

Offa's Dyke Journal



Volume 3

Edited by Howard Williams and Liam Delaney

Aims and Scope

Offa's Dyke Journal is a peer-reviewed venue for the publication of high-quality research on the archaeology, history and heritage of frontiers and borderlands focusing on the Anglo-Welsh border. The editors invite submissions that explore dimensions of Offa's Dyke, Wat's Dyke and the 'short dykes' of western Britain, including their life-histories and landscape contexts. *ODJ* will also consider comparative studies on the material culture and monumentality of frontiers and borderlands from elsewhere in Britain, Europe and beyond. We accept:

1. Notes and Reviews of up to 3,000 words
2. Interim reports on fieldwork of up to 5,000 words
3. Original discussions, syntheses and analyses of up to 10,000 words

ODJ is published by JAS Arqueología, and is supported by the University of Chester and the Offa's Dyke Association. The journal is open access, free to authors and readers: <http://revistas.jasarqueologia.es/index.php/odjournal/>. Print copies of the journal are available for purchase from Archaeopress with a discount available for members of the Offa's Dyke Association: <https://www.archaeopress.com/>

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Volume 3 for 2021

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University of
Chester

Offa's Dyke: A Continuing Journey of Discovery

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Dick Finch, Niall Heaton, Jon Hoyle and Simon Maddison

New observations concerning the Mercian/Welsh frontier, principally on Offa's Dyke (but also on Wat's Dyke and in the Vale of Clwyd), were made each winter between 2016/17 and 2019/20 by the lead author with, at one time or another, each of the collaborators in this article. The prime focus here is upon Offa's Dyke in west Gloucestershire and in Flintshire, in both of which areas fieldwork is adding incrementally to our stock of knowledge about the extent and nature of the monument. However, observations elsewhere on its course, such as in west-central Herefordshire, at Hem (Montgomeryshire), and near Trefonen (Shropshire) are also noted in brief descriptive sections. The identification of 'new' lengths of Offa's Dyke in Tutshill (near Chepstow) and between Lower Redbrook and Lower Lydbrook south-east of Monmouth indicates that the linear earthwork was built as a near-continuous or continuous monument in these southerly areas. Meanwhile, the discovery of lengths of linear earthwork in Flintshire that could have formed part of a continuous course reaching the sea near Gronant east of Prestatyn has also raised important questions about the relationship of Wat's Dyke to Offa's Dyke.

Keywords: fieldwork, Offa, Offa's Dyke, survey

Introduction

The book *Offa's Dyke: Landscape and Hegemony in Eighth-Century Britain* (Ray and Bapty 2016) argued that Offa's Dyke was both a physical and a political monument, one component of a broader 'march land' frontier, paralleled on the Continent by the Kingdom of the Franks under their charismatic leader Charlemagne. The Dyke was carefully placed in the landscape with the twin objectives of maximising its visibility when seen from the west and realising its surveillance potential from the Mercian side. Furthermore, by noting the recurrence of specific *construction* forms and methods, a more consistent and intricate understanding emerged of the character of the monument wherever it is to be found. Features that had been considered anomalous or the result of badly executed building practices were revealed instead to have been carefully planned. The Dyke was a sophisticated piece of engineering, designed and executed with a keen eye for strategic advantage, even in areas where at first glance it seems poorly sited (Ray and Bapty 2016: 122–251).

Offa's Dyke should be understood also as a demonstration of Mercian power and the ability of that hegemonic kingdom to plan and deliver major public works. That this was an example of the political ambitions of King Offa himself is probably reflected in the fact that, even a century on from its construction, his name and the monument were inextricably linked even in the minds of members of the otherwise antagonistic West Saxon court of King Alfred (Keynes and Lapidge 1983: 71). The Dyke, like Offa's

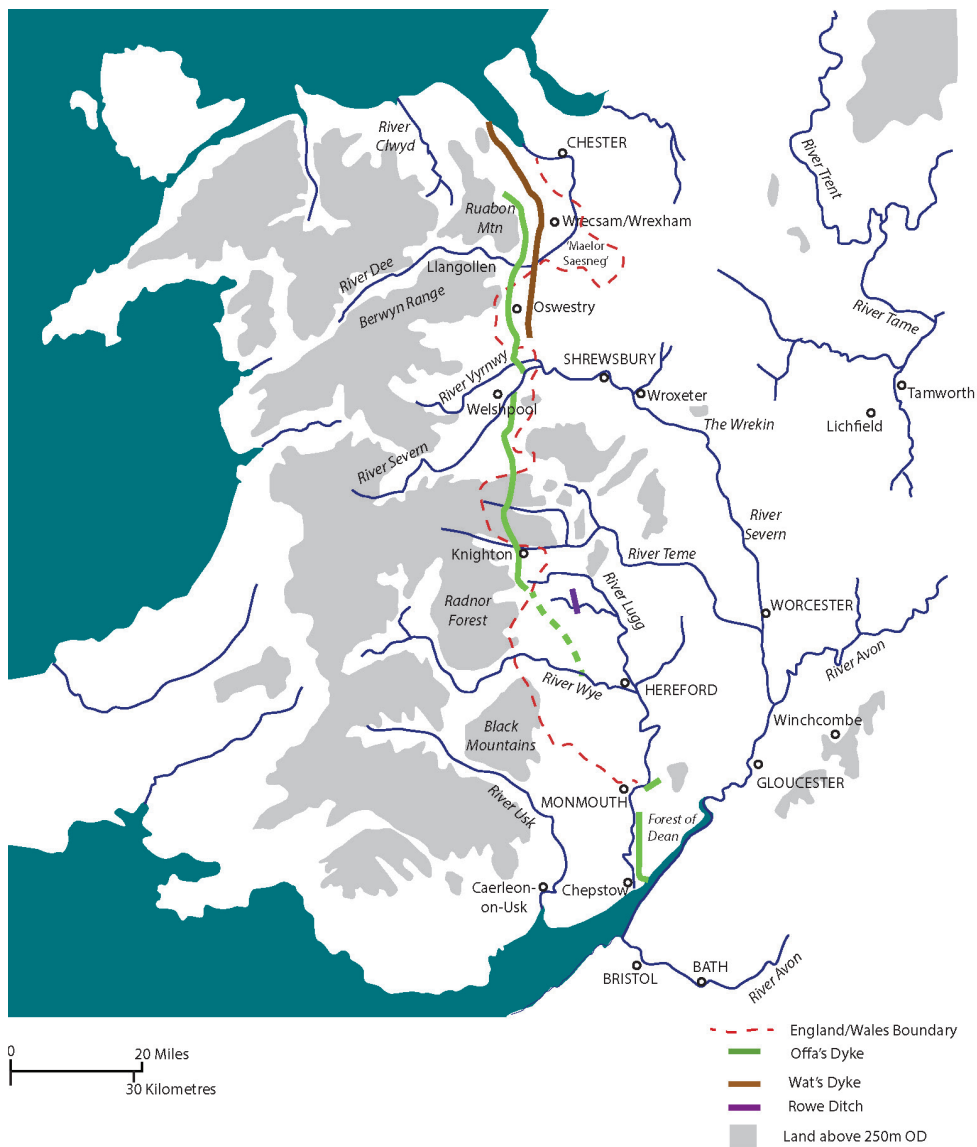


Figure 1: The extent and course of Offa's Dyke and Wat's Dyke as understood in 2016 (after Ray and Bapty 2016, figure 1.1)

coinage (and that of his successor King Coenwulf) with its repeated depiction of the monarch dressed in Roman imperial garb, also served to identify the Mercian ruler as the foremost inheritor of *Romanitas* in Britain (Ray and Bapty 2016: 254–364).

While Ray and Bapty (2016) both reviewed past research and specified new interpretations in greater detail than hitherto achieved regarding Offa's Dyke's siting, design and construction methods, the aim was also to emphasise what we do *not* yet know about Offa's Dyke and the frontier. Some aspects of this ignorance, such as the exact date of construction of the earthwork, are very basic but remain difficult to

resolve and the book aimed to provide a stimulus to further work (Ray and Bapty 2016: 3–5, 19–25, and 371–373). This has led since 2016 to the formation of the Offa’s Dyke Collaboratory (referred to subsequently here as ODC): a network and a vehicle for the sharing of information and insights about the dykes of the early medieval Anglo-Welsh frontier and their conservation. This initiative has facilitated meetings, collaborations and fieldwork (reviewed by Williams and Delaney 2019; see also Belford 2019; Grant and Jones 2019).¹

The reconnaissance visits and observations reported in a highly interim manner in the present article have contributed a further element to this new era of study (Figure 1). The present article comprises first, an introductory essay explaining briefly how the Dyke can be recognised and distinguished in the field, followed by seven locationally specific essays before a similarly brief concluding essay. These seven sections outline the interim findings of recent field studies in the lower Wye valley in Gloucestershire (three essays), in north Herefordshire, close to Montgomery town on the Montgomeryshire/Shropshire border, near Trefonen in north Shropshire, and across central and northern Flintshire.

Identifying Offa’s Dyke in the field from its key characteristics

Keith Ray

The history of the study of Offa’s Dyke as a monument in the landscape has featured numerous attempts to explain the many apparent gaps that occur along its course. Some of these gaps are readily explicable as resulting from subsequent activity and corresponding loss. Two examples are a quarry at Treflach Wood near Trefonen west of Oswestry (Fox 1955: 63 and plate XIVa) and the yet more extensive quarry on Lynclys Hill nearby (Fox 1955: 65–66, fig. 28). Other gaps occur where rivers stand proxy, as with the dislocation along the River Severn that occurs over the course of 8km north-east of Welshpool, and with a more minor displacement on the Dee south of Ruabon. Wherever doubt remained as to the former existence of the Dyke where it was thought that it *ought* to have existed (as for example in north Herefordshire north-west of Hereford) much effort has been expended trying to find an explanation for its apparent absence.

Cyril Fox attributed the intermittent presence, or actual gap, in north Herefordshire to thick forest having existed in such locations at the time of earthwork construction

¹ Among other things, the launch of the Offa’s Dyke Collaboratory and its website prompted the definition of a series of research questions and agenda, and a conservation agenda (Ray 2017a, 2017b, 2017c, 2017d, all of which have since then been available through that website). Other new fieldwork involving excavation on or near the Dyke or the course of the frontier has taken place at Spital Meend in Gloucestershire (Hoverd and Mayes 2018; Ray 2019), and at Breinton House near Hereford (Delaney and Ray 2018: 156–157).



Figure 2: The Offa's Dyke 'adjusted-segmented' design/construction device. 2a (above): at Rushock Hill, Herefordshire. 2b (below): at Spoad, Newcastle-on-Clun, Shropshire (Photographs, left: Keith Ray; right: Adam Stanford)

(Fox 1955: 179, 210–211). However, David Hill and Margaret Worthington dismissed this idea, pointing out that ‘Herefordshire had the smallest amount of forest recorded for any of the Domesday shires along the Welsh border’ (Hill and Worthington 20013: 130). Having themselves sought without success to discover traces of the Dyke that might fill in these gaps in this area during their protracted ‘Offa’s Dyke Project’, they ultimately concluded that the lengths of linear earthworks at Lyonshall and elsewhere in what they termed ‘The Herefordshire Plain’ had nothing whatever to do with Offa’s Dyke (despite providing no other plausible explanation for their presence; see Fox 1955: 174–182; Hill and Worthington 2003: 129–138). This conclusion was in turn questioned in the *Landscape and Hegemony* book, where arguments in favour of this gap being more apparent than real (including eyewitness testimony extending back into the seventeenth century) were provided at some length (Ray and Bapty 2016: 285–288).

The difficulties of tracing the line in some locations were rehearsed carefully by Cyril Fox, such that he specified some principles to be applied to any length that might be proposed as having once formed part of the monument. This came down to a ‘rule’ he devised that he specified as ‘the acceptability of uncharacteristic sectors as veritable portions of the Dyke depends on their being in direct extension of characteristic portions, on an alignment such as the Dyke might be expected to take’ (Fox 1955: 215). While Fox and others have defined key characteristics of the design and building practices of the Dyke, the common assumption has been that it was a simple construction (e.g. Fox 1955: 281–282; Hill and Worthington 2003: 101).

It therefore came as a surprise to discover during the field examination of the monument along its length in preparation for writing the *Landscape and Hegemony* book that some fundamental features of its construction had either not been adequately reported or had escaped notice altogether.² A key example of the latter was the way in which the Dyke had been built in segments, and had often been arranged in what was thenceforward termed an ‘adjusted-segmented’ manner (Figures 2a and b; Ray and Bapty 2016: 194–208). It follows logically from this, that it is not physical continuity that is necessarily the most important determinant of whether any ‘candidate’ length of linear earthwork can be regarded as likely to have formed part of the original scheme (although its location along a plausible former route is a necessary corollary). Rather, the full suite of siting practices and construction devices should be regarded as sufficiently distinctive that the co-presence of two or more such practices or devices can be taken as indicative of the likelihood that the length in question formed part of the Dyke’s course and construction. This approach has helped guide the field investigations reported on below.

