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Borders, Burials, and the Extended Mind in Early Medieval England: *Genesis A* and Apple Down

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This article begins by considering the re-presentation of the Biblical landscape of the Binding of Isaac in the Old English text *Genesis A*. With reference to place-names, landscapes, and other texts, it demonstrates how this setting was presented as a place of cremation on a hilltop border. The poem may, for audiences living in the generations following the cessation of cremation burial, have served as a means of understanding earlier religious praxis. The article then considers a similar moment of cultural transition written into the conversion-era cemeteries at Apple Down in Sussex, similarly sited in a border region and on top of a hill. Here, a mixed-rite cremation and inhumation cemetery was succeeded by an inhumation cemetery set out in a novel fashion, likely reflecting changes in contemporary religious culture. Both the poem and the cemeteries at Apple Down, in marking these changes, can be understood within Material Engagement Theory, a theory of the Extended Mind, as 'exograms': material memory records external to the embodied human brain. The article considers both the poem and cemeteries in this light, and shows how exograms of various kinds might be used to assemble an *exogrammar*, here defined as a set of ideas distributed across one or more exograms. A framework of this kind, assembling evidence across a diverse range of material and textual sources, is presented as an adaptable method of investigation across disciplines in which various forms of evidence can be understood as residual components of embodied human minds.



Mearcian in Old English means to make a mark, to mark out, or to set out a design, giving us both the Modern English sense, but also one of the Old English words for ‘border’ — *mearc*. This article takes the delineation of borders as its theme, considering the relationship between different forms of evidence for human-environmental interaction within the contexts of the Extended Mind Thesis, in which the ‘borders’ between the embodied human brain and the things with which it interacts are porous and shifting. I begin with a case study comparing the hilltop border location in the composite Old English poem *Genesis A*, where Abraham prepares to sacrifice and cremate Isaac, with a pair of conversion-era cemeteries on a hilltop border at Apple Down in Sussex, where a shift in burial rites has been thought to reflect a process of transition in communal thought and practice during the conversion period. *Genesis A*, in its manuscript contexts, and the ritual landscape at Apple Down can be understood within the Extended Mind Thesis discussed below, and specifically within Material Engagement Theory, as exograms: material memory records external to the human body and brain which can function as components of extended human cognition, transmissible between individuals, and manipulable to different extents. Importantly, this conception of the physical, material object does not differentiate between the cutting of a grave and the imprinting of ink on calfskin. Both of these forms of material evidence can be understood as physical components of extended human minds. A set of ideas found across one or more exograms, as I have argued elsewhere, might serve a useful function as an intellectual framework for investigating material and textual evidence. Towards the end of this study, I explain how this kind of *exogrammar* could offer a practical method of handling these forms of evidence as a product of the material continuum between humans and the environments they inhabit.

Bodies and Borders: The Binding of Isaac

In Genesis 22, Abraham is instructed by God to sacrifice his son Isaac atop a mountain in the precipitous region of Moriah. The Biblical description of the immediate environment is sparse. Following God’s instruction (22.2), Abraham and Isaac set out with two servants and cut wood for a burnt offering, before they go on to seek out the appointed location (22.3).¹ It takes them three days of travel (22.4) to reach a place where Abraham

¹ *Ait illi: Tolle filium tuum unigenitum, quem diligis, Isaac, et vade in terram visionis, atque ibi offeres eum in holocaustum super unum montium quem monstravero tibi. [3] Igitur Abraham de nocte consurgens, stravit asinum suum, ducens secum duos juvenes, et Isaac filium suum : cumque concidisset ligna in holocaustum, abiit ad locum quem praeceperat ei Deus.* (‘He said to him: Take your only begotten son Isaac, whom thou love, and go into the land of vision: and there you shall offer him for a burnt offering upon one of the mountains which I will show you. So Abraham rose up in the night, saddled his ass,

builds an altar and arranges the wood they have taken with them (22.9) to burn their offering.² There is little by way of detail in the biblical Genesis: we can infer trees or woodland where the four men cut wood, though this is not mentioned, and perhaps a craggy mountainous landscape through which they travel to the place of sacrifice. The mountain, however, is not described at all; the only aspect of the environment noted in the description is the thicket where a ram (which will be offered up in Isaac's stead) has entangled its horns (22.13).³

