RE-FRAMING REPTON:

NEW INSIGHT INTO SETTLEMENT, LANDSCAPE AND SOCIAL CHANGE AT THE EARLY MEDIEVAL AND VIKING-AGE SITE

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THE SIGNIFICANCE OF REPTON:

EARLY APPROACHES AND A DEVELOPING RESEARCH FRAMEWORK

Repton, with its Viking burial featuring an animistic jackdaw claw and Thor's hammer amulet, and it's ninth century church crypt with phenomenal 'candy-cane' Romanesque pillars, is a famous, evocative site. It is also clearly of importance, both in itself as a nationally significant documented Mercian centre of the early medieval period¹, but also for the sub-discipline of Viking Studies which, for many years, has championed the defensive 'D-shaped' enclosure around St Wystan's Church as the site of the overwintering camp of the Great Viking Army, as recorded by the Anglo-Saxon Chronicle for AD 873-4.

However, as with many 'type-sites', whilst certain research themes are now highly developed - largely focussed around the interpretation of the area around St. Wystan's – interpretative gaps remain. Recent publications have, until very recently, continued to focus on the established themes, for example concerning whether the mass burial excavated in the Vicarage Garden immediately west of St Wystan's contained either the remains of the Middle Anglo Saxon (c. AD 650- c. 850) Mercian royal family or, instead, the remains of the Viking Army (Jarman et al. 2017, but note Jarman 2019).

The St. Wystan's complex is clearly of fundamental importance for the interpretation of early medieval settlement character in Repton. This can be glimpsed in documents detailing the existence of a monastic site from the late 7th century and royal burials within (presumably) the crypt of St Wystan's during the 8th and 9th centuries (Biddle and Kjolbye-Biddle 1986; 1992). However, it is the contention of this article that if we continue to persist with a spatially and chronologically restricted frame of reference, neglecting wider themes of settlement evolution and landscape context, that a number of assumptions will persist and interpretative insight will remain somewhat restricted.

Because the narrative of Anglo-Saxon Repton has previously been dominated by the historically documented foci around St. Wystan's, the labels of 'monastery' and 'royal centre' have perhaps been assumed to characterise the early medieval settlement as a *whole*. This is not an interpretative issue restricted to Repton and was the focus of much debate in late 1990s to 2000s, with labels derived from documents challenged as providing a false 'snapshot' of settlement character at a single moment, resulting in a 'top-down' narrative focussing on documented elites as the sole actors driving social change (Loveluck 2013, 5). At this time, excavations of undocumented Middle-Late Anglo-Saxon 'high status' rural settlement sites

started to reveal detailed stratigraphic sequences, where site layout and material culture use/discard patterns could be used to narrate transformations in settlement character more fully. At Flixborough, North Lincolnshire, for example, the settlement was seen to transform in character from secular consumer centre to ecclesiastical producer settlement and back to a secular site over a 3-400 year period (Loveluck 2007).

Following this model, might early medieval Repton, both before and after its 'Viking phase' have actually had a much more extensive and multifunctional early medieval settlement set-up, reflecting a variety of social tiers and roles, which experienced dynamic transformation over time? Indeed, might the St Wystan's area have actually been targeted by the Viking elite of the 870s for the very reason that it was a high-status (read atypical) activity focus within a more complex settlement set-up?

ANGLO-SAXONS AND VIKINGS:

ESTABLISHING THE TRUE EXTENT OF SETTLEMENT AND LAND USE

Until recently, unfortunately, there has been very little opportunity to more fully explore the above debates and interrogate the archaeological evidence of areas beyond St. Wystan's. By way of illustrating the frustrating lack of more general landscape-scale data for Repton, we can initially cite Gill Stroud's excellent resource assessment, as part of the English Heritage Extensive Urban Surveys (EUS), which was forced to note that 'there is no evidence for the location of the early medieval village' (Stroud 1999, 4). Whilst we may debate the appropriateness of the label 'village' for this period, it was certainly the case that as late as 1999 the only discoveries relating to any wider settlement remains, other than possible timber halls identified around St. Wystan's (Biddle and Kjolby-Biddle 1992), dated to 1854.

In 1854 Bigsby, in his *Historical and Topographical Description of Repton*, stated that the early medieval settlement lay mainly to the west of the present village where; 'repeated discoveries have been made of the foundations of buildings along the summit of the hill [east-west aligned sandstone bluff] at no great distance from the road that leads from Repton to Newton Solney [further west]' (Bigsby 1854). Unfortunately, nothing was recorded or retained during these early investigations. The only other early medieval evidence (i.e. pre AD 1066) in the wider Repton environs comprises stray finds, such as a Viking sword (Derbyshire Historic Environment Record entry 24513) from the low-lying area north of St Wystan's, found by labourers, and a cross shaft from the western part of the churchyard, an antiquarian find (Montgomery 2016, fig. 1).

Although Stroud's 1999 survey was hampered by a lack of widespread evidence for early medieval settlement, it does additionally highlight some key points which can help frame research into the wider landscape. Firstly, Stroud's tentative interpretation of the extent of later medieval settlement at Repton, largely inferred from historic topography and cartographic evidence (1829 and later), is noteworthy. As expected, the early medieval focus is seen to be restricted to the area around St. Wystan's, with later activity then extending southwards from a proposed marketplace as burgage-type plots fronting both sides of the main historic northern routeway through Repton (Stroud 1999). What is interesting, however, is that the area on the immediate west and south sides of the known early medieval 'core' contains no evidence for regular burgage-type plots and is instead divided into irregular blocks (Stroud 1999, 23). Does this reflect an earlier layout? In addition, a western outlier of early activity is also proposed

on the low-lying area north of the sandstone bluff. This is the location of a tannery which appears on historic maps until the late 19th century. Stroud suggests that a tannery may have been located here in the medieval period (*ibid.*, 24), but if true might we also imagine that this could also have been an early medieval activity focus, suggesting a more extensive polyfocal settlement?