² Such as the extent and nature of quarry-ditches or the existence and form of ‘angled turns’ (Ray and Bapty 2016: 190–191, 234–240).

Offa's Dyke at 'Striguil' by the River Wye in the Tutshill (Gloucestershire) area (ST 540 944 to ST 537 950)

Dick Finch, Simon Maddison and Keith Ray

The arguments for accepting that the lengths of massive linear earthwork overlooking the River Wye and its valley gorge separating West Gloucestershire from Monmouthshire formed an integral part of the overall Offa's Dyke frontier scheme are both complex and compelling. Ray and Bapty concluded that the construction and siting characteristics of the Dyke in Gloucestershire were directly paralleled by near-identical built forms (particularly the 'scarp' mode of construction and the angled turns) and siting practices throughout the course of the earthwork, for instance in Radnorshire, Montgomeryshire and Shropshire (Ray and Bapty 2016: 84–91, 142–151, 165–174, 234–140, 276–277, 283–289).

The recurrence of such near-identical placement and build characteristics argues strongly for contemporaneity of construction and the conception and execution of a single project. Moreover, the earliest categorical reference concerning the Dyke, a reference of AD 1321 to a place west of St Briavels in Gloucestershire as 'Offediche' demonstrates that the attribution of the Gloucestershire lengths of the Dyke could not have been a nineteenth-century invention.³

Towards the end of Fox's account of the Dyke in Herefordshire and Gloucestershire is a section about the relationship between Roman roads and the Dyke in both counties (Fox 1955: 221–222). Prominent within this account is a discussion of the Gloucester to Caerleon Roman road (RR60a: Margary 1967; Silvester and Toller, 2010, figure 4.3) which traced a course from close to the west bank of the Severn near Newnham, then skirting the southern flank of what became the Forest of Dean. It survives today in some stretches, and is nowhere better preserved than in the gradual descent to the Wye on the Gloucestershire side of the river towards the site of the 'Bridge of Striguil' immediately upstream of the port and castle named Striguil (or Strigoil).⁴ The latter is among the earliest Norman stone fortifications in Britain, and it has been argued that its fabric contains Roman period fabric assumed to have come from a Roman settlement on the site of the later town attested from coin finds and a cremation burial cemetery (Shoemith and Allen 2006: 2–3, 10–12). Fox argued that just to the north of this early bridging-point of the Wye nearest the Bristol Channel, the Dyke descended from Chapelhouse Wood to the bank of the Wye and moreover that here, uniquely in Gloucestershire, the 'frontier line' became the river itself.

In view of observations made by the present authors early in 2018 and 2020 (with permission for access from the relevant landowners), it is now evident that Fox was mistaken in his

³ Contrary to the suggestion by Hill and Worthington (2003: 42). The St Briavels reference was cited in Baggs and Jurica (1996: 247–271).

⁴ Frank Noble (1983: 2) noted that the Striguil bridge 'still has the bases of its timber piers revealed at exceptionally low tides.'



Figure 3: Chepstow Bridge (an early iron bridge across the Wye built by the engineer John Rastrick in 1816) looking north. The bank of Offa's Dyke occupies the top of the break of slope north from the bridge (above the houses on either side of the ancient routeway). Early in 2020, the co-authors traced the bank of the Dyke surviving in good condition ascending the slope diagonally from the roadside opposite Elm Villa up through the grounds of Castleford House to a point overlooking the cottages at left in this view (Photograph: Keith Ray)

suggestion that the linear earthwork descended to the riverbank in Chapelhouse Wood.⁵ Instead it is possible to trace it (albeit in much eroded form) along the top of the low river-cliffs here (ST 534 950 to ST 532 947) and then south-eastwards across the line of the Roman road (at ST 532 948). Moreover, to the east of Elm Villa there are traces (not identified by Fox) on the slopes above John Rastrick's (1816) single-span iron Chepstow Bridge. For example, in 2020 it was found possible to identify the earthwork surviving remarkably well both at the (newly discovered) angled turn situated above Castleford Hill Road on its northern side (ST 534 946), and then to trace its bank climbing diagonally eastwards across the south-facing slopes through the southern grounds of Castleford House Care Home (ST535946; Figure 3).⁶

⁵ This is not a new objection to Fox's account. Frank Noble (1983: 2) also noted that Fox's reasoning that the Elm Villa bank (Figure 3) could not have formed part of Offa's Dyke 'involved a total inversion of logic', observing also that 'It would have suited Fox's theories (about Welsh boatmen and the exacting of tolls for passage upriver) better to have recognised this Elm Villa bank as the line of the Dyke, rather than to claim that, at the crossing (of the Wye) of the major route between England and Wales, the river bank itself was sufficient frontier' (Noble 1983: 2).

⁶ Further south again, the reconfigured main road (A48) crossing of the Wye next to the railway bridge (a late twentieth-century project) on the Gloucestershire bank involved cutting through limestone bedrock on the line of the Dyke at the rear of gardens on the west side of Beachley Road, Tutshill. This appears to have intercepted the line of the ditch here, since a large walled-up V-shape plainly visible in the side of the road cutting stands in exactly the spot that would be anticipated for the line of the Dyke: an observation not made before 2017.



Figure 4: Offa's Dyke at 'Striguil'. 4a (above): the front of the bank of Offa's Dyke at Elm Villa, Tutshill, Gloucestershire, looking north-west (Photograph: Keith Ray). 4b (below): the line of Offa's Dyke south-east of Chapelhouse Wood and north-west of the Elm Villa bank, looking north-west. The hedge-line here (left) has been cut into the front of the Offa's Dyke bank. The level area to the right of the walking figure (Liam Delaney) is where the quarries for the Offa's Dyke earthwork bank were initially cut through the Roman road as it descended the final gradient towards the Wye riverbank (over the hedge to the left). The resulting level area could then have housed the inner part of the Dyke gateway infrastructure (Photograph by Keith Ray)

Between these two newly recognised stretches of Offa's Dyke, at Elm Villa itself, the earthwork has been modified by the building of stables along the track that follows the former course of the ditch (at ST 5335 9445; Figure 4a). However, beyond these buildings north-westwards it survives well along a stretch measuring more than 100m long (Figure 4b). There are clear indications of the presence of quarry ditches immediately along the northern flank of the earthwork, then a broad bank standing even today more than 2m high, with a drop to the south of 4–5m down to the infilled ditch. Further westwards it reduces in height to become a 2m-high lynchet followed by the later field hedge.

As the former Roman road descends the slope westwards towards the river here, it reaches a point where what are apparently more of the quarry-ditches of the Dyke seem to cut across its line. This is particularly clear in LiDAR imagery for the site (Figure 5, based upon LiDAR imagery provided courtesy of Jon Hoyle and Gloucestershire County Council). It is potentially highly significant that, as the Roman road descends the slope westwards towards the river and just to the east of the point where it is intercepted by the line of the Dyke, it changes character abruptly in precisely the location where one would expect quarry ditches for the Dyke to have been dug.

Two possibilities therefore exist here. One possibility is that the digging of the Dyke quarries to obtain material for the bank involved the truncation of the road at the point where it abruptly changes character. This would have meant the severing of the former route and would have required an early medieval, Anglo-Saxon, re-siting of the Wye crossing to a location close to Rastrick's bridge, directly opposite Chepstow town. The alternative possibility is that there was a complex adjustment, and potentially also a rebuilding, of the Roman road in some way so that it could pass through a newly installed control point or gateway through the Dyke that then gave access directly onto the river frontage and the (presumably rebuilt) Roman bridge.

Either of these possibilities present fascinating further avenues of enquiry, and inevitably nonetheless more questions. In the case of the former possibility, for example, was the re-siting made deliberately to stimulate a Mercian market on the 'Welsh' bank of the Wye, beyond the Dyke?⁷ Ostensibly the weight of current evidence is against this.⁸ Interestingly, as already noted there are a number of Roman period finds from Chepstow itself (Noble 1983: 2–4; Shoemith and Allen 2006) which suggests that it

⁷ The name 'Chepstow' is derived from Old English *ceapstow*, 'market-place'; Ekwall (1960: 100).

⁸ The Normans recorded the name as *Striguil* in 1086, which is an anglicisation of the Welsh word 'ystraigyl' which simply means 'the bend' (Shoemith and Allen 2006: 6). It is not inconceivable that this was the Welsh name for the place that was known at the same time to the English as *Ceapstow*. Noble, however, was convinced that the line of the Roman road was deliberately truncated, and the river crossing diverted southwards to the location later occupied by the Rastrick Bridge, precisely to stimulate a new Mercian market settlement at Chepstow (Noble 1983: 2–3).

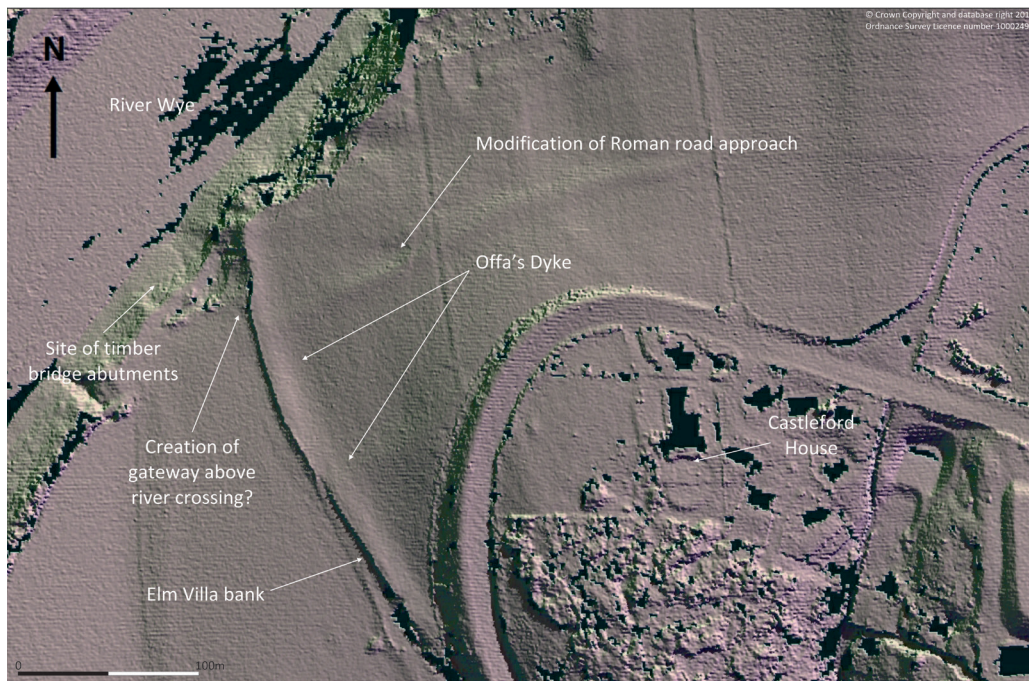


Figure 5: LiDAR data DTM enhancement illustrating the principal features at the Wye crossing immediately below and to the north of Chepstow Castle (LiDAR mapping Gloucestershire County Council; annotation: Simon Mayes, for Keith Ray)

may have continued as a settlement of some kind in the post-Roman centuries. The Roman road continues west of Chepstow from its visible embankment at High Beech (ST 525 931) and on to Crick, situated on the road towards Caerwent (Burnham and Davies 2010: 316).

The very pronounced *agger* of the Roman road approaching the Chapelhouse Wood area of Tutshill, and the road crossing the southern margins of Piercefield Park approaching the bridgehead from the west therefore indicate the crossing-point of the river most likely to have been used.⁹ Only excavation at the point where the line of the Dyke crosses this road on the left bank of the Wye south of Chapelhouse Wood will resolve the question as to whether the road was truncated by the Mercians when they built the Dyke and the bridge was moved 800m or so downstream southwards; or whether the intersection of road and Dyke was deliberately used to create a gateway and customs point on the Mercian side of the river.

⁹ Two excavations have apparently identified the footings of the Roman-period bridge. One was an excavation undertaken in 1911 on the Welsh bank by Dr Orville Owen. Another was conducted in 2004 for an 'Extreme Archaeology' TV series programme. For the latter, samples were taken from footings on the English side for dendrochronological and radiocarbon analysis, producing a date in the first century AD (Anne Rainsbury, Chepstow and Monmouth Museums: pers. comm. to Simon Maddison).

