interest in bath-houses and his earlier career in Devon, with chapters by Michael Fulford on 'Failed and failing bath-houses in late first century Britain', Neil Holbrook on 'The public baths of Cirencester: antiquarian records and modern interpretation' and Frances Griffith on 'Forty years on: some Roman placenames of South West England four decades after Rivet and Smith'. Stephen J Kaye and John Pamment Salvatore then demonstrate the importance of understanding the impact of landscape change in a chapter entitled 'Research on the effects of relative sea-level change on the River Exe estuary in the mid-1st century: implications for the location of Roman sea-port and barge-quay facilities serving the Neronian fortress of Legio II Augusta at Exeter'.

The next section, devoted to antiquarian matters, gives a fascinating insight on how Hadrian's Wall and its environs were viewed in the past. Visitors to the Wall are often shocked that large sections have been quarried away, and the paintings discussed by David Breeze provide an invaluable insight into what has been lost, particularly around Walltown Crags. This is followed by a forensic examination by Roger Miket of a spectacularly ornate cabinet once owned by John Collingwood Bruce, a great pioneer of Hadrian's Wall studies. It is embellished with coins from Coventina's well and once surmounted by an eagle, part of which was claimed to have been constructed with timbers extracted from Newcastle's Roman bridge, now refuted by carbon-14 dating and dendrochronology. Tony Wilmott then compares and contrasts Hadrian's Wall 'travelogs' by William Hutton and John Skinner in 1801, the remarkable Hutton, aged 78, walking all the way to the northern frontier from Birmingham!

The penultimate section concerns the Roman military North, with chapters by Rob Collins on 'The culture of command in the 4th and 5th centuries in northern Britannia', a useful insight into the later Roman army, Richard Hingley, who in his chapter 'Hadrian and the Ocean' considers the symbolic significance of water, Oceanus and Neptune, and Nick Hodgson, who in 'The art of the mensores: the design of the Roman forts at Wallsend and South Shields' reminds us that each fort was planned independently and the idea of mindless military conservatism must be debunked. One of the puzzles of Corbridge is Site XI, which, Alistair McCluskev argues in the next chapter, provided a tempting target for a barbarian incursion in the AD 180s, and this theme of military threat is reprised by Matthew Symonds as being one of the main reasons for the construction of Hadrian's Wall in the first place.

Far from being simply a customs barrier it was, Symonds proposes, a response to episodes of violence in AD 117-19 and 121-2 that necessitated Hadrian's presence. Symonds also argues that the Wall was not simply an imposition but showed strategic understanding of the landscape. In the previous chapters, John Poulter discusses by careful analysis of LiDAR imagery the way the Stanegate crossed the North Tyne, while Margaret Snape examines the decline of fort vici and evidence for markets within the forts themselves, using South Shields and Newcastle as case studies. The section ends with Pete Wilson's reflection on Cade's Road and the forts south of the Hadrianic frontier such as Piercebridge, and the need to protect the growing prosperity of the Tees Valley with its villas and major settlement at Sedgefield.

The final section of the book takes us to Dacia, where Eduard Nemeth discusses military activities at its western frontier, to the Kingdom of Kush, where Derek A Welsby and Isabella Welsby Sjöström demonstrate the reach of Rome beyond its frontiers in their examination of tile kiln construction and, finally, Everett L Wheeler considers Constantine's plans purportedly written by the emperor himself for a surprise attack on the Persians preserved in the *In De Magistratibus* by the Lydian antiquarian and administrator John Lydus (*c* AD 490–565).

The editors should be congratulated for corralling such eminent authors, many of whom provided important new insights into life on the Roman frontiers, and for the quality of their editing. Once again Archaeopress have produced an attractive, well illustrated volume, which I strongly recommend.

Peter Halkon

doi:10.1017/S0003581523000094

The Staffordshire Hoard: an Anglo-Saxon treasure. Edited by CHRIS FERN, TANIA DICKINSON and LESLIE WEBSTER, Pp xxxv + 586, 314 figs, 32 tabs. Research Report of the Society of Antiquaries of London 80, Society of Antiquaries of London, London, 2019. ISBN 9781527233508. £49.95 (hbk).

