at a time when scrub, and perhaps even heathland, were evident in the vicinity and insects and frogs/toads were falling into the well, was presumably forming soon after 2109 (see cross joins, above). 2093 seems certain to have marked the feature’s demise following the deposition of two adult female pig skulls, an act which must have fouled the water source. If this was deliberate, then the choice of two mature sows, no doubt responsible for numerous litters, may link this action to fertility rites (the deposition of cattle and horse crania elsewhere in the well strengthens the notion of the symbolic significance of crania: Wilson 1999, 303). That said, other bones from this layer indicate simple carcass processing and meat consumption, so there is no proof here of symbolic intent (although this group does include butchered horse and a solitary red deer bone, both discussed in more detail below).

By the same token, fill 2093 yielded a wooden bucket and, just above this, a virtually complete Huntcliff type jar, both of which might be taken as some form of structured deposition, especially given that this type of jars was found in wells at both Rudston (Rigby 1980) and Dalton Parlours (Sumpter 1990), along with complete buckets at the latter (Morris 1990). However, there may still be some reason to question this interpretation. Other pottery from this fill was incomplete when recovered, thus suggesting breakage elsewhere and discard, something supported by the CBM sherd size. Equally, the bucket may have been deposited with its iron hoops, something that would surely have been retained and recycled if the item was intended as rubbish. Yet it lacked a mount and handle. This artefact can be most reasonably interpreted as the result of accidental breakage, presumably when in use with the well.

In terms of evidence of ritual in 2093, then, much depends on how one interprets the complete, Huntcliff type jar. Such vessels are commonly associated with wells, but they are also evident elsewhere on many sites, including Heslington East. Vessels of this type are frequently sooted from use, particularly around the neck and upper body, and sometimes scorched. In addition lime-scaling is common inside them, this combination of features leading to the suggestion that they were used to heat water (Sumpter 1990, 244). Hence this jar might be interpreted in similar vein to the bucket, as an item that could have been used with the well. It need not have been deliberately selected to be deposited there at the end of its life.

The next pair of deposits in the well, 2046 then 1979, provides perhaps the most sustained case for involving ritual elements in their formation. Forming at a time when there was wasteland vegetation in the general vicinity, they included pitfall insects and frogs/toads and seem to have been deposited as a single activity. 2046 included a very large cobble stone, which would have precluded any attempt to get at the water. Faunal material from these two fills was also unusual. 2046 suggested the rapid disposal of butchered cow and horse. Apart from two small fragments, bones from overlying 1979 comprised only immature deer, dog and calf, seemingly selected by age, alongside an adult cow and the sacrificing of a large antler, valuable raw material. The deer and dog are clearly unusual and will be discussed more fully below.

The unusual concentration of horse butchering from this horizon, in an animal thought to be rarely consumed in the Roman period (Toynbee 1973, 185), might also be considered significant. It must be remembered, however, that the notion of revulsion to horse meat is derived from documentary sources concerned, in the main, with elite activities at the centre of empire. When one looks at the purely archaeological material, as done for the Eastern Dutch River Area in the Roman Netherlands (Lauwerier 1988), a more complex picture is evident, in which some settlements do seem to avoid such practices (marks on horse bones here being attributed to dogs) but others are consuming horses more regularly. Similar diversity could be evident in our study area, as implied by the consumption of horsemeat at Rudston (Chaplin and Barnetson 1980, 152). Thus one cannot assume that butchering evidence from Heslington East is somehow exceptional. Indeed, hippophagy must have been common enough in the Roman period for later Christian laws to attempt to forbid it, portraying it as linked to unacceptable, pagan practices (Poole 2013).

These fills yielded far less pottery than underlying strata, but did include an unusual long-necked beaker and a complete grey ware jar, without lugs, the latter perhaps already rather old when deposited. This form sometimes has worn areas on the girth and chipped rims, perhaps partly a result of being used to draw water (an example from the Dalton Parlours well was found with a cord fragment still tied to the lug: Sumpter 1990, 244). It is also similar to a complete vessel, with lugs, found at the bottom of the Langton well. The excavators (Corder and Kirk 1932), commenting on its fragility compared to Huntcliff types, suggest that it must have been used by those "unwilling or not permitted to use the ordinary well gear" (*op. cit.,* 52). Lugs are absent from the Heslington vessel, however, so it may not be so directly related to our feature. More generally, the lack of sooting and limescale on these grey ware vessels suggest a contrast with Huntcliff type jars. The unusual beaker and complete grey ware jar, in a layer largely lacking other ceramics, and after whose deposition the well was clearly unusable, combine to suggest the deliberate closure of the well.

All subsequent fills had similar assemblage signatures to each other, comprising small amounts of pottery of a range of forms and dates, probably derived from the sides of the well and drifting in from the surface, and few bones beyond the occasional pitfall victim. The very latest parts of the sequence almost certainly comprise post-well accumulations, including residual material, mixed CBM and some ceramics of Anglian date.

The above discussion shows, then, that in trying to distinguish any particular ritual component in this well, one must not look simply to particularly complete pots or ABGs, or even to whole faunal or ceramic assemblages. Rather these components must be considered in relation to each other and in relation to deposit information (and, even then, one cannot be completely certain, most obviously over the status of the material recovered from fill 2093). The closure of the well is marked most obviously with the deposition of 2046/1979 containing a large cobblestone, the complete grey ware jar, plus the adult cow and large antler, set beside the calf and immature red deer and dog. These last two faunal elements deserve wider consideration.