To the north of Chapelhouse Wood, the cliffs overlooking the Wye increase in height to as much as 90m above the River Wye. Quarrying that has taken place in historically recent times northwards here in the Woodcroft area towards Wintour's Leap has cut the cliffs back, and it has probably resulted therefore in the total loss of the earthwork along this whole stretch. However, in 2017–18, a series of exploratory investigations carried out at Spital Meend promontory fort and involving surface survey, geophysics and a single trench excavation (ST 541 967) found possible traces of the Dyke bank along both northern and southern margins of the high promontory overlooking the Lancaut peninsula (Hoverd and Mayes 2018; Ray 2019) The excavated section bisecting a bank crossing the promontory close to its tip overlooking the Wye raised the possibility that the short earthwork concerned was first built in post-Roman times before modification in the medieval period.¹⁰

In summary, it can now be understood that the stretch of Offa's Dyke on the east bank of the River Wye from the railway bridge across the Wye (parallel with the A48 main road; at ST 541 941) northwards to a point opposite Chepstow Castle and on towards Woodcroft and Spital Meend was originally a continuous work. It has been much interrupted by limestone quarrying and suburban development in the past two centuries, and it is therefore far from easy to trace in the present landscape. More of its structure survives, however, than has been identified by previous fieldworkers. New reconnaissance fieldwork will concentrate more closely on the eastern part of this area. For example, a close search in gardens along the western side of Beachley Road, Tutshill might well reveal hints and clues concerning the survival of short stretches of earthwork between formerly quarried areas. The survival of lengths of earthwork until now dismissed as the result of quarrying and erosion northwards from Chapelhouse Wood also needs to be countenanced and further survey carried out .

However, it is the 'junction area' near Chapelhouse Wood, Tutshill, close to the point where the Roman road from Gloucester to Caerwent and the Dyke traversing the area immediately opposite the site later occupied by Chepstow Castle that most urgently needs to be the subject of intensive investigation.¹¹ This area, which encompasses the road crossing from east to west, and the line of the Dyke as envisaged by Noble and as now underscored by the recent studies reported here includes both the Elm Villa bank and what Fox dismissed as a 'lynchet' running north from it. Whatever the result was in terms of the later history of the crossing of the river Wye in the 'Striguil'/Chepstow area, the line of a major Roman road was clearly disrupted by the creation of the north-south aligned earthwork that traverses it here, and that we now envisage as an integral part of Offa's Dyke. The importance of the site is therefore very considerable: this location in our

¹⁰ Iron Age and Romano-British pottery found associated with this bank was heavily worn and mixed and was therefore deemed residual (Hoverd and Mayes 2018; Ray 2019).

¹¹ The focus of this essay within the overall 'Continuing journey' article is upon Tutshill. This is not to say, however, that other locations, such as the Spital Meend fort, do not merit further study and investigation.

view provides the best opportunity *anywhere along the course of the Dyke* to obtain evidence concerning a clear relationship between a major Roman period work and the Dyke.¹² An archaeological examination of this location should be a research priority for Offa's Dyke.

Tracing Offa's Dyke in the Lower Redbrook to English Bicknor area, Gloucestershire (SO 542 096 to SO 595 170)

Jon Hoyle and Keith Ray

This span of country is situated immediately to the north of the last traditionally recognised length of Offa's Dyke following the Wye Valley (on the high north-south ridge near Highbury Farm before that ridge descends to Lower Redbrook village (at SO 539 092). The stretch in question is located on the western margin of the village of Lower Lydbrook at Tumpshill Grove (SO 596 169) which was for many years presumed to lack traces of Offa's Dyke. Writing in 1894, for example, Maclean wrote: 'On the next occasion, accompanied by Mr Oakeley, I explored the whole length of the county boundary from Staunton to Bellman's Oak without discovering the Dyke.' (Maclean 1893-94: 27-28). Likewise, Noble presents a similar view: 'It is probable that if any full-scale Dyke existed between Redbrook, Symond's Yat and Lydbrook it would have been recorded by earlier surveyors and antiquarians' (Noble 1983: 11). Cyril Fox also noted the lack of any trace of the Dyke west of Symond's Yat. Oddly, he refused to accept portions of the Dyke that he himself had carefully noted in the eastern part of English Bicknor parish, as certainly having formed part of the Dyke (Fox 1955: 184-186).

Jon Hoyle and Jo Vallender (then of the Gloucestershire County Council archaeological service) carried out a 'condition survey' of Offa's Dyke in Gloucestershire in 1996, funded by the (then) historic environment organisation English Heritage (Hoyle and Vallender 1996). They highlighted how several of the isolated surviving lengths of Dyke in English Bicknor parish had construction features typical of the Dyke elsewhere, and they noted further isolated lengths of bank, for instance one to the south of Symond's Yat (see below).¹³

¹² There is a considerable irony here: that Fox failed to recognise this conjunction and to excavate here, given that his explicit reason for excavations at Mansell Gamage west of Hereford and at Forden in Montgomeryshire (Fox 1955: 203-2044; 115-116, respectively: in both places where there was allegedly an intersection between a Roman road and the Dyke) had been to establish which preceded which, and in what way. The irony is compounded by the fact that he failed to demonstrate any such relationship in either of these other places.

¹³ All the above fieldworkers (including Hoyle and Vallender, whose fieldwork took place in September) appear to have conducted their surveys in summer conditions when vegetation growth obscured much of the ground. In contrast, all the Gloucestershire fieldwork of 2016-17, 2017-18, and 2018-19 took place after leaf-fall and frosts (and sometimes snowfall) had reduced vegetation levels and improved visibility considerably.



Figure 6: The Dyke at full proportions facing north (right) overlooking the River Wye on the east-facing slope of a ridge at Great Collins Grove. Viewed from the east in February 2018 (counterscarp bank to right, ditch at centre, bank to left) (Photograph: Keith Ray)

Building on Hoyle and Vallender's observations, the reconnaissance visits reported here were designed therefore to follow up this earlier work under ideal winter conditions for the visibility of sometimes very subtle surviving earthworks. The result is that we can now say with some confidence that it is possible to trace the Dyke as a significant feature (and in some locations surviving in its original form and substantially complete) more or less *continuously* between Lower Lydbrook (in the east) and Symond's Yat Rock (in the west). Furthermore, southwards of this stretch, lengths of the Dyke can be discerned both north and south of Staunton village.

The Dyke at Tumpshill Grove (SO 595 171; point A on Figure 9) that was only tentatively identified by Fox has now been inspected under better conditions than obtained hitherto either in Fox's survey of 1931 or during the 1996 study and it has been found to survive remarkably well either side of the former Monmouth and Ross railway line immediately west of Lower Lydbrook. It exists as a prominent feature along Tumps Hill, through Great Collins Grove to Collins Grove, and down the narrow coombe (at SO 580 164) below Rosemary Topping (Figure 6; point B on Figure 9). It is absent only where its structure has been compromised by subsequent development (for instance by the building of roads or houses, by quarrying or by agricultural works).



Figure 7: The Dyke at Coldwell Rocks, approaching Symond's Yat Iron Age multivallate promontory fort, viewed from the east. Although eroded, the profiles of the bank (at left centre), ditch (at right-centre), and counterscarp bank (at right) are plainly visible (cliffs above the River Wye are located downslope to the north) (Photograph: Keith Ray)

The Offa's Dyke earthwork can, moreover, be traced in woodland along the scarps directly overlooking Coldwell Rocks (Figure 7; for example, point C on Figure 9). It can also be shown not to have reused any of the concentric circuits of defensive ditches of Symond's Yat hillfort as Fox and others had assumed. Rather, at least on the eastern side by Coldwell Rocks (less affected by historically recent limestone quarrying), it appears to have cut straight across the north-eastern extremities of these banks and ditches to link up directly with the Yat Rock itself. This would have served to emphasise the importance of the likely frontier gateway (cf Yat = 'gate' place-name) at that location. It also mirrors to some extent the way in which the Dyke appears not to have used the major defensive earthworks at Spital Meend near Chepstow (see Finch, Maddison and Ray above, this article).

Beyond the Symond's Yat promontory south-westwards, the stretch of bank that had been recorded by Jon Hoyle in 1996 was re-visited in 2018. This again was found to conform to build practices known from elsewhere in Gloucestershire. Two further observations were however added to those of two decades ago. The first was that the shortness of this recorded length is due to the former progress of limestone quarrying to the west (long ago halted) immediately adjacent to the River Wye. This fragment has survived due to the fact that it was the easternmost length to have existed in this area south-west of the Iron Age promontory fort, and it is truncated by two different 'lobes' of the riverside quarry to the north-west and



Figure 8: The Dyke sited along the rocky ridge south-west of Staunton (Gloucestershire), approaching the Buck Stone, viewed from the south-west. The bank survives here as a series of lengths of bank linking the rock outcrop: much of its bulk was removed and made into an estate wall here (Photograph: Keith Ray)

to the south-west (location at approximately SO 560 154; point D on Figure 9). The second observation is that the bank and ditch forming the northern (east–west oriented) boundary of Mailscot Wood (here in the form of a classic ditched medieval woodland boundary bank) cuts straight through the apparent Offa’s Dyke bank, providing a clear stratigraphic relationship: the ‘Dyke’ bank clearly pre-dates the woodland boundary bank.

In 2019, the line of the Dyke was traced intermittently along the rocky north-facing scarp westwards from Staunton village uphill towards the Buck Stone (SO 543 123; Figure 8; point E on Figure 9). This provided a prospect over the hills on either side of the Wye gorge north-east of Monmouth. At this point, the earthwork appears to have turned southwards and then a series of extended lengths of bank was found, again surviving intermittently along south- and west-facing slopes at Staunton Meend and southwards again from Knockhalls Lodge (being discernible at approximately SO 542 115) downslope into Knockhall’s Inclosure (point F on Figure 9) and the valley bottom upstream of Upper Redbrook (SO 544 109).¹⁴

¹⁴ All this area will require future closer scrutiny and mapping. The available LiDAR data permitted identification of likely linear earthwork locations. In some places these were readily traceable on the ground: as where they followed the crests of west-facing scarps. Vegetation that was dense even in winter made it difficult to find some linking stretches. At one point, the linear bank approached a massive spring from both (north and south) sides and appears to have detoured around the upper lip of the curving scarp that enclosed it.

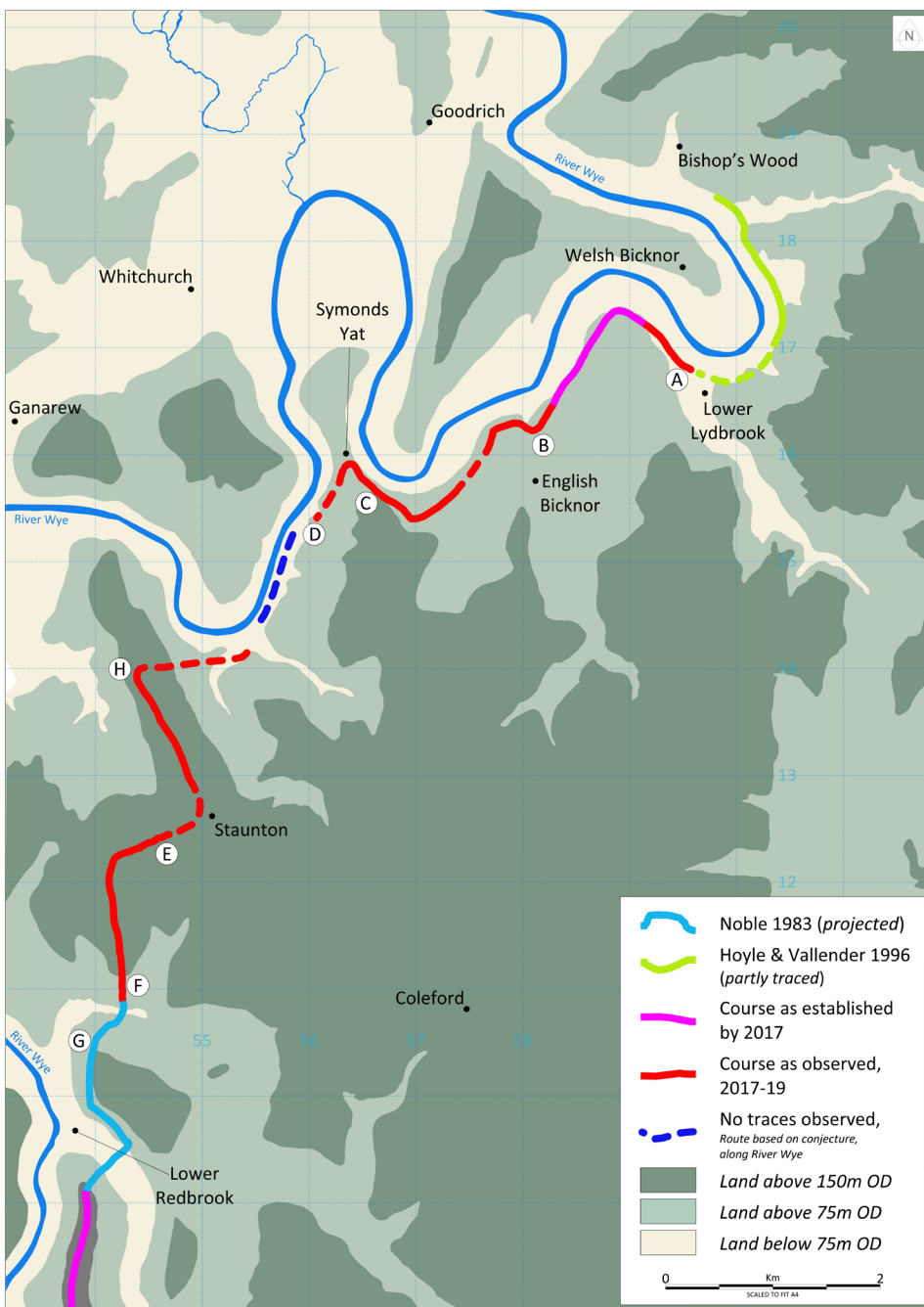


Figure 9: The course of Offa's Dyke in north-west Gloucestershire above the River Wye and south-east of Monmouth. The map indicates the lengths previously known or suspected from survey work by Cyril Fox in 1931 (short lengths close to English Bicknor village), Frank Noble in the late 1970s (immediately north of Lower Redbrook), and Jon Hoyle and Jo Vallender in 1996 (north-east of Lower Lydbrook and into southern Herefordshire). All lengths marked in red were walked and ground-checked by the authors of this section of this article in visits in 2017, 2018 and 2019. Annotation of base mapping: Simon Mayes (under licence from the Ordnance Survey).