Every few years major new discoveries are made in archaeology that cause the scholarly equivalent of an earthquake. Early medieval archaeology has been graced with a series of discoveries of such phenomenal opulence that

the capacity of post-Roman societies to produce material culture of quite possibly unassailable quality cannot be doubted, despite a continuing general sense that early medieval culture lacked the sophistication of the Classical/Late Antique world. Since the discovery of the tomb of the fifth-century Merovingian king Childeric in Tournai in 1653, other finds, such as the seventh-century northern Iberian gold treasure, including the Visigothic votive crowns of kings Reccessinth and Suintila, from Guarrazar, near Toledo, serve to underscore the phenomenal wealth that could be accrued by early medieval elites. Closer to home, the discovery of the early seventh-century ship burial in Mound 1 at Sutton Hoo on the eve of the Second World War and the seventh century and later contents of St Cuthbert's Tomb at Durham recovered in 1827 showed that even a far-flung former province of the Roman Empire could itself produce materials of the highest technical competence carrying in their artistic schema an often complex melding of ideological strands drawn from a variety of geographical regions and cultural traditions.

Then, in 2008, there was the Staffordshire Hoard. Prior to the discovery, the words 'Anglo-Saxon' and 'Staffordshire' were uncommon bedfellows. The sheer scale of the find with its c 600 objects, including nearly 4,600 fragments, many unidentifiable, many of them unique pieces of exquisite quality and workmanship, invited immediate wonderment as news of the find went 'viral'. Excavations took place, an enormous sum of money (£3.28 million) had to be raised to purchase the find from its legal owners, the finder and land-owner then fell out (Independent 22 March 2011) and discussions ensued over the eventual home of the material, now housed in the museums of Stoke-on-Trent and Birmingham, although elements of the Hoard have since travelled far and wide. Conferences and workshops were quickly organised and held, generating everything from genuine wisdom and insight to hot air and dogma; anyone with even a tangential interest in early medieval archaeology had a view to offer on the purpose and meaning of the discovery. Subsequent public interest in the find saw extraordinary numbers of visitors making their way to the various exhibitions.

Several aspects generated great excitement among the research community: the Hoard lay beyond known distributions of Early Anglo-Saxon material culture, and yet farther from the distribution of the comparably lavish material commonplace in the graves and metal-detector finds of East

Anglia and Kent; no documents could be linked to the Hoard; and it was found in a lonely spot alongside a major route without any indications of contemporary settlement or burial close by. Inscriptions and a processional cross initially seemed ill at ease with the strongly martial and entirely male-associated objects that comprised the Hoard (although swords are to be found in several late Saxon women's wills). All in all, the discovery marked a back-to-the-drawing-board event for early medievalists writ large, as interest in the material went far beyond the world of archaeology into the realms of art history, linguistics, history, landscape archaeology and the hard analytical sciences in ways that really made scholars think long and hard and in new ways about this most remarkable and enigmatic discovery.

While 80 per cent of the identifiable objects are fittings from weapons, almost all of these are hilt-fittings crudely stripped from (mostly) swords and seaxes. No iron blades were recovered and very few scabbard fittings or buckles, suggesting that whoever assembled the Hoard had acquired a substantial collection of weapons, but not their associated gear: what circumstances might lead to such a selective collection? A fine helmet (possibly more than one) is represented by a multitude of fragments, and finds its best parallel in that from the Mound I ship burial at Sutton Hoo; dated to c 600, its material and decorative qualities point towards a royal context. The chronological aspects of the Hoard are of great interest, with four phases of material culture dated to the sixth century, c 570-630, c 610-50 and c 630-60. The longterm curation of swords across three or more generations is acknowledged and handing swords down as heirlooms must have been the norm in the Early Anglo-Saxon period, with deposits in graves and watery places the exception, probably for a variety of reasons. The material thus covers one of the most formative periods in English history, including the emergence of the English kingdoms and their subsequent conversion to Christianity, of which both these processes find particularly strong resonances in the Hoard's contents.