Secondly, Stroud perceptively noted that the palaeochannel located below the bluff to the north of the St. Wystan's complex, known as Old Trent Water (Fig. 1), may have been navigable in the early medieval period, effectively creating an island between Old Trent Water and the River Trent to the north (Stroud 1999, 5). This 'island' is first documented in a deed dated to the second half of the 13th century (*ibid.*), and the channel may have been navigable as late as the 18th and 19th centuries (Hipkin 1899; Austen *pers. comm.*). Recent work by Hadley and Richards at the Viking Camp at Torksey, Lincolnshire (2016) – where the Vikings overwintered just a year before Repton – has demonstrated that the Viking Camp here was over 50 hectares in size. On this basis, would the Repton 'D-shaped' enclosure – 0.4 hectares in size - really have permitted occupancy by a substantial army (Williams 2013; Stein *pers. comm.*)? If the answer to this question is no, are we also required to re-think the function and role of the St. Wystan's 'D-shaped' enclosure and to seek out new locations for Viking activity in Repton, perhaps to include landing sites such as this 'island'?

THE OPPORTUNITY: RECENT DEVELOPMENT-LED ARCHAEOLOGY

Over the last seven years, redevelopment across the dispersed campus of Repton School has afforded Trent & Peak Archaeology the opportunity to start to recover some important data in new locations, permitting us to look at early medieval settlement evolution on a wider scale. This work has been carried out through the planning process following advice from Derbyshire County Council's archaeology team, who have recommended schemes of archaeological work be carried out on a number of redevelopments as conditions of planning permission. The archaeological investigations were undertaken in accordance with approved Written Schemes of Investigation (WSI's) which identified a number of research questions – both general and specific – which in general dovetailed with priorities identified in the East Midlands Research Agenda (Knight, Vyner and Allen 2012). For the Early Medieval period, a key question was whether we might obtain a better understanding of the extent and character of settlement and the constraints/opportunities provided by the physical landscape setting. Full *grey literature* reports for all sites can be found on the ADS website (https://archaeologydataservice.ac.uk/)

The first site to be developed was the Science Building on high ground immediately south of the sandstone cliff at the north-west extent of the present-day town (Fig. 2). Initial work here comprised desk-based assessment (Flitcroft 2011), followed by evaluation trenching (Hurford 2012) and an area excavation (Hurford, Humphreys and Jones 2014).

A second development was the Repton Precinct site located further eastwards, closer to St Wystan's and just south of the Willington road (Fig. 1). This comprised archaeological monitoring and recording only (Flintoft 2015).

The third, most recent, redevelopment was in advance of upgrades to the Repton School Sports Facilities, located on lower-lying ground, again immediately south of the sandstone cliff at the north-west extent of the present-day town (Figs 1 and 3). Here desk-based assessment (Montgomery 2016) and archaeological monitoring of ground-investigation boreholes (Keyworth 2017), was followed by evaluation trenching and geoarchaeological investigation (Puzey-Broomhead, Renner, Stein and Keyworth 2017) which targeted a small section of floodplain.

THE RESULTS OF RECENT INVESTIGATIONS

The cliff-top settlement site

Excavations at the Science Building site were located on a 60m by 30m area of flat high ground immediately south of the sandstone cliff at the north-west extent of the present-day town. Machine stripping in the eastern 30m of the site revealed a thin dark brown layer of 'culturally rich' soil containing, amongst other artefacts, Middle Anglo-Saxon pottery dating from between the 5th and 8th centuries AD. Removal of this layer revealed a discrete area of settlement features comprising a Romano-British field boundary and at least two phases of Mid to Late Anglo-Saxon settlement features comprising boundaries, an enclosure and a number of pits (Hurford, Humphreys and Jones 2014).

The Romano-British field boundary

A northwest to southeast aligned boundary ditch (0761), interpreted as a field boundary, defined the western extent of concentrated activity at the site. The ditch, in common with other features on the site, had apparently silted-up naturally prior to being re-cut on two occasions. One re-cut event, (0713), may have dated to the Roman period, with the fill producing a single sherd of Roman grey ware. The original ditch (0761) was cut by a Middle Anglo-Saxon pit (0716) which produced an early radiocarbon date of cal AD 416-597 (95.4% probability) (see below).

A single pit (0712), located just west of the northwest observed extent of the Roman ditch, produced a radiocarbon date of cal AD 354-379 (95.4% probability). Environmental analysis revealed significant quantities of domestic waste, including charcoal obtained from local scrub woodland.

Phase 1: Middle Anglo-Saxon Features

As noted above, the northwest to southeast aligned boundary ditch (0761), interpreted as a Romano-British period field boundary, had been re-cut at least twice. Stratigraphic relationships between all re-cutting events were impossible to observe, but one re-cut, (0739), produced a single sherd of pottery dating from the Early to Middle Anglo Saxon period (5th to 8th centuries AD). A further ditch feature, (0740) located 2m further east, shared an identical alignment to boundary ditch re-cut (0739) and produced a single sherd of Middle Anglo-Saxon Shell-tempered pottery dating to the 9th century, which represents a regional import. There are two possible interpretations for ditches (0739) and (0740). Either they are not contemporary, and ditch (0740) represents a slightly shifted replacement of a field boundary or, perhaps more likely, the features are contemporary and represent the northern extent of a trackway.