The close examination of LiDAR survey data enables the tracing of a near-continuous bank through Furnace Grove (G on Figure 9) and along the south-west facing slope in Forge Wood above Lower Redbrook. At approximately SO 544 095, this bank appears to turn southwards downslope towards the southern limit of the wood in the valley-bottom of the Valley Brook, whence it must be assumed it climbed up the steep north-east facing slope to meet the ‘known’ length of the Dyke at Highbury Farm.¹⁵

North of Staunton, a prominent north-south aligned earthwork bank is traceable to the east of an access track leading towards Redding’s Lodge (SO 547 133). This bank runs parallel to a steep slope facing westwards onto Highmeadow Woods. A much slighter linear feature runs in a curve north-westwards towards this scarp and may mark the former line of the Dyke towards Near Harkening Rock (at SO 543 140) or the nearby Suck Stone (point H). Just to the east of this point the county boundary with Monmouthshire runs eastwards down a broad spur. Halfway down this spur the boundary is marked by a deep natural cleft that leads down to a broad plateau standing prominently above the Wye at SO 552 143. Despite several attempts to locate the presence of a linear earthwork between here and the northern end of Mailscot Wood, no trace could be found. One possibility is that 1200 years ago, as now, the river itself formed the boundary and stood in place of the Dyke. Only further intensive survey is likely to resolve this question (Figure 9).¹⁶

The cumulative impact of this reconnaissance work across three winter seasons (2016–17, 2017–18, and 2018–19) has been to envisage *for the first time*, the former existence of a continuous span of the Dyke from Sedbury Cliffs on the Severn Estuary northwards to the historic border with Herefordshire north-east of Lower Lydbrook. Jon Hoyle’s survey and LiDAR ground-truthing visits have moreover located short lengths of earthwork to, and beyond, Bishops Wood on that border, and there are hints also that it continued beyond Bishop’s Wood and towards Howle Hill (Hoyle and Vallender 1996; Hoyle 2019).

¹⁵ The existence of this earthwork was also noted by Frank Noble: ‘There is a local tradition at lower Redbrook that the Dyke continued north-eastward from Highbury Farm, across the valley and up through Forge Wood. This has proved too dense for a brief survey, but a line of low bank, unrelated to modern boundaries has been traced for more than a quarter of a mile through the woods on the crest of the slope above Upper Redbrook, and another stretch on the other side of the road to Newland, across the old railway cutting, runs beside the track along the crest of the spur towards the Buckstone near Staunton’ (Noble 1983: 11). It can hardly be a coincidence that this is precisely the course through Knockhall’s Inclosure that we traced, albeit southwards (and without realising that this was identical to Noble’s description) early in 2019.

¹⁶ This represents the only remaining conundrum of the Gloucestershire course selected for the Dyke. It is not impossible that the Dyke extended in one form or another northwards to Far Harkening Rock at SO 541 151 (the names of these ‘hearkening stones’ are themselves intriguing) and then turning abruptly eastwards opposite the Severn sisters Rocks on the right (Herefordshire) bank, and extending around opposite The Biblins to link up to the Mailscot Wood stretch of the earthwork (see below).

This raises the question of exactly why Offa's Dyke extended northwards towards the Wye gorge east of Monmouth to reach Symonds Yat, but then turned eastwards rather than being picked up on the north bank of the river continuing on a more directly northwards course. The simplest answer is to point out that the quasi-independent British kingdom of Ergyng stood in the way on that bank of the river. A more nuanced possibility is, however, that what was being protected (or sequestered) by the Dyke in the lower Wye valley was not simply 'Mercia', or even the former independent Anglo-Saxon kingdom of the Hwicce, but rather Dean itself. What would have been included within the span of the Dyke (clearly an impressive work throughout its Gloucestershire course, and a more formidable barrier here, arguably, than almost anywhere further north along the frontier), therefore, was rather a resource: the extremely valuable, and taxable, economic asset of manufactured iron.

In the years immediately after its construction, the wall-like appearance of the Dyke must have been very evident when viewed eastwards across the Wye valley between Tutshill in the south and the Buck Stone, Staunton, in the north; when viewed south-eastwards between the Buck Stone and Symonds Yat; and then when looking southwards between Symonds Yat and Lower Lydbrook (and beyond). This massive work in this way served to reinforce the fact of appropriation of this key resource into Mercian, and, subsequently, English royal control.

The results of field observation here clearly need to be followed up, both by more detailed (measured) survey and by selective excavation, to establish the true character (and potentially also the date) of these lengths. The 'lived reality' of the creation of these sections may have been even more complex than suggested here. Only further intensive survey of these nonetheless 'difficult' landscapes, and well-co-ordinated localised investigation by excavation, will eventually serve to resolve the attested anomalies.

The implications of the fieldwork reported here are nonetheless considerable, and considerably important. What is most important is that, by showing Offa's Dyke to have been continuous in this part of the Wye Valley, it has reinforced the sense not only that its planning and execution was deliberate, but that there was a clear intent to isolate Dean physically from the land to both the west and the north. The key implications of this realisation are the related and consequential ones that, firstly, the Dyke's construction was undertaken with multiple aims and purposes in mind; and, secondly, that this continually took into account the real-world and on-the-ground complexities of a multi-dimensional political and strategic frontier.

Construction features of Offa's Dyke in Gloucestershire: some new evidence

Tim Copeland, Jon Hoyle and Keith Ray

A series of winter season field studies in the early months of 2017, 2018, and 2019 have been looking anew at the Dyke in Gloucestershire. They have involved field visits right along its course to review places where the exact routing of the linear earthwork was uncertain, but an additional concern has been to try to better understand aspects of its

construction and siting.¹⁷ One of the key categories of discovery concerns the relationship of the Dyke to field systems apparent on LiDAR images (see also Hoyle 2019). An example is at Madgett Hill where (at SO 546 007) a prominent lynchet forming part of an early field system located on a north-facing slope was observed as having clearly cut through by the ditch (and covered by the bank) of Offa's Dyke (Figure 10).

Meanwhile, at Brockweir, the bank of the Dyke crossing the Brockweir stream (at SO 546 015) is encased entirely within the stone-wall-enclosed structure of a (long-since breached) medieval dam. At Wyeseal Wood above the Mork Brook, the Dyke has now been traced along a stretch of scarp-edge located high up, overlooking the Wye (at SO 547 060). It had not previously been recorded here because of the masking effect of (almost continuous) subsequent quarry-delves that repeatedly cut through the top of the scarp along which the Dyke ran. At Red Hill Grove (Lower Meend, St Briavels: SO 547 046), the very stony bank of the Dyke has been traced, partially submerged in marshy ground, all the way northwards to the stream at the foot of the south-facing scarp upon which Lindors Farm stands (Figure 11).

However, it is the observations made concerning the construction features of Offa's Dyke along the north-facing and west-facing scarps overlooking the Wye that are discussed at some length here. One feature of particular interest is how the almost pristine condition of the Dyke in locations such as at Great Collins Grove (SO 584 167) facing north-westwards across the Wye to Welsh Bicknor) and at Lippetts Grove/Passage Grove above Tintern Abbey (SO 540 002) has meant that the recognition of both original profiles and primary built details has been possible. In both places, for example, the Dyke is still capped with stones placed over an earthen base, while the original profile featuring a steep west-facing frontal scarp and a much more gradual slope eastwards to the rear of the rampart is clearly recognisable. At Great Collins Grove, as well as at Madgetts Hill (at SO 546 013), there is clear evidence for a layered stone slab fronting structure to have been set in successive receding layers to form a wall-like facing above the ditch.¹⁸ Among other things, this enables an appreciation of the structure of the Dyke elsewhere where a stone fronting was created but has since eroded almost completely away (see the section on Pentre-shannel near Trefonen, below, for example).

Other structural features include indications of a horizontal stone slab course built into and along the rear of the bank within an angled turn at Tumpshill Grove (SO 592 173), which had been exposed during refurbishment of an approach road to modern commercial office premises and observed in 2017. Between Passage Grove and the Devil's Pulpit, what had been assumed to

¹⁷ These winter observation/reconnaissance visits have been undertaken either solo by Keith Ray or accompanied either by Jon Hoyle (three visits) or by Tim Copeland (three visits), or by Dick Finch and Simon Maddison (two visits). They have underscored the importance of visiting and revisiting key locations (such as for example Plumweir Cliff and Caswell Wood: see Ray and Bapty 2016: figure 1.28).

¹⁸ Madgett's Hill layered slab capping: see Ray and Bapty 2016: figure 5.17.



Figure 10: The line of Offa's Dyke on its north-south trajectory clearly cuts through a prominent east-west early field system lynchet by Beeches Farm here, on a steep north-facing slope at Madgett Hill near Brockweir, Gloucestershire. Viewed looking uphill from the north-west, the lynchet bank (facing the camera position) is visible at right-centre and centre, crossing from right to left, where the ditch of the Dyke truncates it (bank of the Dyke visible as a skyline feature)(Photograph: Keith Ray).



Figure 11: In the valley of the Mork Brook, south of Lindors Farm, in March 2018: looking south here, the north facing scarp of St Briavels Common is just visible through the trees as a skyline feature. The quarry ditches for the bank of Offa's Dyke are located to the left (where Tim Copeland stands in this photograph), the much eroded and spread bank, capped by stones, fills the ground at centre-right. The west-facing ditch is visible at right (Photograph: Keith Ray)

be a modern cut through the Dyke has been re-appraised during recent inspection surveys. Here, a trackway leading up from the Wye opposite Tintern approaches the Dyke from the north-west, up the southern side of a prominent spur. As the Dyke approaches the point at which the trackway traverses the Dyke from north-west to south-east, the northern bank length is aligned to the south-east, deflecting away from the course northwards that the southern bank length takes. This results in a hollow way that rises up in a curve through the earthwork. The curve of the hollow way so formed continues up onto the higher ground behind (east of) the

Dyke bank. The effect is similar to the angled ‘postern gates’ found within the defences of some Iron Age hillforts (Figure 12). The choreography of the bank lengths (which were deliberately set so that the southwards trending bank segment turns inwards as it approaches the gateway, and the northwards trending one turns outwards) and the trackway is such here that it was clearly a design feature of the original construction, rather than an afterthought or subsequent modification (Figure 12a and b).¹⁹

Nearby, north of the modern forestry cut through the Dyke at Passage Grove (SO 541 001) that has already been noted above, the Dyke approaches the prominent promontory hill spur projecting out into the Wye Valley, up the southern flank of which the trackway just mentioned passes. However, instead of extending out to the tip of the promontory spur, it deliberately and abruptly turns north to cut across the

inside of the promontory in a 100m-long straight length. This is quite probably the best-preserved length of the Dyke that exists anywhere along its course. The abrupt shift *could* be seen simply as an expedient measure enacted to save the effort of taking it to the extremity of the promontory. However, the configuration of the sides of the further, excluded, area of the promontory westwards beyond the Dyke earthwork itself includes a series of features that cannot have been formed naturally, or coincidentally. To begin



Figure 12: Just north of the Devil's Pulpit, two lengths of the bank of Offa's Dyke move apart to accommodate a trackway leading up from the river crossing (the 'passage' of Passage Grove) opposite Tintern, and towards Lydney. In these photographs, 12a (above) is viewed from the southerly bank looking downslope towards the Passage; 12b (below) is viewed from the northerly bank looking south in the direction of The Devil's Pulpit (Dick Finch standing in the centre of the gateway path) (Photographs: Keith Ray)

¹⁹ This feature was first recognised as an original feature of the Dyke's construction on a visit conducted jointly between Dick Finch, Simon Maddison and Keith Ray early in 2018.



Figure 13: At Caswell Wood, Offa's Dyke makes a pair of angled turns with a short straight length between them that together take it on a course that excludes the most prominent natural spur (other than that at Symond's Yat itself) on its entire course in Gloucestershire. Why this should be so is uncertain, but the tip of the spur is occupied by a substantial ditched oval mound aligned north to south. The view here westwards from the bank of the Dyke to the tip of the spur (Offa's Dyke Path is visible beyond the ditch in the foreground) (Photograph: Keith Ray)

with, the area just west of the ditch of the Dyke appears to have been carefully levelled, and the edges of the promontory tip to north and south appear form a sharp scarp with a slight bank evident just inside this rim. The whole is reminiscent of the relict bank around the edges of the promontory at Spital Meend promontory fort. Towards the very tip of the promontory (at SO 539 002) another broad low bank crosses the promontory in parallel with the Dyke itself, but some 50m westwards from it. Beyond this bank there is a broad curving ditch which defines the eastern side of another stone-capped feature. This is an oval mound oriented north-south (Figure 13).