In a review of this length, it is not possible to delve into the fine details of each chapter, but the stand-out contributions are in the main those of the volume's editors and principal contributors. Chapter I gives the background to the discovery and the subsequent treatment of the material and includes the results of survey and excavation of the of findspot, which appear to confirm the isolated nature of the find and the plough soil context of the objects. Chris Fern's characterisation of the material components in Chapter 2 is exceptionally detailed, written in crisp prose and beautifully illustrated. Chapter 3 presents a state-of-the-art consideration of the material from a technologicalcompositional perspective by Fern and Blakelock, with overall oversight of the analyses by Martinon-Torres. Chapter 4 by Fern is a thought-provoking and detailed consideration of the post-manufacture 'object biographies', moving beyond traditional art-historical approaches and building on theoretical perspectives found, for example, in the work of Toby Martin and (more explicitly) Sue Brunning to consider how items were worn about the person and curated over time. Fern highlights the 'total disregard' for the qualities of the objects by those who took them to pieces. The apparent lack of battle-inflicted nicks and cuts, as opposed to damage as a function of disassembly, perhaps has much to say about the nature of warfare in the formative period of the earliest English kingdoms. Chapter 5 represents a state-of-the-art analysis, again by Fern, of the stylistic attributes of the Hoard – it is in every way exemplary, and again finely illustrated. In Chapter 6 Fern considers the dating of the Hoard (noted above) and addresses questions of the possible geographical origins of the material, suggesting that the various styles of decoration and form reflect distinct regional/ kingdom-level social identities. East Anglia and Sutton Hoo provide the most obvious parallels, with Kentish connections too, but to a much lesser degree; Northumbrian origins are possible for certain objects adorned with filigree.

The volume then moves on to a series of essays by specialists in various disciplines and topical fields: Yorke on the early kingdom of Mercia and Thacker on the early church in Chapter 7. Yorke suggests, among other possibilities, that the vicious wrecking of the objects might reflect the personification of bladed weapons and perhaps the dishonouring of their former owners in the context of the rise of Mercian power; Thacker emphasises the religious instability of the period when the Hoard was buried, noting that changing political affiliation may have led to the material being 'jettisoned' as opposed to being recovered from a battlefield by a victor before burial. Thacker also parallels the Christian and martial objects as items of great power, real or perceived. In Chapter 8 Hines considers the archaeological context, providing a generalised view of the settlement and burial archaeology of the region and period, but his main contribution is to assess the contemporary value of the Hoard in relation to coin and wergilds and in relation to social context. Placing the pommels into a social

setting using various sources and approaches suggests that if pommels can be equated to heads of households then these objects alone might equate to the territorial equivalent of a lower order region of the 600 hide+ kind found in the seventh-century Tribal Hidage, quite possibly, indeed likely, not from one coherent political territory in the case of the geographical origin of the former sword owners.

In Chapter 9, Webster and Dickinson, with contributions by Guest, Hardt and Fischer, tackle the tricky issue of the nature of the Hoard itself in comparison with wider hoarding traditions both in geographical and chronological terms; it is an expert synthesis and a starting point for any future work in this topical area. The notion of 'tainted' material is again raised in relation to the Staffordshire Hoard and the marked difference in the composition of the collection in relation to the nature of the large majority of the comparanda discussed is more than evident.

Chapter 10 by Dickinson, Fern and Webster concludes the narrative part of the volume with a consideration of 'how' and 'why' the Hoard came to be. The previous chapters largely foreground conflict within a rapidly developing socio-political environment as the context, while this chapter discusses the various possibilities in great depth. The main theories can be summarised thus: war booty, theft and tribute, all within a royal milieu based on the quality and nature of the objects. There is an interesting and well-reasoned argument here that the items were dismantled by smiths rather than by warriors, although perhaps smiths might have had a higher regard for the objects? A case is presented that the material is a collection made prior to being melted down, but the editors note various problems with this line of thought, not least the selectivity evident in the Hoard. The suggestion that destruction of a previous regime's regalia might have taken place following a power grab is interesting, but perhaps mitigated against by the evidence of the Anglo-Saxon royal genealogies with their emphasis on connections with ancestors and also by the inclusion of old objects both in the Hoard and elsewhere as grave finds; the creation, appropriation and maintenance of lineage was key to the aspirations of early medieval elite families. A further notion is that the collection was gathered with the sole intention of burial. The possibility of illicit burial of stolen material is raised but dismissed on the basis that the findspot was accessible and identifiable, but it must be remembered that the site is remote, population density would have been low, the Hoard itself could be contained in a shoe box and a single individual