Ditches (0739) and (0740) appeared to truncate an earlier Middle-Anglo Saxon feature which comprised an east-northeast to west-southwest aligned shallow boundary ditch (0.3m wide by 1.2m deep and with an irregular profile) (0720) of uncertain function. Ditch (0720) contained both Roman (2nd to 4th century AD) and hand-built pottery dating from the Early to Middle Anglo Saxon period (5th to 8th centuries AD). The relationship had been lost due to the later truncation, but ditch (0720) certainly appeared to terminate at the Romano-British field boundary (0761), perhaps suggesting a need in the Middle Anglo-Saxon period to subdivide the land originally defined by the Romano-British field boundary. Indeed, all three ditch features discussed above appear to pay some form of spatial reference to the Romano-

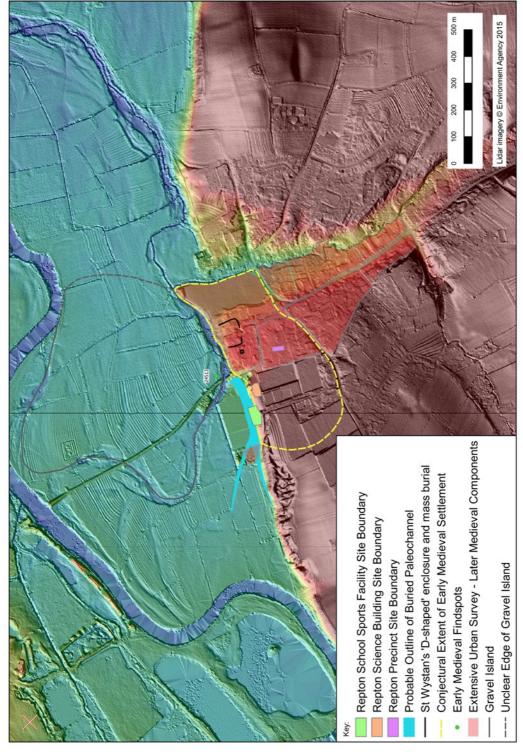


Fig. 1: Lidar image of Repton showing locations of key areas mentioned in the article, including recent archaeological investigations.

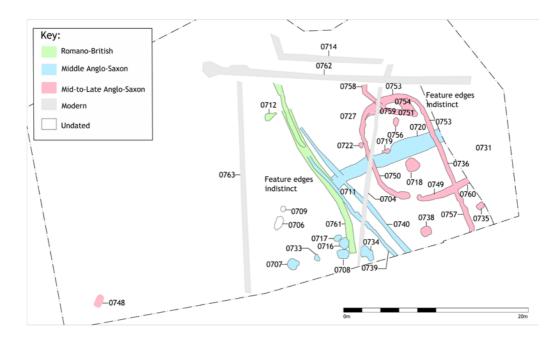


Fig. 2: Excavated features at the Science Building site.

British ditch (0761); perhaps it was visible in the Middle Anglo-Saxon landscape as an earthwork feature?

A cluster of six shallow pits, perhaps indicating refuse from a household group, are also attributed to this activity phase, and may have been deliberately placed to the west of ditch (0761). Dating evidence from the pits was sparse, but Early to Middle Anglo Saxon hand-built pottery (mid 5th to 8th century) was recovered from pits (0707, 0708 and 0716), whilst pit (0717) contained pottery dating to the Middle Anglo-Saxon period (mid 6th to mid 9th century). As noted above, pit (0716) truncated Romano-British ditch (0761) and produced a radiocarbon date of cal AD 416-597 (95.4% probability). Pit (0716) also produced hammerscale, indicating the contemporary presence of iron working in the vicinity.

Phase 2: Middle to Late Anglo-Saxon Features

Truncating the shallow Middle Saxon boundary ditch (0720), was a small (10m in length) sub-oval enclosure gully (0749)/(0760)/(0750)/(0727) with an entrance on the southern side. A single sherd of pottery dating to the Middle Anglo-Saxon period (5th to 9th century) was recovered from the sandy upper fill of the enclosure (0750). A radiocarbon date obtained from enclosure fill (0750) provides a date of cal AD 997-1006 (93.8% probability). On the north side of the enclosure there was some evidence for its re-cutting or remodelling (0753). Fills here, namely (0754), produced a residual piece of Roman pottery and a single sherd of Early to Middle Anglo-Saxon pottery (mid 5th to 8th century in date). An extension of the enclosure to the southeast (0736) was also noted which continued beyond the southern extent of the excavation area as gully (0757). This extension appeared to be contemporary with the main enclosure, but investigative slots through the shallow homogenous feature fills could not ascertain this with certainty.

The enclosure's northern end (represented by (0727)/(0759), (0753) and (0754)) had been cut by a further curvilinear feature (0751)/(0758); apparently the southern part of a similar enclosure. This curvilinear feature terminated in a butt end to the east and extended to the northwest where it had been truncated by modern services. A single piece of Anglo-Saxon pottery dated to the Middle Anglo Saxon period (mid 6th - 9th century) was retrieved from the fill of this stratigraphically later enclosure.

Two pits within the interior of the sub-oval enclosure are placed within this activity phase. Pit (0756) contained charred grain and no dateable material, but pit (0718) contained pottery dating to the Middle Anglo Saxon period (mid 6th to 9th centuries) and charred grain which produced a radiocarbon date of cal AD 1022-1091 (94.3% probability). Flake hammerscale from iron smithing was also recovered from this pit. Beyond the southern extent of the sub-oval enclosure, a third pit contained pottery dating to the Middle Anglo Saxon period (mid 6th to 9th centuries) plus charred grain which produced a radiocarbon date of cal AD 660-1016 (86.6% probability) and fragments of burnt clay which possibly formed part of a clay oven hood (Elliott pers. comm.).

Three undated post-holes, (0719), (0722 and (0735), potentially indicative of otherwise largely truncated fence-lines, were also observed in the area of the sub-oval enclosure. Post hole (0735), which had a discernible post-pipe (0.28m in depth), contained pottery dating to the mid 5th to 9th centuries.

A final undated pit (0748) was observed as an isolated feature on the western periphery of the excavation area, perhaps indicating that the western extent of this particular zone of concentrated settlement activity has been identified. Pit (0748) contained evidence of burning and a concentration of fire-cracked stones. Similar 'fire pits' have been recorded at other Anglo-Saxon rural settlement sites in the East Midlands, such as Brough, Nottinghamshire (Jones, forthcoming) and are often situated on the periphery of zones of concentrated settlement activity.