The ditch defines the edge of the mound on the west side also, to outline a boat-shaped mound cut off from the rest of the spur. The question as to what this feature signifies will take some effort to resolve. It is most certainly not a 'round barrow' as described in an entry in the Gloucestershire HER. Standing directly above Tintern and on the very tip of the most prominent spur in the district, the fact that the Dyke itself respects its presence must provide some clue as to its former importance. Either it was a pre-existing monument of unknown form, or it was integral with a deliberate design for the promontory as a whole here, that was created at the same time that the Dyke was built. Dominating its

landscape, to some degree echoing the way in which the Pillar of Eliseg visually dominated the Dee valley landscape near Llangollen, it is difficult to avoid the impression that it was a monument to the completion of the work itself, or to its creator.²⁰ Is it too far-fetched to see this feature, with its boat-shaped form, as some kind of cenotaph to Offa himself? Again, only further, more intensive, study will begin to resolve this question: in this case, beginning with a fine-grained survey of the whole of this promontory.

The Wye frontier west and north-west of Hereford

Liam Delaney and Keith Ray

Despite the existence of Offa's Dyke west of Hereford having been discounted by Hill and Worthington, written testimony extending back as far as John Aubrey (c. AD 1690) indicates the presence of a continuous Offa's Dyke earthwork in northern Herefordshire, for instance at Moorhampton west of Hereford (Aubrey folio 87/59; Fowles 1982; Ray and Bapty 2016: 58). Although there is much still to explore in Herefordshire using a variety of field methods, one of the outcomes of the *Landscape and Hegemony* book was to highlight the importance of the area to the eighth-century and later frontier. New studies of LiDAR imagery and new field observations have begun to corroborate the idea of the former presence here of a continuous earthwork between Herrock Hill in the north and the River Wye at Garnons (Byford) west of Hereford (Delaney 2021; including an image of the LiDAR plot, showing the location of the excavation trench). One focus of research since 2016 in this area has been upon the nature of the frontier between Garnons and Hereford, and in particular how the River Wye here, on its east-west course downstream to Hereford itself, may have been enlisted as in effect a frontier work approximating the role of the Dyke itself elsewhere.

The first discovery made during this work involved the processing of LiDAR data of the Breinton area. This revealed the existence of a previously unknown earthwork apparently pre-dating the Norman church, the latter being sited partially over it. The earthwork had a peculiar 'staple'-shaped three-sided plan (the 'fourth' side being the river), at the centre of which had later been placed the walled and ditched enclosure that had provided the summer residence for the Treasurer of Hereford Cathedral from c. AD 1150–1450.

Another particularity of this earthwork was that its ditches were around 20m wide, which is approximately the same width as the ditch belonging to the middle to late Anglo-Saxon defences around Hereford itself. The fort-like character of this earthwork was revealed in an excavation undertaken in September 2018 (Ray 2018; Delaney and Ray forthcoming). The bank comprised a clay core fronted by turves, into which façade had been placed large river cobbles and other stones to create a battered drystone frontage

²⁰ The Pillar does not directly overlook the River Dee itself, but is located in a side-valley. But its presence locally is arguably dominant within the wider valley landscape, especially when viewed from the north.

which would have looked like a strongly built stone wall when viewed especially from the north. While this fortification has yet to be dated closely, its structure suggests broad contemporaneity with the Dyke (Figure 14).

Westwards from Breinton, the Dyke itself descends south-eastwards from Garnons Hill at an oblique angle and reaches the River Wye at SO 408 427 having at that point followed the parish boundary between Byford and Bridge Sollers. The latter settlement was identified simply as 'Bridge' in 1086, and presumably it is no accident that a bridge located here had been sited deliberately close to the ending of the Dyke at the Wye in a particularly dramatic way, overlooking the Brecon to Kenchester Roman road and the River Wye itself. Much of the frontier further north appears to possess a number of key elements from west to east: a zone of English settlement to the west of the Dyke marking the furthest point forward of the frontier; eastwards from this the north-south corridor through which the Dyke passes, and then eastwards again a 'service zone' behind the Dyke, perhaps with military or further reconnaissance installations; and then to the east yet again a north-south Roman road marking the rear of the zone (and in principle enabling rapid movement of Mercian forces along the frontier).

It is possible to envisage similar components having existed in the valley of the Wye immediately west of Hereford, but with the elements ranged south to north rather than west to east. In other words, the frontier was turned here through a right-angle to run east-west rather than north-south. In these terms, the southern limit of the frontier (and of English settlement) would have been close to Aconbury hillfort south of Hereford; the River Wye would have played the same 'corridor' role as the Dyke did elsewhere; the Breinton earthwork (if it had been in existence by then) located as one of the rearward military installations; and the 'back' of the frontier zone being marked by the Roman Road that had formerly run from Brecon through the walled town at Kenchester, and then eastwards towards Worcester.

Meanwhile, study of the available LiDAR data for the Garnons area near Bridge Sollers has demonstrated why, when Hill and Worthington's team dug two excavation trenches at two different locations close to the parish boundary along the crest of Garnons Hill, they failed to find any trace of Offa's Dyke at all (Hill and Worthington 2003: 137–138).²¹ The LiDAR data now available clearly shows, however, that the course that the Dyke took was not over the summit of the hill at all but some 200m to the west, along the crest not of the hill itself but of its steep west-facing slopes. As the Dyke rose up from the riverbank, it headed for a prominent sub-circular enclosure (also first discovered from the LiDAR data, owing to the heavily wooded terrain) located on the southern end of the Garnons Hill summit ridge. The Dyke then looped around the western perimeter of this enclosure, and proceeded northwards along the scarp-edge, to descend towards the already well-known straight length east of Moorhampton (Williams and Delaney 2019: 8–10; Delaney 2021).

²¹ Site 73 at SO 403 439 and Site 130 at SO 402 444.



Figure 14: Breinton House excavation, September 2018.

14a (above): from the west. Scale 1m. The southern margin of the 20m-broad ditch slopes northwards (to the left), with the tumbled stones from the former bank-facing partially removed to reveal the angle of descent towards the centre of the ditch. The turf-fronted rampart with layered turves is visible to the right. Amidst the tumbled stones were burnt lumps of (furnace?) daub, and sherds of late Anglo-Saxon pottery (Photograph: Keith Ray). 14b (below): to the right (south), clay core of bank with possible post-hole; centre: layered turves fronting the clay bank; left (north): southern lip of the ditch that defined the north side of the fortification, with collapsed stone facing made of river cobbles (the late Anglo-Saxon pot-sherds and burnt clay from corn-driers were found in the soil matrix around these stones). Excavation: Liam Delaney and Keith Ray, with volunteer and professional assistance (Photograph: Liam Delaney)

The Dyke at the Camlad near Hem, Montgomery (SO 233 984 to SO 230 997)

Tudur Davies, Liam Delaney and Keith Ray

The significance of the place name 'Hem' as denoting a key location on the Dyke on the northern margins of the Vale of Montgomery was noted in the *Landscape and Hegemony* book as meaning 'an edge', like the hem of a garment (Ray and Bapty 2016: 278–279).²² As such, it was a significant naming of a place (at SU 230 003) where, if one is moving northwards, the Dyke again approaches the River Severn, here in its middle reaches. When moving southwards, conversely, this is the location where it departs from its course shadowing the River Severn upstream from near its confluence with the Vyrnwy and where it turns away southwards to cross the Vale of Montgomery and then to climb towards the Clun uplands. In these terms it was a significant place geographically and topographically, as well as culturally: in effect for the Mercians the margin of the Anglo-Saxon world.

Immediately below this significant, if subtle, turn, southwards of the ridge where it is performed (with Hem farm 500m to the west and Great Hem 400m to the east), the Dyke traversed the Camlad river, which drains westwards here (unusually, since most rivers crossed by the Dyke flow eastwards). At this traverse, between Pound House (on the north side of the floodplain at SO 230 998) and Devil's Hole, Rownal (on the south at SO 232 985), the earthwork appears to be very slight as it extends up to the present course of the Camlad in either direction (Figure 15). This slightness of scale is an illusion: following the line of the Dyke along the long-distance path, it may not be readily apparent that the path occupies the very crest of the bank: the bulk of the earthwork is submerged beneath the alluvial silts that have accumulated here over centuries.

Just north of Devil's Hole, the Dyke appears to make an oblique crossing of the river. This too, is illusory, since the present course of the river here is not the ancient one, and the river has broken through a formerly continuous length of the earthwork. This much is evident from the study of LiDAR data, that indicates that at least one former course of the river meandered across the floodplain some 300m to the north of its present course (Figure 15).²³ The Dyke maintains the alignment that has been followed at this point for more than 1km north from Rownal, and heads straight for a particular former loop of the river. Here, it was carefully placed to cross the (then) main channel of the river by making a minor adjustment to its course in a segment of less than 50m long. This crucially enabled the earthwork to cross the river course at the perpendicular, before resuming the alignment immediately on the opposite (northern) bank.

²² The suggestion was made (ibid) that the naming was a deliberate reference to this point along the course of the Dyke being perceived by the Mercians, perhaps, as the furthest westerly outpost along the Dyke, facing boldly up the Severn valley into central Wales.

²³ LiDAR representation and geomorphological mapping by Tudur Davies. Separate field visits were made by Liam Delaney and Keith Ray, and subsequently by Tudur Davies and Keith Ray to check these features on the ground.



Figure 15: View northwards towards the hill at Hem, from a point close to where the modern course of the Camlad cuts through the former line of Offa's Dyke. Along the course of the north-south field boundary hedge visible at left-centre is the point where the single palaeo-channel of the Camlad was traversed by the Dyke (Photograph: Keith Ray)

This short, adjusted, length crossing the former main stream is a vital piece of evidence in terms of the most likely interpretation of both the geomorphology and the archaeology. For the geomorphology, it demonstrates that this former stream channel was in existence, and active, approximately 1200 years ago when the Dyke was being built. For the archaeology, it demonstrates not that the Dyke was built across the channel, as much that in some form or another it actually *bridged* across it (otherwise it would not have been necessary to make the kind of angled adjustment that remains detectable today). This raises an important possibility: namely, that the Mercians built a bridge over the River Camlad here, spanning from the northern end of one Dyke length to the southern end of another, and from bank to bank of the stream channel.

This has two further important implications. The first is that it raises the possibility that there was originally some form of walkway along the crest of the Dyke, such that a bridge was deemed an important feature enabling access along these lengths (and inferentially was also a feature likely to have been present in similar situations elsewhere). The implications for the surveillance practices along the whole course of the Dyke hardly need emphasising: a walkway crowning the bank in at least some locations would have provided clear oversight of the country on both sides. The second implication is that timbers forming the foundations of the bridge may be preserved here. This in turn highlights a further potentially crucial eventuality: that it may be possible, ultimately, to obtain a felling date for the timbers and a close calibration of the date of construction of the bridge (and, locally at least, the Dyke itself: unless the bridge was a later addition).²⁴

²⁴ The potential significance of these three aspects cannot be overemphasised. Firstly, if excavation reveals water-logged timbers that can be dated by dendrochronology (Christensen 2003, see also Roesdahl 2008) then a specific part

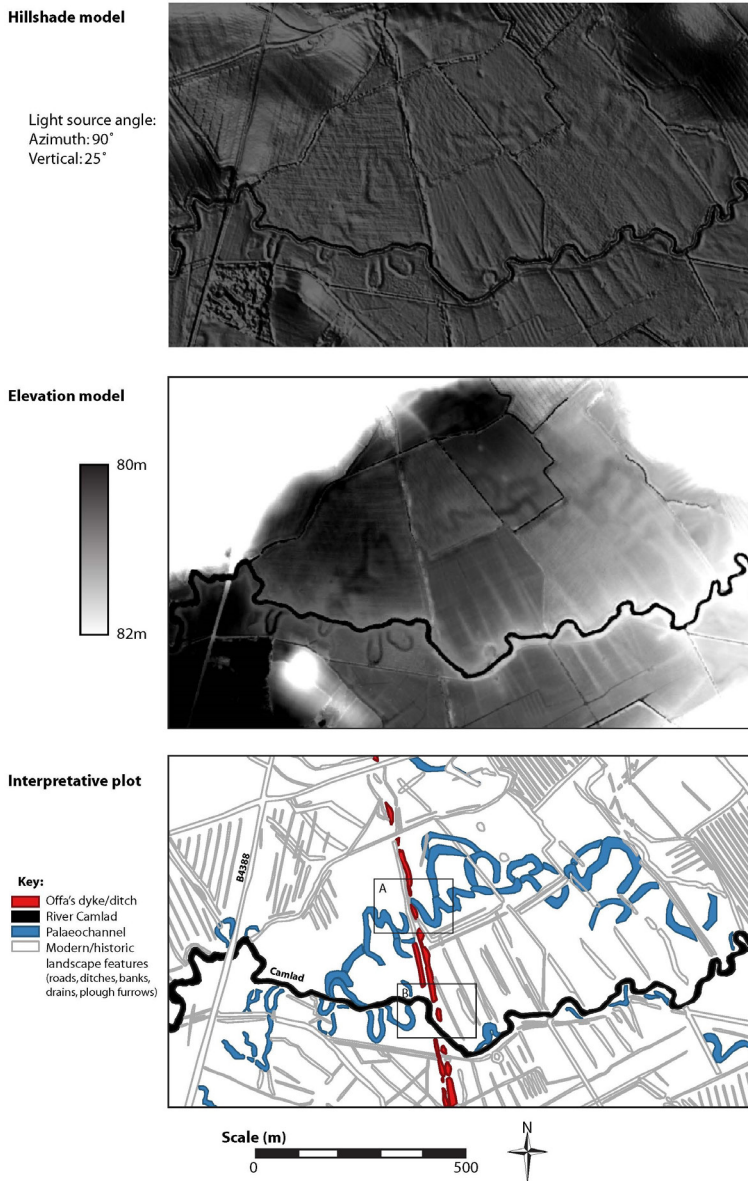


Figure 16: LiDAR-based mapping of Offa's Dyke at its crossing of the floodplain of the River Camlad north-east of Montgomery. The interpretive plot shows how the present-day stream-channel (flowing from right to left here) simply cuts through the Dyke, whereas the Dyke builders made a subtle adjustment to cross the river at the perpendicular at a loop of the former stream-channel.