working in the dark could have concealed the collection quickly and easily without notice.

One interpretative avenue, however, has lain neglected, which does explain the selectivity of the Hoard, and that is the possibility that the material represents a pre-selected body of material stolen on occasion of a major assembly and buried close by with the intent of recovery. How might such pre-selection come about? Fern comments on the nature of the findspot's locale as suitable for an early medieval assembly site, as does Yorke, and several authors note the liminal location of the site, arguably in a border region between the Pencersæte and the Tomsæte, early constituents of the emerging Mercian kingdom. Proximity of the site to a major route, probably a crossroads, taken together with the boundary location all strengthen the case for a place suited to early medieval assembly; indeed, Dickinson, Fern and Webster describe the Hoard as 'a communal assemblage of the elite' in Chapter 10. Arguably, then, the collection could represent a snapshot of the range of elite gear in use at a moment in time rather than the result of episodic addition.

In Chapter 8, Hines mentions in passing the reference in the epic *Beowulf* to the protagonists arrival at Heorot, Hrothgar's hall, whereby Beowulf and his retinue leave their weapons at the entrance to the hall (see *Beowulf* lines 321b–31a and 399–404: Mitchell and Robinson 1998). Here is a clear context for the kind of selectivity evident in the Staffordshire Hoard, with weapons alone removed from high-ranking warriors in the context of visiting the hall of another.

In a similar vein, there are strong indications from English and Scandinavian law codes relating the necessity to maintain peace in the context of an assembly and of the special circumstances that could apply to assembly spaces. Aethelberht of Kent's lawcode of c 600 refers to a penalty for the violation of assembly peace (Oliver 2002, 61, clause 7), while the Scandinavian Vapnabing at which 'all free men of major age' should attend and produce arms for inspection shows that armed warriors (at least in that region) attended assemblies. Scandinavian texts also refer to the importance of maintaining peace at assemblies, with the suggestion that enclosed spaces were subject to particular 'peace' regulations (Pantos 2002, 80; Sanmark 2017, 52, 86-8), perhaps among them a requirement to lay down weapons. Whatever the details, men gathered for assembly provide one possible means by which weapons might become collected together in the manner represented by the Hoard.

If the Hoard did indeed relate to weapons laid down at a major assembly or perhaps at a social gathering at an elite residence, it would explain why ancient sword fittings and later ones are found together, as heirlooms and new objects, why different regional styles are represented, why objects of an ecclesiastical character are there and why high-status women are not represented. The almost complete absence of belt and scabbard fittings might also be explained by weapons being voluntarily surrendered for the duration of, or part of, an important meeting, perhaps kept in a safe house, but then stolen, quickly dismantled and the high-end fittings buried with the intent of recovery. The exclusion of crosses from an assembly at this time may also reflect ancient customs relating to neutrality in such settings, especially at such an early date and in such ideologically ambiguous times. Assemblies would have been catalysts for violence as much as they were for maintaining peace, especially in instances of contentious dispute between emerging polities. Indeed, many of the battles found in early medieval annals might be better read as failed attempts at conciliation as opposed to one party seeking out another with the initial aim of violence or two parties agreeing to meet with fighting as the principal aim.