The occurrence of the sub-adult red deer is not without precedent within late Roman wells. Occurrences at Baldock, Hertfordshire, were believed to represent the natural deaths of animals trapped in the well head (Chaplin and McCormick 1986, 410-11), while two carcasses within a well from Burst, Belgium, may have been hung there but never retrieved (Ervynck *et al*. 1987). Other evidence might take us beyond functionalist explanations, for example with the partially-articulated remains of an immature red deer in a well at Drapers’ Gardens, London (Gerrard 2011, 555). Deer bones are rare in Romano-British contexts, whether locally in York (Foster 2012, 11; Foster and Jaques 2012, 6; O’Connor 1987, 7) or more generally. Cool (2006, 114) suggests that venison consumption ‘could well have only taken place in special circumstances’. The act of hunting during summer or autumn, then transporting and consuming some of the Heslington animal, before final disposal in the well, must have had particular meanings for this agricultural community.

The finding of dog skeletons in wells is a ‘common theme’ on Roman sites (Black 1983, Fulford 2001, 214-5), local examples being Dalton Parlours (Berg 1990, 252-3), Rothwell Haigh (Cool and Richardson 2013), Shiptonthorpe (Millett 2006, 314) and Welton (Mackey 1999). They have been seen, in a functionalist vein, as reflecting the purge of stray dogs (Maltby 2010, 29) or the convenient disposal of (inedible) ‘waste’ carcasses (Seeley and Wardle 2009, 156). Yet they could also represent ‘termination’ deposits (Seeley and Wardle 2009, 148-9), as seems likely, for example, at Swann Street, Southwark (Beasley 2006). It is, after all, the Roman period that sees the first clear indication of *pet* dogs (Grant 1989) and perhaps dedicated breeding programmes (Bruch 2003). It is notable here that the 15 dogs in the well at Welton, noted above, included puppies alongside mature animals: Mackey 1999, 26). Pit 2601 at Silchester contained an articulated dog skeleton and an ivory folding knife depicting two mating dogs plus raven remains, albeit alongside otherwise non-descript artefacts, and well 5735 contained a dog whose remains were scattered over several fills (Eckardt 2011, 311). Thus the ritual deposition of an immature canid at Heslington East might be understandable at a time when the bond between dogs and humans was undergoing significant transition (Snyder and Moore 2006. See Smith 2006 for a study of domesticated dogs in both Iron Age and Roman periods).

**Conclusion**

This paper proposed at the outset that access to water was fundamental to human engagement with nature, this encounter taking a significant step forward when society started to employ subterranean sources on a regular basis. The exploitation of such a basic necessity is likely to have embodied ritualistic, as well as functional, elements from the start, as is clearly the case at the core of the Roman Empire with the symbolism of aqueduct supplies. Yet understanding such dynamics at the margins of that empire, and deciding whether they drew on social forces or on pre-Roman influences, is difficult, even when deploying a range of archaeological materials.

We have attempted to investigate such issues with our Heslington evidence by combining assemblage analyses and setting these within the context of depositional history and formation processes (Brudenell and Cooper 2008). In this way, we have sought to explore the comparability of contexts and evidence for patterning in relation to notions of intentionality (Garrow 2012). Our interpretations have important implications for the relationship between ritual activity and material circumstances.

When looking at the assemblages deposited in any well, parallels can be drawn far and wide. Above, for example, we placed the young deer from our feature beside a counterpart at Drapers’ Gardens, London (Gerrard 2011), and our dog beside that from Swann Street, Southwark (Beasley 2006). Yet the differences must not be forgotten. The latter animal was accompanied by human skeletons, suggesting a Southwark context that is more ritual shaft than water well. The Drapers’ Gardens feature included unworn coins in its construction and a hoard of twenty or more very prestigious metal vessels in its backfill. These items are seen by Gerrard (2011, 568) as marking some form of ‘closure’ in this part of Londinium, at the very heart of Britannia (i.e. the capital of Maxima Caesariensis). In contrast, the Heslington East well lacked coins, other metal finds and human bone. Simply having a dog or a deer in common does not mean that these London features convey the same forms of symbolism as those embodied in activities on a hillside outside York.

It is striking that all of the material found in our well would have been familiar to those inhabiting this landscape. Its construction incorporates a finial which, we argue, probably came from the dismantling of a nearby, good-quality structure. The jars circulated here widely, the Huntcliff type probably being connected directly to water usage. The butchered sheep, cattle and, it can be argued, horse are found in other contexts on the site, albeit not in these forms and proportions. Even the young dog and deer could have come from, respectively, within and fairly near the site. They therefore attest locally-derived, well-understood, ‘mundane’ elements.

Yet sufficient evidence is presented to show that some of this material was deliberately placed in the well as symbolic performance. If we are to understand these forms of routine ritual, we must look not to other places where the odd complete pot or articulated animal skeleton has turned up in a similar feature, rather to local agricultural cycles and fertility practices, whether at annual, generational or longer-term points of transition. The question of whether such practices belong to a ‘Roman’ or ‘Iron Age’ tradition is, perhaps, less important than understanding the specific rural processes, and the associated pressures and social tensions, that may have caused a community to act in the way that it did.

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