Site Interpretation

The excavated evidence of Phase 1 comprised a boundary ditch, perhaps aligning to a former Romano-British agricultural boundary, which then became the focus for the digging of a number of pits. The overall function of the pits is uncertain, but they certainly contained fragmented pottery and a relative concentration of ferrous metal working waste (especially pit 0716). The fragmentary nature of the pottery finds, in addition to the presence of the overlying 'culturally rich' layer, may indicate, as with other Early to Middle Saxon sites in the wider region such as Flaxengate, Lincoln and Holdingham, Sleaford (Irving 2014), that rubbish disposal was initially by way of surface middens, with the ceramic artefacts only later becoming incorporated within pit fills.

Later, in Phase 2, a sub-oval enclosure ($c.13 \,\mathrm{m} \times 8 \,\mathrm{m}$) was constructed. The enclosure may have been reserved for either animal penning or production related activities, as has been interpreted at numerous sites in the wider region, for example, Riby Crossroads, Lincolnshire (Steedman 1994). However, a structural function for the enclosure cannot be entirely ruled-out. At Brough, Nottinghamshire, for example, enclosures of a similar morphology served as drainage gullies for wall-post type timber halls ranging in size from $c.7.5 \,\mathrm{m}$ to 11.5m in length and 3.7m to $c.6 \,\mathrm{m}$ in width (Jones forthcoming). At Catholme, Staffordshire, structures were also recorded as being within ditched boundaries similar to the Science Building enclosure (Losco-Bradley and Kinsley 2002,115).



Plate 1: The Repton School Science Building site under excavation, from the west looking east to St. Wystan's.

The presence of the Phase 2 enclosure, along with associated pits, implies that the site at this time was located closer to a habitation focus, although, given the continued presence of waste indicative of high temperature production related activities, perhaps not too close! This notion is supported by the presence of carbonised wheat (both emmer and spelt) rachis and spikelet fragments indicative of preliminary crop gleaning, as well as crop weeds, in environmental samples from pits suggesting that they were intentionally used for domestic refuse disposal (Miller and Carson 2014).

The remains identified at the Science Priory site seem to reflect the edge of a fairly long-lived Middle to Late Anglo-Saxon settlement zone, with indications of specialised production activity in the form of iron working, most likely smithing. There is also the suggestion of a change in site layout and use of space between the Middle Anglo-Saxon Phase 1 and Middle to Late Saxon Phase 2. Transformations in the settlement zoning, however, appear to have occured within the overall context of a stable settlement, as was also the case at Catholme, Staffordshire (Losco-Bradley and Kinsley 2002). Indeed, the evident confusion and 'mixing' of material culture from throughout the Anglo-Saxon period tends to suggest sustained, though certainly not static, activity at this location both before and after Repton's Viking-phase.

Overall, the Science Priory site is very much characterised by production related activities, be that enclosure features associated with agricultural production such as (potentially) animal penning, domestic crop processing, or high temperature industries. Nevertheless, a degree of

regional exchange is also potentially represented by shell tempered pottery from Lincolnshire, and quartz and igneous rock temper within other ceramic vessels; raw materials which may originate in the Peak District and the Charnwood area of Leicestershire respectively (although it is not clear if the pots or rock fragments themselves were being traded) (Irving 2014). Sadly, animal bone was not preserved (apart from a few unidentified burnt fragments) depriving us of an additional 'window' on to the contemporary agricultural economy and potentially patterns of consumption at the site.

Evidence at Repton Precinct

At Repton Precinct, a scheme of archaeological monitoring and recording was undertaken within the area immediately west of the St. Wystan's area. Below made-ground layers containing post-medieval finds, up to 0.7m deep, structural elements in the form of poorly bonded rubble-packed walls were identified truncating the natural substrate. Two elements, ENE to WSW aligned wall [0010] and NW to SE aligned wall [0017), may represent the corner of a stone building. Further south, an additional ENE to WSW aligned wall, [0024], was observed running parallel to [0010] for a distance of 10m before just possibly returning to the north and may represent the southern side of the same, heavily truncated, building (Flintoft 2015).

The stone-built walls of the building identified at Repton Precinct remain undated, but a Saxo-Norman through to High Medieval date was suggested by the excavator. What is significant is that a potentially early building has now been identified in this part of Repton, previously noted as having irregular land divisions as opposed to regular burgage-type plots (Stroud 1999, 23). This discovery potentially supports the notion of an early layout for this area, perhaps extending our mental picture of early planned medieval settlement further south of St. Wystan's than previously imagined. Only further investigation could confirm or deny this hypothesis.

The Palaeochannel at Repton School Sports Facilities

Most recently, archaeological investigations during the redevelopment of sports facilities, a short section of a now silted-up and deeply buried watercourse (a palaeochannel) was exposed. The site was located on a sloping site immediately north of Repton's sandstone bluff, roughly 500m west of St Wystan's and immediately northwest of the Science Priory site (Fig. 1). It was hoped that contemporary refuse from that settlement may have been deposited in this location.

The Palaeochannel Sequence

A broadly similar sequence of deposits was observed across the site, which featured a north to south sloping area at its southern extent (backing onto the bluff) with little overlying deposit depth, before flattening out onto the floodplain to the north at around 42m AoD (Plate 2). In the southern sloping part of the site, the deposit sequence comprised up to 0.6m of modern topsoil (0100), overlying deep 20th century made-ground, (1010), up to 1.3m deep, which contained a high proportion of 19th and early 20th century refuse. The made-ground in turn overlaid colluvial (hillwash) deposits (0102)/(0103), up to 2m deep, and the underlying natural mudstone (0108). On the flat area to the north, overlying deposits were much deeper and, as Figure 3 demonstrates, had apparently accumulated in a 'shelf-like' depression occupied by a former river channel. Here, beneath the topsoil, made-ground and upper colluviums,

a sequence was identified comprising possible palaeosoils (0104)/(0105) (1.7m deep) interspersed with ancient colluvium (0106) (0.45m deep). These deposits overlay substantial alluvial (floodplain) deposits (0107), at least 2m thick, at a depth of 5.3m below ground level (38.09m AoD). Due to the depth of the alluvial deposits, they could only be observed by auger survey, with organic material retrieved for detailed analysis.