The three images reproduced here were generated by Tudur Davies.

of the construction of the Dyke may be closely dateable). Secondly, if a bridge is proven to have been present, then the construction of a 'military' Dyke is of a piece with 'bridgework and fortress work', and the means by which the labour was brought to the frontier to build the Dyke is established. And thirdly, if there was a bridge it implies that there was a walkway along the top of the Dyke which enabled Mercian forces or patrols to cross the floodplain here.

A length of the Dyke at Pentre-shannel, Oswestry, Shropshire (SJ 258 273 to SJ 257 277)

Niall Heaton and Keith Ray

In 2019, an inspection was made by the authors of this section of the paper of the particularly well-preserved length of the Dyke located between Pentre-shannel Farm and Trefonen village.²⁵ In brief, three aspects of the site were noted. Firstly, the profile of the bank (standing at SJ 257 275 to a full height of more than 8m above the base of the ditch – as currently partially infilled: it would originally have been deeper) is of the ‘classic’ Offa’s Dyke form: on the eastern side a long slope upwards (westwards) to the crest of the bank and then a steep scarp facing west above the ditch.

The second observation is the presence of a stone capping over the crest of the bank (Figure 17, photo of the bank at Pentre-shannel). These features combined suggests that at this point the bank of the Dyke retains something of its original profile. Such a profile and capping exactly mirrors the form of the well-preserved lengths of the Dyke in Gloucestershire discussed earlier in this article, and this in turn reinforces the conclusion that although separated often by considerable distances from one another, the different lengths were conceived and executed as a single construction project.

The third observation concerns the nature and disposition of construction quarries and the evidence for earth-moving on the eastern side of the bank locally (Figure 18). As the Dyke approaches a slight rise in the ground and crosses a spur of the hill at SJ 2582 2745, satellite imagery dating from 2005 indicates the existence of a distinct oval-shaped quarry (necessarily undated) on the south-eastern flank of the spur only 30m east of the Dyke bank, and other less distinct areas nearer to the back (eastern flank) of the bank itself, but again on the southern flank of the east–west trending spur.

That these quarries are contemporary with the bank cannot be proven, but a further remarkable phenomenon was noted on the ground. This was that the entire central area of the spur directly eastwards from the Dyke had purposely been graded level to a single (reduced) level, presumably when the Dyke was under construction. This is what appears most likely to have happened here, as indicated most directly by the survival of a narrow lip of gravel along the edge of the spur on its north-east facing side, where the levelling incision had been made. The probable explanation for this is that to obtain material with which to raise the bank, the Mercian construction team had not only quarried into the spur but had opportunistically carried out levelling operations upon it.

This reinforces the view expressed earlier (Copeland, Hoyle and Ray, this article) that the work of creating the Dyke, and most especially the preparation of the ground by quarrying to its west, was a sophisticated and considered, rather than hasty, operation. It indicates that the ground was carefully surveyed before construction began. These

²⁵ Accompanied by Andy Heaton and Dylan Ray.



Figure 17: The top of the bank of Offa's Dyke at Pentre-shannel, north of Trefonen (west of Oswestry) showing the remains of a former continuous stone capping (Photograph: Keith Ray).



Figure 18: The view of Offa's Dyke at Pentre-shannel, looking north towards Craig Morda, in May 2018. In the foreground is the area 'shaved level' for material to be placed in the bank of the Dyke (Photograph: Keith Ray)

observations also indicate the need for further, closer and intricate – and perhaps above all, *informed* – survey and recording of the structure of the Dyke throughout its course, but also the selective analytical investigation of particular locations (Pentre-shannel would be a good one), where good preservation means that more information could be gained by excavation of both the Dyke and parts of its immediate environs, designed to answer closely defined questions.

A frontier in the north: Offa's Dyke in Flintshire re-established? (c. SJ 267 578 to SJ 078 838)

Ray Bailey and Keith Ray

The results of work from the 1970s onwards suggested that, despite assertions by Fox and others to the contrary, slight linear earthworks near Walwen, Newmarket (SJ 101 794) Brynbella, Whitford (SJ 130 772) and at Holywell Racecourse, Whitford (SJ 150 755), traditionally referred to as 'Offa's Dyke' (and included as such on Ordnance Survey maps; and see Fox 1955: 13–28) were instead a mix of prehistoric and post-medieval constructions (Hill and Worthington 2003: 154–161; Jones 2008). It seemed likely by 2016, therefore, that the northern terminus of Offa's Dyke was, as had been suggested as long ago as 1781 by Thomas Pennant, at Treuddyn north-west of Wrexham (Pennant 1784). However, the interim conclusion of the new field reconnaissance studies reported formally for the first time here is that there is an alternative possibility. This is that the Dyke was built northwards from Treuddyn, but on a course somewhat to the west than previously envisaged, with an entirely contrasting outlook.

A series of exploratory field excursions to locations in northern Flintshire began in 2017.²⁶ The first site visited was to a boundary earthwork north of a prominent hill immediately adjacent to Acre Wood, just to the south-west of Gronant (SJ 084 821). An area of north-facing fields here has a fine prospect overlooking the Irish Sea, and running downslope northwards there is an earthwork marking the boundary between the civil parochial communities of Prestatyn and Llanasa (Figure 19 a and b).

²⁶ The first visit was made by Keith Ray and Howard Williams early in 2017 to lengths of Wat's Dyke close to (and at) the northern end of Wat's Dyke in April 2017. Keith Ray gave a talk about the 'Landscape and Hegemony' book in Rhuddlan in March 2017. Ray Bailey attended that talk and afterwards questioned the suggestion that there was no authenticated stretch of the Dyke north of Treuddyn. He thought that the accounts of antiquaries that had pointed out the linear earthworks in the Trelawnyd, Whitford and Ysceifiog areas needed to be re-examined and re-assessed, particularly in reference to the earthworks on the ground. In September 2017, Ray invited Keith Ray and Howard Williams to visit a location north of Gop Hill (Trelawnyd) and south-east of Prestatyn to inspect a boundary feature that he thought might be germane to an understanding of the frontier.



Figure 19: The earthwork at Gronant in September 2017. 19a (above): looking north, with the remnant bank and partially infilled ditch to right, and the much-spread counterscarp bank to left. 19b (below): looking south, with the massive (but spread) bank left and centre, and the ditch and counterscarp bank (reduced and topped with a fence) to right (Photographs: Keith Ray).



Figure 20: The degraded (or bulldozed) former course of the Gronant boundary descending to the narrow coastal strip (viewed from the south: the beach to the east of Prestatyn is in the background) (Photographs: Keith Ray)

The earthwork along this boundary is much-degraded, but it is possible to observe possible former quarry-hollows to its east, then westwards successively a much-reduced but still substantial bank upon which the field fence has been placed. Westwards again there is an eroded and partially infilled ditch; and, further to the west, the near-continuous spread vestiges of a broad counterscarp bank. Its course is marked by a series of lengthwise segments adjusted to the terrain, and it is traceable for approximately half a kilometre. At a point where the slope steepens markedly, the earthwork disappears (apparently having been levelled), being replaced by a fence-line (at SJ 084 826; Figure 20). Although the former bank is vestigial here, it is potentially instructive to note that it follows a course downslope that features several short lengths whose existence as a continuous earthwork is nonetheless apparently arranged in segments whose positions have been adjusted, length by length.²⁷ If this represents the original northern terminus

²⁷ Subsequent searches by Ray Bailey and members of his 'Offa's Dyke Collaboratory North' group have established that this vestigial course is again to be observed further down the slope in woodland (on west-facing slopes along the western edge of The Dingle woodland). At the foot of the slope beyond the woodland its course is picked up by a modern drainage dyke crossing the narrow coastal strip to the beach at the perpendicular.



Figure 21: The bank at Tan-y-walk, Caerwys. 21a (above): view south over the earthwork sited on the top of a natural bluff. 21b (below): south-eastwards down the valley (earthwork surmounting the slope to the left) (Photographs: Keith Ray)



of Offa's Dyke, it could not have been more spectacularly sited, descending steeply from a point close to the highest summit in the hills directly overlooking the Point of Ayr to Prestatyn coastline.

A further visit was carried out to examine a feature that was shown on the Ordnance Survey 1:25000 scale map to exist north of Caerwys. This appeared potentially to be a linear earthwork facing south and aligned north-west to south-east along the top of a natural scarp. It appeared to descend eastwards down a slope to cross the valley north-east of Caerwys. Although some c. 10km south-east of the southern end of the 'Gronant' earthwork this linear feature at Coed Tan-y-walk in the close environs of Caerwys Hall (SJ 133 736) was considered to be well-located to pick up a route running southwards that Offa's Dyke might be expected to follow.

It was considered at least possible that the Tan-y-walk earthwork (Figure 21) was in origin some kind of enclosure bank such as is common for a medieval or later deer park boundary, or pale. If so, it might be expected to follow a course that in some way (partially at least) encircled the Hall. However, the apparent absence of the rest of the 'circuit' of such a pale argues against this. Meanwhile, it appears to do exactly what we might expect the Offa's Dyke linear earthwork to do when approaching the valley of the Caerwys Brook: namely, to turn inwards (eastwards), to make the crossing before swinging around southwards to take advantage of the steep west-facing slopes facing Caerwys village. Further survey will be needed to attempt to trace its former course on the south/east side of that valley, directly eastwards from Caerwys village.

Even if the Caerwys Hall earthwork was other than a former park boundary earthwork, it was realised that it hardly filled the 'blank' that still existed in a projected approximately 30km line of the Dyke between Gronant and Treuddyn. It seemed reasonable therefore to speculate that if the Offa's Dyke earthworks that have been recorded in the landscape to the south of Treuddyn were also heading north from the east-west ridge across which that settlement is spread, there was no reason to suppose that they would, as Pennant had suggested, have been heading for the Clwydian Hills overlooking the Vale of Clwyd from the east.²⁸ Surely, the Dyke would have continued to follow a direct route northwards, heading for the place chosen to mirror the southern 'flourish' at Sedbury by Chepstow with an equivalent dramatic northern terminus near Gronant?

The broad valley basin now mostly occupied by the town of Mold is clearly laid out when seen from the south at the eastern limits of Treuddyn. The valley is oriented north-south, with the River Alyn flowing southwards along its northern margins. It is evident

²⁸ Somewhat hopefully, Ray and Bapty (2016) had suggested that the former northern course of Offa's Dyke was actually the same earthwork later identified as Wat's Dyke in the Northop area and extending 'to the Dee estuary' at Basingwerk. This was in part based upon local namings of Wat's as Offa's Dyke: a confusion easily understood given their proximity. In light of the recent fieldwork noted here, it seems more sensible to reject that possibility.



Figure 22: The massive west-facing bank (right) extending from the road between Mold and Cilcain for a distance of more than 400m at Llanerch, Rhual (Mold), viewed from the south-east. The bank clearly faces south-west here. Its continuation northwards to Benllan lies just beyond the trees on the horizon in this view (Photograph: Keith Ray)

that any potential course of the Dyke northwards would have to cross the River Alyn to the west of Mold at an optimal location to achieve exclusion while offering a convenient route northwards. A promising location for the location of a southern approach to this valley crossing was identified a mile to the north-west of Mold, at Llanerch close to Rhual mansion (at approximately SJ 217 647).²⁹ This location was chosen for two reasons: firstly, to determine whether the Dyke crossed the place here where the Alyn emerged from a steep-sided narrow valley into the broader valley around Mold, and secondly, to follow a route that would most likely provide the best surveillance over the hills that rise westwards towards Nercwys Mountain. Extraordinarily, although there had been no prior indication that such a feature existed here, the location chosen proved to be bordered to the east by a massive 3m-high linear bank (Figure 22).