The Old English poem *Genesis A* offers a significantly more detailed account of the landscape through which Abraham, Isaac, and their retainers travel on their way to this place of sacrifice and cremation.⁴ Its first appearance is in God's command to Abraham:

Siððan þu gestigest steape dune,
 hringc þæs hean landes, þe ic þe heonon getæce,
 up þinum agnum fotum, þær þu scealt ad gegærwan,
 bælfyr bearne þinum, and blotan sylf
 sunu mid sweordes ecge, and þonne sweartan lige
 leofes lic forbærnan and me lac bebeodan. (2854–59)

After you have climbed the steep mountains,
 the circuit of the high land, which I will show you hence,
 upon your own feet, there you shall prepare a pyre,
 a balefire for your son, and sacrifice your own

and took with him two young men, and Isaac his son: and when he had cut wood for the burnt offering he went on his way to the place which God had commanded him'). References to the Vulgate and translations from the *Holy Bible Douay-Rheims Version*, with translations modernised by this author.

² *Die autem tertio, elevatis oculis, vidit locum procul: dixitque ad pueros suos: Expectate hic cum asino: ego et puer illuc usque properantes, postquam adoraverimus, revertemur ad vos. [...] Et venerunt ad locum quem ostenderat ei Deus, in quo aedificavit altare, et desuper ligna composuit; cumque alligasset Isaac filium suum, posuit eum in altare super struem lignorum.* ('And on the third day, lifting up his eyes, he saw the place from a distance. [...] And they came to the place which God had shown him, where he built an altar, and laid the wood in order upon it: and when he had bound Isaac his son, he laid him on the altar upon the pile of wood').

³ *Levavit Abraham oculos suos, viditque post tergum arietem inter vepres haerentem cornibus, quem assumens obtulit holocaustum pro filio.* ('Abraham lifted up his eyes, and saw behind his back a ram amongst the briars sticking fast by the horns, which he took and offered for a burnt offering instead of his son').

⁴ All references to *Genesis A* from Krapp (1931). The composite *Genesis* poem is found in MS Junius 11, the poem *Genesis A* (1–234, 852–2936) being interpolated by *Genesis B* (235–851), derived from an earlier version written in Old Saxon. The poem is generally considered to belong to an earlier group of Old English poetic texts, and unlikely to be contemporaneous with its 10th-century manuscript, dated to c. 965 in Lockett (2002). This episode, the binding of Isaac, was of clear interest to contemporaries. It appears on the Newent Cross, one of remarkably few monuments from early medieval England in which scenes from the Old Testament feature prominently. See discussion in Alexander (2019: 49–60).

son with a sword's edge, and with dark fire
incinerate the body of your beloved one, and dedicate that sacrifice to me.

God's instruction extends the text of the Biblical Genesis considerably. The mountains here are steep, a circuit or *hrincg* of high ground—a word that in this context may also play on the *hrycg* (ridge) that Abraham must climb on foot. As God spells out, he must then prepare a pyre (*ad*), a balefire where Isaac's sacrificed body will be cremated.