Specialist Analysis

Specialist analysis was subsequently undertaken on deposits from the palaeochannel. Initially, radiocarbon dating of suitable retained material was carried out to understand when the former channel might have been in existence. This was followed by detailed analysis of preserved plant macrofossils and pollen from specific deposits in order to understand what type of human-influenced landscape was in existence during the lifetime of the former channel.

The earliest sampled deposit comprised silty fine sand alluvial sediments (equivalent to deposit (0107)) retrieved from a borehole (BH2) at 38.45m AoD. A radiocarbon date of 1413 cal BC (95.4% probability (SUERC-76964) was obtained, placing it in the later Early Bronze Age. The pollen was well preserved and contained almost equal tree/shrub pollen (*Alnus*, *Pinus*, *Ulmus* and *Carpinus*) to herbaceous pollen (*Cyperaceae*, *Filipendula* and *Potentilla*) including some species indicative of open/disturbed ground (e.g. Carduse sp. (thistle). The *Cereale* pollen grains demonstrate that there was arable activity in the floodplain or on the first terrace of the Trent at this time.

A second sample, comprising a deposit of dark brownish, greenish grey fine silt sand with laminations of black peaty silt within the palaeochannel, was retrieved from a borehole (BH1) at a depth of 38.78m AoD. Radiocarbon dates of 1368 cal BC and 1298 cal BC (95.4% probability (SUERC-76962 (GU46180)) were obtained from this deposit, placing it in the later Middle Bronze Age. The pollen was well preserved, and by this time was dominated by herbaceous pollen (70.5%) comprising mainly grasses (*Poaceae*) with sedges also present *Cyperaceae* (sedges). Pollen from trees on drier land above the floodplain made up only a small proportion of the pollen count, and the site was evidently damp with perhaps limited areas of open water at this time, since there was little pollen from aquatic species (Green 2017).

The final deposit to be sampled was a mid grey-brown sandy silt palaeosoil (roughly equivalent to deposit (104)/(105) overlying the palaeochannel deposits within Borehol 1, at a depth of 39.78m AoD. A radiocarbon date of 792 cal BC (95.4% probability (SUERC-76962 (GU46180)) was obtained from this deposit, placing it in the Early Iron Age. The pollen was well preserved, and by this time contained abundant land pollen, with tree pollen a much more important component of the assemblage (51%), including *Alnus* (Alder) and forest trees such as *Quercys* (oak). However, pollens typical of fens and damper open ground (e.g Cyperaceae) had increased, suggesting a reduction in grassland suitable for grazing (Green 2017).

Although no carbonised grains or other indications of anthropic deposition were identified within plant macrofossil samples, a number of taxa were identified, including cruciferous vegetables/mustard (*Brassica/Sinapis* sp.), bramble (*Rubus* sp.) and cinquefoil/strawberry (*Potentilla/Fragaria* sp.), which are all suitable for human consumption. Interestingly, samples recovered from a greater depth (over 2.5m) below ground level contained greater proportions of remains preferring shady environments (as opposed to open landscapes) which correlates with the picture obtained from the pollen analysis (Bouchard-Perron 2017).

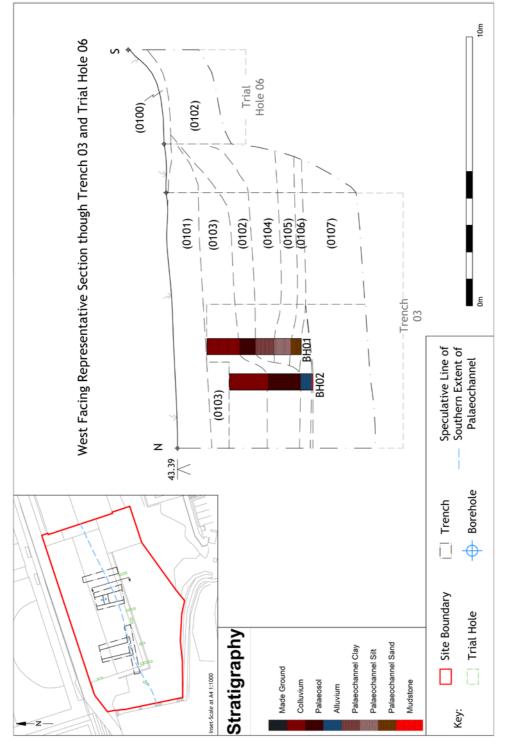


Fig. 3: Location Plan and Representative Section of the Sports Facilities Palaeochannel.

Conclusion

Whilst the nature of sample recovery (grab points and two purposive augers) did not allow for precise reconstruction of the depositional sequence of the palaeochannel, some interesting observations are still possible following specialist analysis. In the later Early Bronze Age, the landscape surrounding this river channel seems to have supported wet grassland with fen habitats and local alder carr, with a sparse cleared woodland on the terrace above the floodplain. Alder carr reduces and grassland increases during the Middle Bronze Age until, by the Early Iron Age, woodland has expanded and the site was dominated by alder and hazel with limited, but still damp, grassland. This pattern is somewhat atypical of the Trent valley as a whole where there is little evidence of local woodland at this time (Green 2017). The palaeochannel had also been largely infilled at this time and no early medieval material culture was retrieved during the archaeological work.