This feature was traced southwards from Llanerch (at SJ 216 647) for more than 400m but could not be found in the shallow valley bordering Maesgarnon Farm at SJ 217 643. However,

²⁹ This location was selected by Keith Ray as a line on the map following a public footpath, that could easily be visited and checked on the ground. In late September 2018, therefore, another meeting with members of the by then burgeoning Flintshire 'Offa's Dyke Collaboratory North' group was arranged, to look at this and other locations nearby. The visit was repeated the following Spring (in snow) this time accompanied by Howard Williams.



Figure 23: The linear earthwork at Pen-y-garth, south of Rhydymwyn looking south-west in the direction of Mold. The person on the left is standing behind the putative bank (the latter located at centre, surmounting the natural south-facing scarp here); while the person on the right is standing in the largely silted-up ditch with the counterscarp bank behind them (Photograph: Keith Ray)

even cursory examination of both satellite imagery and aerial photographs has indicated the presence, less than a kilometre to the south (at SJ 224 634), of what looks like a straight linear ditch running for half a kilometre southwards on a north-west to south-east trajectory (to approximately SJ 227 628. This ploughed-out feature is bisected by the A5119 road into Mold, just north of its intersection with A494 Ruthin to Connah's Quay trunk road).

Across the road northwards from the bank noted above at Llanerch (by the Pantymwyn–Mold road: SJ 216 647), the line of the earthwork is followed by a track (initially, from the south, placed along the top of the bank) at Benllan. As the track (and the bank) approaches the crest of the north-facing slope overlooking the Alyn valley, the bank again reaches massive proportions: first in a hedgerow bordering (on its north-eastern side) the access track to the Benllan cottages (at SJ 215 650, to the north-east), and then in woodland (also to the north-east of the track) down the north-facing slope here (SJ 216 651). As it descends the north-facing valley slopes obliquely here, it is hidden amongst the undergrowth: although it formerly had an impressive prospect north-westwards up the Alyn valley and across the river.

Where it reaches the valley bottom, it crossed the river at the perpendicular (at SJ 217 653) modern land-use has removed it for the most part here). Beyond this, its route is marked by a segmented hedge-line climbing up the steep south-facing hillslope above



Figure 24: The linear earthwork at Nannerch. 24a (above): looking north-east from the west end of Nannerch village, the bank is ranged along the top of a south-facing scarp, to some degree obscured by modern hedgerow and trees. 24b (below): the view north-west towards the same south-facing scarp across the driveway to Piw Gwyn Farm: the bank surmounting the scarp at right-centre (Photograph: Keith Ray)



the river. Having climbed the slopes northwards, it makes a sharp north-westwards turn (at SJ 216 654) before continuing as a broad eroded earthwork (nonetheless featuring quarry scoops, a broad bank, broad but mostly infilled ditch, and outer lip representing the counterscarp bank), along the top of the south-facing scarp overlooking the Alyn (Figure 23). Entering Coed Pen-y-garth woodland from the south-east, it follows a south-facing scarp-edge deploying what can be termed the ‘scarp’ mode of construction (to SJ 214 655; see Ray and Bapty 2016: 170–171, for the definition).³⁰

Northwards of this, in the Rhydymwyn area, boundary hedges can be observed that extend beyond the limits of individual fields and that broadly follow the contours of south-facing slopes in a flat-bottomed valley linking the Alyn and Chwiler valleys. These continuous or near continuous hedge-lines run northwards and then westwards between SJ 210 668 and SJ 200 678 before being lost to quarries in the Hendre area westwards towards Nannerch.

Some indications of a formerly more massive linear earthwork exist on west-facing slopes near Gelli lkm south-east of Nannerch village (for instance visible as a linear lynchet at SJ 172 686). The watershed valley curves northwards and then westwards and the west-facing then south-facing slopes along a half-mile stretch here feature a near-continuous boundary marked by a hedge over a pronounced linear lynchet that is sometimes capped by a massive bank. All this distance it overlooks Nannerch village from the opposite (northern) side of the valley (Figure 24).

To the west again, a sand and gravel quarry has removed (and continues to remove), the south-facing slopes to a point above Sarn Farm south of Ysceifiog village where Swan Wood covers an east-trending spur running parallel with, but some 150m above, the valley-bottom. Within Swan Wood a linear bank unrelated to existing land parcel boundaries mostly occupies the crest of the ridge for nearly half a kilometre (from SJ 153 707 to at least SJ 150 708, and beyond). This bank is broad and in places stands as high as 2.5m. It has the characteristic profile of Offa’s Dyke, with a long slope up the rear (here, north-facing) side of the bank, and a sharp steep scarp facing forwards and looking southwards over the lip of the natural scarp down to the valley below (Figure 25).

Where it is possible for the bank to occupy ground directly above the south-facing scarp it does so: providing clear sight lines down to the valley-floor south-westwards. From this point it is likely to have followed a curving route north-westwards to occupy west-facing slopes near Trefraith overlooking the south-trending valley east of Caerwys village (at SJ 134 730). Just north of here, it may have turned westwards to plausibly link up with the Coed Tan-y-walk length described above.

³⁰ Comprising a slight bank along a scarp-top, artificial scarping of the west-facing slope beneath this to make the bank appear massive when viewed from the west, slight ditch at the foot of this slope, and a modest counterscarp bank beyond this.



Figure 25: linear bank in Swan Wood, above the Chwiler/Wheeler valley. 25a (above): looking south-east along its line, valley to right. 25b (below): looking westwards, earthwork bank to left (Photograph: Keith Ray)



The length of bank at Coed Tan-y-walk is sited only half a kilometre north of Caerwys village. Its orientation is south-east to north-west, and a projection along this alignment for around 7km north-westwards would reach a point at an ancient farmstead 2km south of Gop Hill. This farmstead has for at least 500 years been named ‘Terfyn.’ In the Welsh language this word means ‘an end, or a boundary’ (Evans and Thomas 1987: 408).³¹ Whether the course extended around the east or west side of Gop Hill is unknown, nor is it impossible that it ascended that prominent (251m OD) hilltop. In whichever case, it is likely that, to reach the hilltop at Acre Wood, it would have followed a course c. 1km to the east of Gwaenysgor village.

To recapitulate, reconnaissance survey in central and northern Flintshire has involved a series of observations concerning lengths of possible linear earthwork that share several characteristics of Offa’s Dyke occurring elsewhere. These are beginning to chart, at least in outline, a plausible northernmost course of Offa’s Dyke, north of Treuddyn. The degree to which such a course mirrors (or shadows) the course of Wat’s Dyke (often consistently 2.5km to the east) is remarkable. If the identification of a northern series of lengths of Offa’s Dyke here is correct, this geographical separation remains constant over considerable distances (see below).

The implications of this potential identification of a northern course to Offa’s Dyke between Treuddyn and the sea are enormous, and will be discussed further in the concluding section of the paper, below. It is not only the existence of the Dyke here that is of importance, but also its course. The location of any crossing of the Alyn was bound to be significant, since this is the largest river that is largely contained within the county. However, what is of especial interest is that once this is achieved, the low-lying valley that ultimately connects the Vale of Clwyd with the north Cheshire Plain is followed until a point is reached south of Caerwys where there is an opportunity, topographically, to alter course northwards.

This is the kind of choice made by the ‘designers’ of Offa’s Dyke time and again along its course. This correlation, together with the frequent scarp-edge siting and the structural form of the linear earthworks identified in northern Flintshire between 2017 and 2019 provide quite compelling support for the identification of a once-continuous northern course of the Dyke (Figure 26). However, only further fieldwork and investigation will, cumulatively, provide the firmer evidence to support, or to disprove, this possibility.

Conclusion: markers along the ‘continuing journey’

The focus of this article has been on the specific characteristics of a series of locations, and of surviving (if sometimes badly eroded) linear earthworks: whether in terms of presence/absence of Offa’s Dyke or the details of its siting, design and construction. It is arguable in this context, nonetheless, that this still evades the central question of

³¹ Further ‘terfyn’ placenames have been researched by the ‘Offa’s Dyke Collaboratory North’ team. A prominent example exists at Terfyn Hall, which is located 500m east of the line of the earthwork descending to the Irish Sea between Gronant and Prestatyn, and where the location directly overlooks the narrow coastal plain.

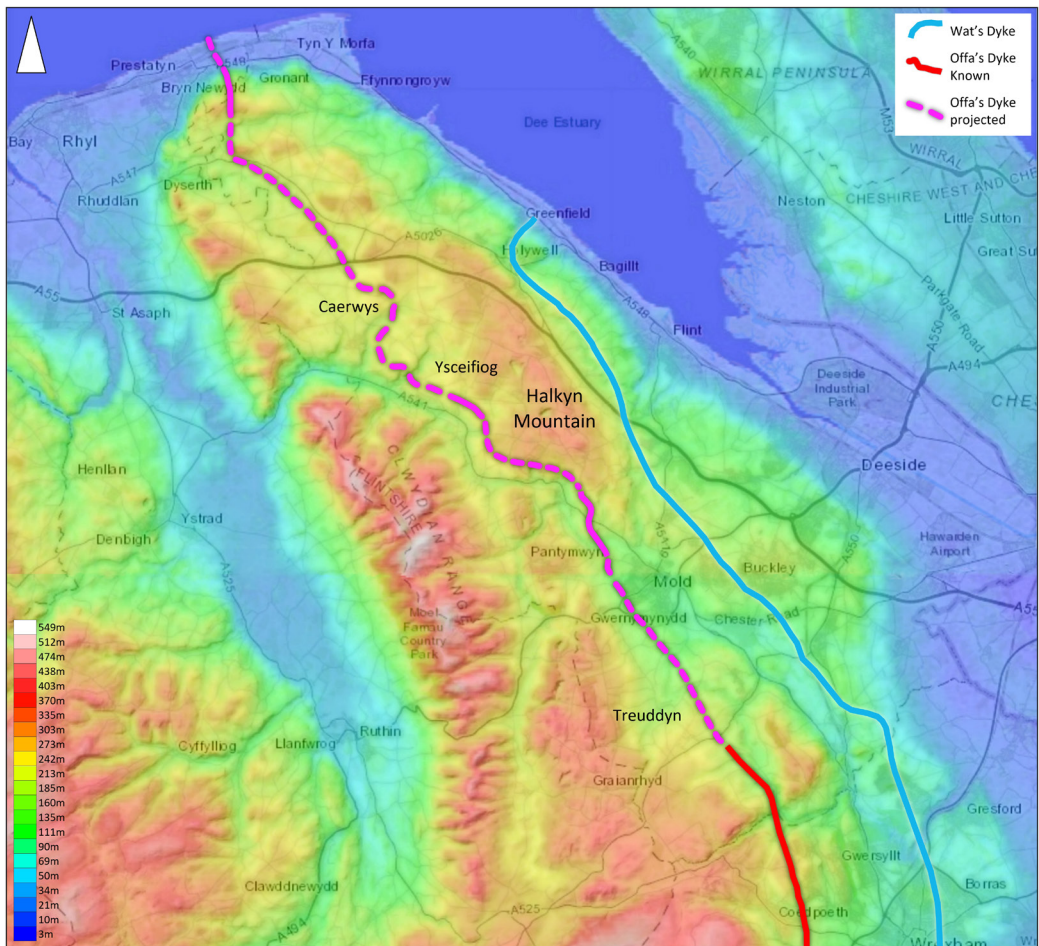


Figure 26: The lengths of 'putative' Offa's Dyke traced, and projected, in central and northern Flintshire, mapped alongside the known lengths of both Offa's Dyke (south of Treuddyn) and Wat's Dyke (mapping by Simon Mayes, designed by Keith Ray)

why the Dyke was built as and where it was. Here it is helpful not to focus solely upon its westwards-looking stance, but to envisage it as having constituted a key part of a particular process: that is, the transformation of a hitherto ill-defined borderland into something approaching a formal frontier, and more particularly, a *march* (Ray and Bapty 2016: 344–350).

The insistence upon a line that deviated as little as possible from a strictly north-south course indicates the intention to define once-for-all what was Mercia as distinct from the lands occupied by the Welsh kingdoms to the west (that were nonetheless regarded as potentially subject to future Mercian domination). The purpose of a march (a concept in the later eighth century already taking material form in the Carolingian domains) was however to serve as a frontier *zone*, which might be narrower or wider at different places and times (Ray and Bapty 2016: 344–353). The central element of such a frontier was

unquestionably the Dyke itself, so that the border was both rigid when it needed to be, and permeable at other times. Among other things this enabled Mercian armies to campaign westwards when deemed necessary or desirable but inhibited retaliatory raids eastwards.

So, the frontier was a complex entity, for which the linear earthwork was itself but the principal component. The further importance of the Dyke was twofold. Firstly, it created a potential source of revenue for the King, his regime and especially for the emerging Mercian state apparatus. The mention of frontier ‘customs posts’ in the hugely more extensive surviving Carolingian documentary record explains very clearly what may have been intended to happen also in contemporary Mercia (Ray and Bapty 2016: 347, citing Smith 1995). And this is the main reason why there most likely were indeed gateways through the earthwork serving as toll-places, and why these were in some cases complex pieces of border infrastructure, as at Hergan in Shropshire (Ray and Bapty 2016: 236).