In the Biblical Genesis, Abraham cuts wood *before* setting out on his three-day journey (22.3). The Old English poem makes no mention of this. Instead, we see the four set out on the *foldweg* ('earth-path', 2874), following *wegas ofer westen* ('paths through the wilderness', 2875) for three days.⁵ They arrive at the foot of the place of sacrifice, where Abraham, *se eadega wer geseah hlifigan hea dune* ('the blessed man saw the high mountain towering above', 2877–78). Abraham leaves his servants behind in both versions (22.5; 2880–84), before going on ahead with Isaac. Here, in a departure from the Biblical Genesis, the landscape of the Old English poem is given a different treatment. Having made their way along pathways across land and through the wilderness, Abraham and Isaac pass *through* an area of woodland as they ascend to higher ground:

Gewat him þa se æðeling and his agen sunu
to þæs gemearces þe him metod tæhte,
wadan ofer wealdas. Wudu bær sunu,
fæder fyr and sweord. (2885–88)

He departed then, that nobleman, with his own son,
to the border which the Measurer showed him,
moving through the woods. His son carried wood,
the father fire and sword.

The poet does not tell us explicitly that Abraham and Isaac gathered or cut wood in this place—but there is no mention of wood before they enter these woodlands, and within the same line Isaac is then seen to be carrying it. The poet's response to the source here could feasibly be an effort to answer a question perhaps more puzzling to early medieval English audiences than the authors of Genesis; why would Abraham carry wood with him when he might find it on the way?

⁵ The word itself here could suggest travel over high ground, as it does when 'closely associated with steep routes at least when used of settlement names', though in 'charter boundaries it is used of tracks of any gradient'; see discussion in Cole (2011: 53).

Thus equipped with wood, fire, and the sword, and having told Isaac that God will provide a fitting oblation when the time comes, Abraham and his son at last climb the mountain of sacrifice:

Gestah þa stiðhydig steape dune
 up mid his eaforan, swa him se eca bebead,
 þæt he on hrofe gestod hean landes
 on þære stowe þe him se stranga to,
 wærfæst metod wordum tæhte.
 Ongan þa ad hladan, æled weccan... (2897–902)

Resolute, he then climbed up the high mountain
 with his son, as the eternal one had bid him,
 until he stood at the summit of the high lands
 in that place which the powerful one,
 the oath-fast Creator, had shown him in words.
 Then he began to stack up a pyre, to build a bonfire...

There is nothing particularly striking about the way this builds on the Biblical text. The Vulgate describes this only as the *locum quem ostenderit ei Deus* ('place which God had shown him', 22.9); it is a high mountain, and thus appropriately described in the Old English as the *hrof* ('roof' or 'summit') of the surrounding lands.

The differences between the Biblical text and the poem are fairly minor in isolation. On the whole, they are typical of the resituation of episodes from Biblical, Antique, and Late Antique narratives in landscapes recognisable to early English audiences, and described using the terminology they used to characterise their own environments.⁶ There is, however, a coherence to this landscape that suggests careful and deliberate construction on the poet's behalf. The mountain to which Abraham is sent is the *hrincg þæs hean landes* ('the circuit of the high land')—*hrincg* being a variant of *hring* ('ring'), which suggests that the mountain in some way forms part of a range of high ground, like the sides of a steep-sided valley.⁷ In this way the 'circularity' of this high land may

⁶ See discussion of, e.g., the landscapes of Mermedonia in *Andreas* and Bethulia in *Judith*, in Bintley (2020a). Continuations of the same approach in later popular literature such as romances has been similarly demonstrated elsewhere; see, for example, further discussion in Richmond (2021).

⁷ *Hrincg* appears twice in Old English poetry, its other appearance also being in *Genesis A*, where it describes the ('ocean's circuit', 1393). There is also clear slippage between *hrincg* and *hricg/hrigc/hrycg* spellings indicating waters elsewhere in the corpus, including references such as: *sæs hricg* ('sea's circuit', *Psalm* 68.2.1); *wæteres hricg* ('water's circuit', *Solomon and Saturn* 19); *hreone hrycg* ('stormy circuit', *Christ II*); and *wæteres hrycg* ('water's circuit', *Beowulf* 471). The meaning of *hrincg* here could, in a more straightforward sense, simply be 'ridge' rather than circuit. References to the metrical