On the basis of existing evidence, it must be assumed that this particular channel, traceable to both the east and west using LiDAR imagery (Fig. 1), was largely infilled, but perhaps seasonably wet, by the early medieval period. The aerial images show that the channel appears to run into the *Old Trent Water* paleochannel immediately north of the St Wystan's Church section of sandstone bluff, further to the east. As noted above, further to the north and east, the *Old Trent Water* channel remained navigable until as late as the 19th century (Hipkin 1899).



Plate 2: The Repton Sports facilities site before demolition (palaeochannel located on flat part of the site) with the Science Building site on top of the sandstone bluff looking east towards St. Wystan's.

THE WIDER IMPLICATIONS OF RECENT RESULTS:

FUTURE RESEARCH PRIORITIES

Anglo-Saxon settlement archaeology of the 1990s and 2000s broke down simplistic labelling, in order to arrive at a more nuanced interpretation of the character and evolution of sites. In particular, the interpretation of undocumented settlements labelled as 'high status' was transformed by attempts to analyse the range of activities and functions represented and to narrate 'dynamic' transformations in patterns of production and consumption during the Middle and Late Anglo-Saxon periods (*c*. AD 650-1066).

In the last decade, scholars have continued to highlight the diversity of rural settlements (e.g. Thomas 2010), including those with apparent urban traits (see below), to an extent where settlements previously labelled 'high status' on the basis of the presence of perceived scarce material classes (e.g. imported pottery or non-ferrous metalworking) are now seen as much more commonplace (Davies 2013). There has also been increased recognition of extensive polyfocal settlements with diverse settlement histories where both ecclesiastical and secular influence took primacy at different times. For example at Lyminge, Kent, an important royal settlement to the north preceded the foundation of a monastic site to the south (Thomas 2013).

Most recently, debate has shifted on to our ability to materially identify and characterise different emerging social groups at settlements, and not just ecclesiastical and secular elites, but the more elusive societal strata such as merchants/traders, the documented 'freemen' of the Domesday Book (1086) and those tied to obligation and labelled as peasants by the Norman conquest (Loveluck 2013). In short, the successful identification of different actors driving settlement evolution is now regarded as critical to the way in which we might start to go about reconstructing early medieval settlement character. To date the archaeological evidence for Repton has existed outside of these crucial debates, but our recent investigations have started to provide us with evidence that can contribute to this discussion.

Reassessing the extent and character of the Anglo-Saxon settlement

Firstly, the identification of the Science Building remains, some 500m east of St. Wystan's, force us to think in more detail about the extent and nature of the Mercian centre that greeted the overwintering Vikings. In terms of overall settlement extent, we must now acknowledge a polyfocal set-up including, on the basis of the additional evidence of Repton Precinct, the possibility of an early laid-out component south and west of the St. Wystans area adjacent to the later marketplace (Fig. 1). Unfortunately, further afield, investigations of the palaeochannel immediately below the Science Building site did not provide further insight into changing patterns of early medieval waste disposal and production, but this outlying area, later close to the site of a medieval tannery, must remain a target for future investigation.

Most notably, the evidence of the Science Building site, apparently occupied both before and after Repton's Viking phase, appears to contrast strongly with what we know (and what we might expect) of the 'high status' activity focus of the early medieval secular/ecclesiastical settlement and burial ground around St. Wystan's. Although there are presently issues of phasing and absolute dating for this site, the Science Building site can be broadly characterised as a long-lived settlement area reserved for agricultural and ferrous metal production, with evident transformation over time.

The recognition of a dispersed early medieval settlement foci evidently rooted in production, suggests that a variety of social tiers and roles may have been operating in

parallel in the same 'community' of Repton by the Middle-Anglo Saxon period. Who were the people that undertook these agricultural and industrial production activities and what was their relationship to the elite focus at St. Wystan's? Were they initially free, or were these activities carried-out under strict elite control from the outset? Within this debate, we might also look immediately north of the Trent at the Early Anglo-Saxon settlement at Willington (HER 27928), where a series of sunken floor structures have been recorded. Does this site, dated to the 6th century AD, represent the same community prior to the emergence of social stratification?

At some point in the Mid-Late Anglo-Saxon period the installation of a sub-oval enclosure, potentially associated with post-holes and pits, suggests that the site was now located closer to a habitation focus. Scholars such as Andrew Reynolds have highlighted how transformations in the use of space within and around Anglo-Saxon settlements, such as the marking of boundaries, the alignment of structures and the use of functional zones (industrial areas, market sites, habitation areas and so on) are invested with social meaning. A natural corollary of this is that changes in the use of space, such as the replacement of boundary ditches, might represent important transformations in the social relationships of the resident communities (Reynolds 2003, 130). On this basis, the transformations observed at the Science Building site perhaps suggest the emergence of new forms of social relationship or a new guiding authority within the settlement. Indeed, comparable settlement enclosures at Riby, Lincolnshire, have been interpreted as representing either a secondary centre within an estate network or a settlement of independent free proprietors (Steedman 1994). The further evidence for crop processing, food production (clay oven hood), iron working and smithing may also hint at an intensification and diversification of production at this time. Work by Verhulst (2002) on the documented Carolingian economy has demonstrated that there may have been a range of options available for craft specialists in relation to distribution of their products. In some instance even if they were tenants of an estate holding they may also have been able to engage in taxed and/or obligation-free transactions (Verhulst 2002, 74-8). Might this also have been the case for Repton, or were these activities instead strictly controlled?

Arriving at a better characterisation of the tentative evidence at the Science Building site and beyond is clearly an important future research target. In addition, given that occupation at the site apparently spans the period of Repton's Viking phase, we might also now start to ask whether any of the transformations on this site may have occurred as a result of Viking influence.