At the end of the day, it is clear that discussion about the meaning of the Hoard will continue for decades to come. Whether splitting of the Hoard was ultimately desirable will provide a generation of museum studies students with an essav topic. Overall, however, this most excellent book presents a cutting-edge analysis and discussion edited into shape and with major contributions by three of the most prominent scholars of such material at the present time, with many other valuable contributions. The fine catalogue makes for astonishing viewing and in many respects ought to be where the reader of this volume should begin. As the volume's publishers, the Society must be delighted with the outcome of the collective efforts of all those who have contributed to this monumental work.

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ANDREW REYNOLDS

doi:10.1017/S0003581523000057

Anglo-Saxon Hydraulic Engineering in the Fens. By MICHAEL CHISHOLM. 230mm. Pp. x + 150, ills (some col), maps. SHAUN Tyas, Donington, 2021. ISBN 9781907730917. £14.95 (pbk).

The evidence for the construction of canals in England in the tenth and eleventh centuries has been gradually accumulating since the 1980s. It was drawn together by John Blair (2007) in an edited book that argued for the widespread construction of early medieval waterways. While there were a few documentary references to canals, the papers in that volume demonstrated that further examples could be identified from archaeological fieldwork. For eastern England, much of the evidence for early medieval canals had already been identified by the Fenland Survey. Somewhat surprisingly, the discovery of these was not much discussed in the final synthetic volume on the Fens, although the implications were significant (Hall and Coles 1994). There was a certain reluctance among archaeologists to accept that large-scale construction works, involving precise levelling, could have been undertaken as early as the tenth century.

The existence of Anglo-Saxon canals has now been largely accepted, and more recent research has focused on when such watercourses, whether for transport or drainage, were built and how extensive they were. Chisholm approaches this question as a geographer, distinguishing between natural distributaries of the rivers and artificial watercourses. He argues that a series of watercourses were built before AD 1000 to drain the River Nene through the marshlands and provide routes along which goods could be transported. He suggests that this was a unified project that required the construction of more than 60km of watercourse. The most likely context for this work was the foundation or re-foundation of abbeys at Crowland, Ely, Peterborough, Ramsey and Thorney around 970. If the artificial origins of these channels are accepted, then it seems likely that a further 75km of watercourses were built for purposes of drainage or to allow the abbeys to

move goods. Indeed, the total length identified by Chisholm is even greater.

The consequences of these vast works are examined in the final chapter. It is suggested that the programme of construction was an extraordinary co-operative project initiated by King Edgar to transform the Fens. The idea of the abbeys as remote religious houses established to foster strict worship in conditions of extreme austerity is hardly compatible with Chisholm's analysis. Instead, the abbeys have to be regarded not as accidental agents of change, but as the instruments of political planning to colonise an underdeveloped area of the kingdom. This dirigiste view is hard to swallow at first reading, although it is only a small step beyond the widely accepted realisation of the efficiency and organisational capacity of the late Anglo-Saxon state. Instead of looking upon the kingdom just as an effective collector of taxes, in the light of this work we must regard it also an active agent in the production of agricultural wealth.

The practical problems of undertaking such vast works are touched upon only briefly. First, there were the difficulties of surveying the lines for the watercourses. That work required lines, some of them straight, to be laid out across fenland with carefully chosen routes. Then there was the problem of finding sufficient labour to cut the channels in a sparsely occupied area of the country. It is only possible to speculate how such a body of people, perhaps to be numbered in their thousands, were accommodated and fed.

The argument of this volume is constructed in a dry, painstaking manner, and can be particularly critical of other scholars. 'An inherently implausible proposition' and 'the claim is a *non sequitur*' are two phrases used about others' work. Yet the conclusions drawn here also rely on inference and interpretation, although they are asserted in a forthright manner that implies there can be no doubt. Documentary sources are treated as if they provide incontrovertible proof, although every historian knows that this is hardly the case.

This work is the study of a distinguished geographer and that provides confidence that the identification of watercourses as artificial is soundly based. The arguments for their dating are carefully developed. Inevitably, it has relied upon the reading of works of historians or archaeologists for those elements of the analysis. The conclusion to which the interpretations tend provides a challenge for our understanding of the period and it will require a careful evaluation of all the strands of the argument to determine whether the implications of this work are as solid as the text implies.