Secondly, the Dyke not only made manifest the power of the Mercian kingdom in its physical scale and scope, but also in the colossal mobilisation of men and materials involved. It thereby impressed upon the wider consciousness (in Wales, along the frontier itself, within Mercia, among its allies, and among its rival kingships – including on the Continent), the organisation, cohesion, vision, innovation, determination and military capability of the Mercian regime and its forceful King. And it is in these terms especially, that Asser’s allusion to the Dyke (Keynes and Lapidge 1983: 71) needs to be read: even a century on, the Dyke could be regarded as a product of ‘recent times’ and stand as an adequate metaphor for Offa’s aggressive dominance and oppressive power.

The various observations described and discussed in the foregoing text each need to be followed up with detailed investigation and recording since they are so far the product only of reconnaissance visits and so their results at this stage must be regarded as provisional. Nonetheless, it is perhaps worth reviewing, briefly, the picture that they are cumulatively providing in terms of a number of interim conclusions (Figure 27).

The claimed possibility (at present of course requiring much further investigation to be certain) that far from ending, always somewhat inexplicably, at Treuddyn, Offa’s Dyke continued northwards to the sea just east of Prestatyn is a remarkable one to make, given the length of time across which the ‘basic facts’ concerning Offa’s Dyke have been rehearsed and debated. One extraordinary aspect of such a course as projected here is that between a point just north of Nercwys village (around SJ 235 617) and a point north of Rhydymwyn on the River Alyn (at roughly SJ 209 675), Offa’s Dyke would have run for more than 7km on a south-east to north-west orientation *almost exactly parallel with*, but just under 5km west from, a 7km-long stretch of Wat’s Dyke running from near Penyffordd (SJ 298 607) northwards as far as Mynachlog west of Northop (SJ 233 683).

At this point, Wat’s Dyke turns abruptly northwards at just the latitude that, those only 3km to the west, Offa’s Dyke may have made an equally abrupt turn westwards. What

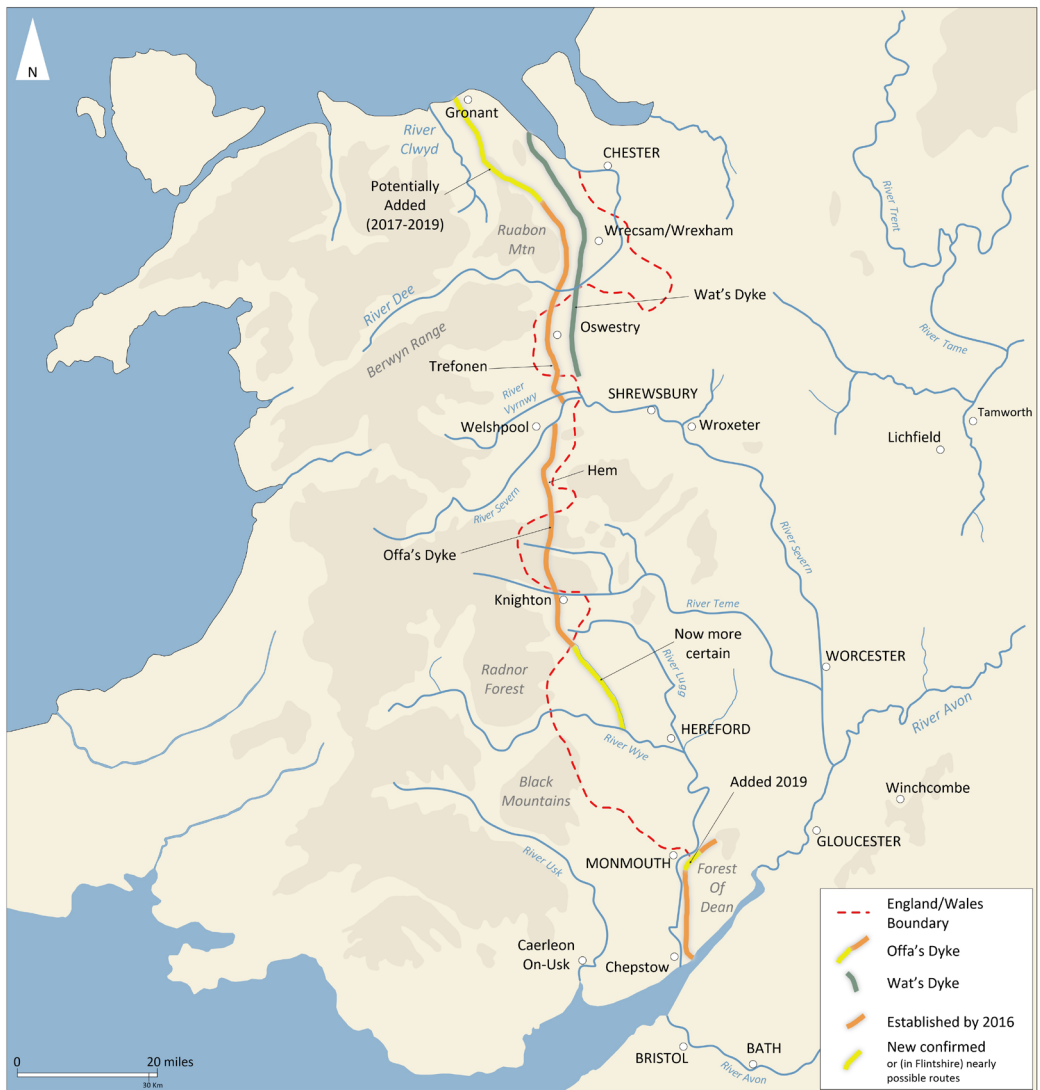


Figure 27: The status of current understanding of Offa's Dyke and Wat's Dyke as a result of field reconnaissance efforts between 2017 and 2020. Map redrawn by Simon Mayes

this would have created was an enormous 'funnel' between the Dykes with each broadly running parallel with the other but a short distance apart, extending from the 'mouth' of the funnel in the Rhosesmor area at the southern end of Halkyn Mountain southwards for a distance of around 30km to a point near Ruabon where they were situated only 1km apart.

Two further questions emerge from this discussion: why was the putative frontier zone expanded to engulf the broad Halkyn Mountain ridge? And, what relation did the two dykes have with one another? For the first, there is an important likelihood that the

Mercians may have developed an interest in the mineral resources of Halkyn Mountain, which since at least Roman times had been producing lead. In order to place the latter resource firmly within the Mercian domain, the preferred routing for Offa's Dyke would have taken it from the high ridge at Treuddyn directly northwards to the River Alyn west of the later medieval town of Mold, before following its tributary stream the Afon Chwiler north-westwards towards Caerwys and then directly northwards towards the coast.

In view of this lead-related and economic dimension, there is a helpful correspondence with the reference in Thomas Churchyard's extended poem, *The Worthines of Wales*, published in 1587, to this area between the dykes as 'free ground' that had traditionally served as a neutral trading zone between the English and Welsh. Close inspection of the text of the relevant stanza suggests that this was a negotiated zone with agreed terms for trade and agreement also over the consequences of unauthorised movement eastwards or westwards beyond it.³² As was noted in another recent paper, this raises the possibility not so far considered at all, that the two dykes, instead of being of different dates, were in fact used, if not necessarily built, at the same time (Ray 2020: 130).

As this long article reaches its ending, the potential of a very different observation reported here to transform our understanding of the Dyke needs perhaps to be emphasised. This is the ostensibly simple observation, arising from LiDAR data and expertise in the mapping of geomorphological features on the part of Tudur Davies, that there is a crucial adjustment in the route of Offa's Dyke as it crosses the floodplain of the Camlad north of Montgomery.

This is at the point where the Dyke approached the former principal channel of the river. Firstly, if excavation reveals waterlogged timbers that can be dated by dendrochronology (a bridge in Denmark was dated to Harald Bluetooth's reign in this way) then a specific part of the construction of the Dyke may be closely dateable.³³ Secondly, if a bridge is proven to have been present, then the construction of a 'military' Dyke would have been of a piece with the 'bridgework and fortress work' of the Mercian charters from Offa's and Coenwulf's reigns. In this way, the mechanism of obligations of service to the regime by which the labour was brought to the frontier to build the Dyke could be regarded as

³² The stanza of the poem 'Worthiness' concerned reads: 'Within two myles, there is a famous thing;/ Cal'de Offaes Dyke, that reacheth farre in length:/All kind of ware, the Danes might thether bring./It was free ground and cal'de the Britaines strength./Wat's Dyke, likewise, about the same was set,/Betweene which two, both Danes and Britaines met/And trafficke still, but passing bounds by sleight/The one did take, the other prisoner straight.' Cyril Fox (1955: 226) noted the existence of the stanza concerned, but simply observed that it was 'the earliest reference to Wat's Dyke as a distinct structure.'

³³ Whether this would produce a date in Offa's or Coenwulf's reign is less significant than tying the construction to a particular decade. If in Coenwulf's reign it would not necessarily 'prove' that the Dyke was built by Coenwulf and not by Offa: rather it would certainly demonstrate that it was in use in Coenwulf's time. Nor, of course, would it prove the construction of the Dyke everywhere dated to that period.

established. And thirdly, if there was a bridge it implies that there was a walkway along the top of the Dyke which enabled Mercian forces or patrols to cross the floodplain here. At one place, it would be possible, therefore, to move discussion along substantially concerning the date, the means of building, and the functioning of the Dyke.³⁴

As for the southern extremities of the Dyke in Gloucestershire, again there appears to have been a carefully executed tactical plan to deny the Welsh communities of Archenfield in southern Herefordshire access to the Forest of Dean, its iron ore and its ironworks. The continuation of the Dyke eastwards along the Wye Valley here finds its equivalents at various points along the course of the Dyke and frontier. Such brief east-west stretches no doubt reflected the political circumstances of the building of the Dykes, and they occur three times in the environs of Herefordshire. The other two instances are the frontier that existed without the Dyke along the Wye valley to the west of Hereford, and the curious turn of the Dyke eastwards along Herrock Hill and Rushock Hill towards the River Arrow in the far north-west of Herefordshire. In each case, it can be suggested that the need for surveillance was the key reason for the adjustment of orientation.

Where does this leave our overall understanding of the Dykes and the frontier? For one thing, we are beginning to become more fully aware of the complexities not only of the Dykes as structures, but also of the frontier as comprising both a varied and a dynamic political and cultural entity. If we compare the map of the frontier as envisaged in terms of the known extent of the Dykes in 2016 (Figure 1) with a re-casting of this map in light of the recent fieldwork (Figure 27) the difference lies not only in the lengths of the principal linear earthworks now known, or suspected, to have existed. It is also clear that we can now envisage a frontier that was *zoned*, from north to south. This zonation was itself undoubtedly complex (addressed by Ray 2020).

A glance at this 'new' map indicates that at least four major contrasts appear to exist from north to south. The frontier in the north was bounded to west and east by each of the two Dykes, and extended southwards from two different points on the north coast to a location close to the course of the River Vyrnwy south of Oswestry. The frontier in the centre spanned the whole distance southwards from the middle reaches of the River Severn near Welshpool to Bridge Sollers on the River Wye west of Hereford. The frontier south of Hereford still appears to have no Dyke present at all, perhaps due to the existence of treaty relations between the Kingdoms of Mercia and Ergyng. Here, the River Wye may have stood proxy for the existence of an earthwork. The frontier in the south was again marked by a huge and imposing linear work, in this case as much to mark off the Forest of Dean as a Mercian (royal?) possession, along with its ironworking industry,

³⁴ This surely also enhances the importance of promoting and funding an intervention archaeologically, albeit in potentially difficult (waterlogged) conditions, to examine this location through controlled research excavation.

as to confront the undoubted might of the Kingdom of Gwent to the west of the River Wye. Why the frontier took the form it did in the centre and north is a matter for future speculation. Yet, the co-existence of Offa's Dyke and Wat's Dyke represented to an extent an unstable compromise. Tensions, not only between Mercia and Powys but also Mercia and Gwynedd, seem likely in light of the number of recorded battles between Mercian and Welsh forces along the North Wales coast in the early ninth century.

Finally, the work reported here once again serves to remind us we are only now close to the end of the *beginning* of the journey of discovery and continual re-assessment of this complex and diverse frontier. It will be important in future years to harness many people's enthusiasm, and the financial support of many organisations and institutions, to fuel the ongoing process of discovery.

Acknowledgements

Keith Ray would like to thank the input (over several years), in support of his 'post-book' researches of his co-Conveners of the Offa's Dyke Collaboratory: Paul Belford, Andrew Blake, Christopher Catling, David McGlade and Howard Williams. The debt owed to co-fieldworkers since 2016, and, in particular to Ray Bailey, Tim Copeland, Liam Delaney, Dick Finch, Jon Hoyle, and Simon Maddison should already be evident.

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