Reassessing the extent and character of Viking activity

It now seems very important that future narratives of the Viking interaction with Repton pay greater attention to the potential complexity of the Anglo-Saxon settlement and Mercian centre that greeted them. As already noted, might the St Wystan's area have actually been targeted by the Viking elite of the 870's for the very reason that it was a high-status activity focus within a more complex settlement set-up? Here, a fundamental future priority concerns our ability to ascertain the true extent of the Viking activity. If we accept, following Hadley and Richard's observations at Torksey, Lincolnshire (2016), that the Repton 'D-shaped' enclosure would not have permitted occupancy by a substantial army (Williams 2013), where was the Viking camp (or camps) actually located?

Gareth Williams has recently highlighted the potential scale and variety of Viking overwintering camps. Using examples in Ireland (known as *longhports*), Williams

demonstrated that at Linn Duachill a defensive rampart over 1km long cut off a peninsula, whilst at Woodstown two 'd-shaped' enclosures encompass an area of 2.91 hectares (Williams 2015). The subsequent work at Torksey has combined survey, excavation and landscape reconstruction, and demonstrated that this site – some 55 hectares in size - was *not* enclosed by a substantial defensive ditch. Instead, the site occupied a low gravel dry 'island', with the River Trent to the west, a boggy/channel that had silted up in the Bronze Age to Iron Age to the east, and 'slipways' for boats to the north and south. Citing continental examples, Hadley and Richards suggest that the Viking's often selected island-sites for encampments and this, along with a number of other factors (e.g. territorial marking), may have determined the location of the Torksey site (Hadley and Richards 2016, 59-61).

Noting the above observations, we should certainly not underestimate the sheer potential scale of Viking activity in Repton. Interestingly, recent work by Cat Jarman has now started to highlight a number of Viking artefacts found by metal detectorists at Foremark Hall, some 2km east of St. Wystan's, as an alternative Viking camp location (Jarman 2019,24-25). This site is very near Heath Wood, Ingelby, where hitherto only Viking cemetery remains in the form of a unique cremation cemetery have been identified (Richards 2004). Further to this, is the presence of a possible gravel island in the Trent floodplain immediately north of St.Wystan's, where finds of Viking artefacts have previously been made (Fig. 1), a potential candidate for a landing place location? To this end, it is of great interest that the recently investigated Repton Sports Facilities identified a channel that had largely silted-up by the Iron Age. Might this seasonally wet feature have provided a similar 'slipway' facility for the gravel island at Repton similar to that recognised at Torksey? Clearly these suggestions are at present highly speculative, but it is important that such hypotheses are now tested with more systematic archaeological and geoarchaeological investigations.

Furthermore, far from being a short-lived transitory annexation of an existing high status settlement, might the incoming Viking Army have actually provided the catalyst for other, longer term, transformations in settlement layout and character at Repton? The evidence now emerging from the Irish sites and Torksey suggest that Viking camps, in addition to defence, may have performed a variety of functions, with the presence of craft, industrial and trading activities (Hadley and Richards 2016, 28-29). Key findings at Torksey included extensive evidence in the recovered metalwork assemblage for trade/exchange in the form of ingots/hack silver, possible coin minting, industrial production in the form of woodworking (a hoard of woodworker's tools) and metalworking (fragmentary copper alloy dress accessories for melting down) (*ibid.*, 45-59). This, combined with evidence for leisure activities and dressing-up (gaming pieces and decorative items), has led to the suggestion that the Viking camp at Torksey performed a number of functions that we later commonly attribute to towns, for a sustained period of time (*ibid.*, 63). It is agreeable here to recall Martin Biddle's criteria-based definition of a town which included, amongst other features, the requirement for a mint, a market, a role as a central place and a diverse economic base (Biddle 1976, 99-102).

Might a similar situation to Torksey, with Viking influence resulting in an administrative and economic centre with a diverse population, including those not involved in agricultural production, also have occurred at Repton? This would certainly accord with the later medieval prominence of Repton as a town which attracted a sizeable Augustinian Priory from the twelfth century. If Viking activity did indeed have a significant impact on the nature of trade, exchange and production at Repton, might this have not resulted in the sort of transformations in material culture use and site layout as observed at the Science Building site? It is clearly as

yet impossible to say. Yet, following this line of enquiry we might also start to ask questions such as; when was the market-place south of St. Wystan's laid out, and how might this facility have mediated the social relationships of different groups? Future investigations should try and target those areas of settlement that might shed further light on this debate.

In conclusion, the results of recent investigations, when placed within an updated theoretical framework, clearly show that we now need to work towards approaching the Repton landscape as part of what might be termed an 'archaeological microhistory' (Davies 2017, 5). In this approach, description and synthesis are not restricted to one area of excavation and disconnected bits of specific information, but instead utilise all the available archaeological, documentary and cartographic evidence to reconstruct the physical environment of a locality. Localities can then be placed within the wider context of the social and historical development of the town (*ibid.*, 4-5). It is hoped that this will allow for new questions to be generated. For example, what was the character and extent of the settlement that greeted the Vikings, what were the drivers behind its emergence, what was the true extent of Viking-Age activity and what was the subsequent trajectory of settlement in Repton after this pivotal phase?

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NOTE

¹ For the purposes of this article and ease of discussion, 'early medieval' is divided into Early Anglo-Saxon (*c*. AD 410-650), Middle Anglo-Saxon (*c*. AD 650-850) and Late Anglo-Saxon (*c*. AD 850-1066). Within this, the 'Viking Age' is considered to lie within the Ninth to Tenth centuries AD.

REFERENCES

Biddle, M. (1976) Towns. In D. Wilson (ed.) *The Archaeology of Anglo-Saxon England*. Methuen, London: 99-150.

Biddle, M. and Kjolbye-Biddle, B. (1992) Repton and the Vikings. *Antiquity* 66: 36-51.