be less intended to imply an unbroken circuit, and rather the sense of encircling high ground that an individual might experience while moving through the landscape, as is the case (for example), if following the river Derwent along the floor of the Hope Valley in Derbyshire. If, as suggested, this use of *hrincg* is also intended to evoke a *hrycg* (OE ‘ridge’), this might also see Abraham ultimately ascending to higher ground along a ridgeway of the kind found widely in the landscapes of Britain. Ridges of this kind are commonplace in vernacular charter bounds, and recorded in more than a hundred boundary clauses. Those for Downton and Ebbesbourne in Wiltshire refer to a feature described as *hrofan hric/hrige/hricge*, a ‘top’ or ‘summit’ ridge that would fit well in this context.⁸ But Abram begins his journey on a single *foldweg* (‘earth-path’), which in turn becomes *wegas ofer westan*, moving away from the homestead Abraham establishes for himself earlier in the poem (1719–21) and into uncultivated and perhaps uncultivable wilderness. At the edge of this wilderness Abraham sees the appointed mountain towering above him, but must move through an area of woodland in order to arrive there—a place in which I have suggested the wood for the pyre may be gathered or cut. Having taken *wegas ofer westan*, they must now *wadan ofer wealdas*, and pass over or through *weald*—the latter generally referring to wooded higher ground, as we might expect as Abraham ascends the mountain.⁹

Fascinatingly, the end point of this journey, where human sacrifice and cremation will take place, is described as being sited on a border; Abraham is headed to *þæs gemearces þe him metod tæhte* (‘to the border which the Measurer showed him’), the *hrof* (‘roof’) of the *hean landes* (‘high lands’). The use of *Metod* for God, alliterating with *gemearces*, seems particularly appropriate here, with God mapping both the centres of human habitation and those on the periphery. Here, my translation of *gemearces* follows the Bosworth-Toller reading of *gemearc* word as ‘a boundary, limit’, rather than more simply as an identified location, as in the *fangemerc* or ‘fen boundary’ of Icklesham, Sussex (S108) (Kelly, 1998: 107–10). This word is, I would argue, a departure from the Latin’s more neutral use of *locus* (‘place’), more commonly glossed in OE using terms such as *stede* (‘a place, spot, locality’) or *stow* (‘a place, spot, locality, site’) (Toller, 1897). The OE translation of the Heptateuch, for example, follows the Latin far more

Psalms from Krapp (1932: 3–150) (references to the Psalms given in Krapp’s edition are to those found in the *Biblia Vulgata*); references to *Christ II* from Muir (1994: 66–81); references to *Beowulf* from Fulk, Bjork, and Niles (2008); references to *Solomon and Saturn* from Anlezark (2009).

⁸ This appears in the bounds of Downton (S229; S275; S393; S540; S891); and the bounds of Ebbesbourne (S861) in the south east of the county, in the same chalk downland landscape as the Mardens discussed below (in West Sussex), some 40–50 miles away.

⁹ For a focused study of the character of early English woodland, including discussion of the Weald in South East England, see Hooke (2011).

closely here: Isaac is to be offered up *super unum montium*, i.e. *uppon anre dune* ('upon one of the mountains', 22.2), and they go *ad locum quem ostenderit ei Deus/to þære stowe þe him geswutelode God* ('to the place which God had shown him', 22:9) (Marsden, 2008: 47).