- Biddle, M. and Kjolbye-Biddle, B. (1986) The Repton Stone. *Anglo-Saxon England* 14: 233-292.
- Bigsby, R. (1854) Historical and Topographical Description of Repton. London.
- Bouchard-Perron, J. (2017) The Plant Macrofossils. In P. Puzey-Broomhead, P. Renner, S. Stein, and T. Keyworth, Repton School Sports Facilities. Archaeological Monitoring of Groundworks, Excavation of Trial Trenches and Geoarchaeological Assessment. TPA Report 063/2017.
- Davies, D. (2017) The Development of Archaeological Post-Excavation Within British Professional Archaeology. BAJR Guide Series 46.
- Davies, G. (2013) Middle Anglo-Saxon Continental Wares in Norfolk: A Social Interpretation. In *Medieval Ceramics* 2012.
- Flintoft, P. (2015) An Archaeological Watching Brief at Repton Precinct. TPA Report 009/2015.
- Flitcroft, M. (2011) Archaeological Desk Based Assessment Repton School Science Priory, Repton, Derbyshire. CgMs Ref: MF/12734.
- Green, F. (2017) Pollen and Radiocarbon. In P. Puzey-Broomhead, P. Renner, S. Stein and T. Keyworth, T. Repton School Sports Facilities. Archaeological Monitoring of Groundworks, Excavation of Trial Trenches and Geoarchaeological Assessment. TPA Report 063/2017.
- Hadley, D. and Richards, J. (2016) The Winter Camp of the Viking Great Army, AD 872-3, Torksey, Lincolnshire. *The Antiquaries Journal* 96: 23-67.
- Hipkins (1899) Repton and its Neighbourhood. A Descriptive Guide. Repton.
- Hurford, M. (2012) An Archaeological Evaluation at Repton School, Repton, Derbyshire. A Report on Trial Trenching. Trent & Peak Archaeology. TPA Report 048/2013.
- Hurford, M., Humphreys, R. and Jones, H. (2014) An Archaeological Excavation at Repton School, Repton, Derbyshire. TPA Report 007/2014.
- Irving, A. (2014) The Anglo-Saxon Pottery. In M. Hurford, R. Humphreys and H. Jones. An Archaeological Excavation at Repton School, Repton, Derbyshire. TPA Report 007/2014.
- Jarman, C., Biddle, M., Higham, T. and Bronk Ramsey, C. (2018) The Viking Great Army in England: new dates from the Repton charnel. *Antiquity* 92: 183-199.
- Jarman, C. (2019) Resolving Repton. Current Archaeology 352: 18-25.
- Jones, H. (forthcoming) Excavations of an Anglo-Saxon Settlement at Brough, Nottinghamshire. Trent & Peak Archaeology Report.
- Keyworth, T. (2017) Repton School Sports Facilities, Repton, Derbyshire. Archaeological Monitoring of Window Samples. TPA Report 009/2017.
- Losco-Bradley, S. and Kinsley, G. (2002) *Catholme: An Anglo-Saxon Settlement on the Trent Gravels in Staffordshire*. Nottingham. University of Nottingham.
- Knight, D., Vyner, B. and Allen, C. 2012. *East Midlands Heritage: An Updated Research Agenda for Historic Environment in the East Midlands*. Nottingham. Buxton Press. https://archaeologydataservice.ac.uk/researchframeworks/eastmidlands/wiki/
- Loveluck, C.P. (2007) Rural Settlement, Lifestyles and Social Change in the Later First Millennium AD. Excavations at Flixborough. Vol 4. Oxford. Oxbow.
- Loveluck, C.P. (2012) Central Places, Exchange and Maritime-Oriented Identity around the North Sea and Western Baltic, AD 600-1100. In S. Gelichi and R. Hodges (eds) *From One Sea to Another:* 123-165.
- Loveluck, C. P. (2013) Northwest Europe in the Early Middle Ages, c. AD 600-1150. A *Comparative Archaeology*. Cambridge University Press. Cambridge.

- Miller, J. and Carson, S. (2014) The Animal Bones. In M. Hurford, R. Humphreys and H. Jones. An Archaeological Excavation at Repton School, Repton, Derbyshire. TPA Report 007/2014.
- Montgomery, A. (2016) Repton School Sports Facilities. Archaeological Desk Based Assessment. TPA Report 081/2016.
- Puzey-Broomhead, P. Renner, P. Stein, S. and Keyworth, T. (2017) Repton School Sports Facilities. Archaeological Monitoring of Groundworks, Excavation of Trial Trenches and Geoarchaeological Assessment. TPA Report 063/2017.
- Reynolds, A. (2003) Boundaries and Settlements in Later Sixth to Eleventh-century England. Anglo-Saxon Studies in Archaeology and History 12: 97-139.
- Richards, J., Beswick, P., Bond, J., Jecock, M., McKinley, J., Rowland, S. and Worley, F. (2004) Excavations at the Viking barrow cemetery at Heath Wood, Ingleby, Derbyshire. In *The Antiquaries Journal* 84: 23-116.
- Steedman, K. (1994) Excavation of a Saxon Site at Riby Cross Roads, Lincolnshire. In *The Archaeological Journal* 151: 212-306.
- Stroud, G. (1999) Repton. *Derbyshire Extensive Urban Survey Archaeological Assessment Report*. Derbyshire County Council.
- Thomas, G. (2010) *The later Anglo-Saxon settlement at Bishopstone. A downland manor in the making*. Research Report (RR163). Council for British Archaeology. York
- Thomas, G. (2013) Life before the minster: the social dynamics of monastic foundation at Anglo-Saxon Lyminge, Kent. *The Antiquaries Journal* 93: 109-145.
- Verhulst, A. (2002) The Carolingian Economy, Cambridge: Cambridge University Press.
- Williams, G. (2013) Viking Camps. In G. William, P. Pentz and M. Wemhoff (eds) *Vikings: Life and Legend*. Cornell University Press.
- Williams, G. (2015) Viking Camps and the means of exchange in Britain and Ireland in the ninth century. In H.B. Clarke and R. Johnson (eds) *The Vikings in Ireland and Beyond*. Four Courts Press, Dublin.