If *gemearc* is translated as 'border', we must consider why the poet chose to describe it in this way. A number of possibilities present themselves, some more straightforward than others. It is, for example, a turning point and a testing point for Abraham himself. Equally, the act Abraham is prepared to perform is at the very limits of what even a deity might ask of his creation. Or, one might suggest that the height of the mountain stands at the border between the heavens and the earth. Being more prosaic, we might compare this place of sacrifice and cremation with places that operate in a similar fashion elsewhere in Old English poetry. One clear parallel appears in the *Andreas* of the Vercelli Book, potentially a late 9th-century production.¹⁰ After freeing the captives of the anthropophagic Mermedonians, Saint Andrew sits down beside a pillar near a *mearcpæð* ('border-path', 1061) where the Mermedonians then gather to hold a meeting, its purpose being to cast lots and decide who to eat in place of their intended victims. A leading figure in what passes for Mermedonian civic life is selected, but puts up his son in his stead, with the boy's life being saved only thanks to divine intervention.¹¹ This episode in *Andreas* resonates strongly with the binding of Isaac because it parodies God's sacrifice of Jesus, foreshadowed for Christians by Abraham's readiness to sacrifice Isaac. These resonances offer no clues, however, as to why we should find the sacrificial (and filicidal) events described in these poems taking place on a borderland.

More tentatively, we might also consider the only other detailed description in the corpus of Old English poetry where a cremation forms part of a set of burial rites, which is in *Beowulf*. The aged king, having ruled for fifty winters before he does battle with the dragon ravaging his people's land and homes is not 'sacrificed' by anyone but himself. Beowulf's funeral, cremation, and burial do, however, take place on a border, with the king commanding that it should be on *brimes nosan* ('an ocean headland', 2803), where it will *heah hlifian on Hrons næss* ('tower high on Whale's-Ness', 2805) as a marker for seafarers travelling from afar. Against the reading of this seashore as an incidental or *de facto* border is the emphasis on the division between land and water throughout the poem, both in the main narrative (e.g. Grendel's mere) and in the digressions (e.g. the swimming match with Breca), to which attention is drawn explicitly in the scene

¹⁰ See discussion in North and Bintley (2016); all references are to this edition.

¹¹ Andrew Reynolds similarly points out that St. Juliana in the Old English poem of the same name is led out of the city of Nicomedia to the borderland where she is executed; see Reynolds (2009: 26, 180).

where Beowulf and his companions arrive on the shores of Denmark, where they are challenged by the coastguard. Here, this nameless but canny watchman says he will ‘protect’ Beowulf’s ship during his time in Denmark, before they return home to Geatland. He refers to Geatland as the *Wedermearc* (298), which in this context refers to a region of land held by the Wederas, but of the fourteen appearances of *Weder* in the poem, this is the only occasion on which it appears as part of a compound emphasising territorial divisions. This is appropriate, in this context, as Beowulf and his men have left their own borders, and have just crossed into the *Dene-mearc*—not a phrase that appears in the poem, but the place in which this heavily armed troop now find themselves without leave from the Danes, or indeed their knowledge. Once again, then, in *Beowulf* we encounter borders as places of cremation, burial, and of sacrifice—the dragon’s barrow, where the hero gives up his life, is near enough for its corpse to be shoved over a cliff into the sea (3132–33).¹²

This understanding of borders as places of burial and assembly under the influence of a powerful authority (the *Metod* here) reflects what we know from the material culture of early medieval England, as I have discussed elsewhere in relation to *Andreas* (North and Bintley, 2016: 81–83). In many cases, burials on borders were also made with reference to prehistoric barrows (such as the dragon’s) and Roman sites. Sarah Semple makes a case study of *Cwichelmeshlæwe* (‘Cwichelm’s Mound’), located on the border of Oxfordshire and Berkshire, where in 1006 a viking army camped to provoke the armies of the English, the mound highly likely to have had longstanding ‘political significance for the late Anglo-Saxon communities and powers of this region’ (Semple, 2013: 1). In terms of the evidence supporting associations between powerful authority and cemeteries sited on borders in relation to mounds and other naturally or artificially elevated locations, Andrew Reynolds’ annotated handlist of execution cemeteries includes numerous examples of burials made with reference to barrows, hills, and earthworks (Reynolds, 2009: 97–151). With two to four possible exceptions, all of the execution cemeteries that Reynolds describes ‘can be seen to be located upon or adjacent to the boundaries of counties, hundreds, or boroughs’, together with ‘an equally striking relationship to mounds’ (Reynolds, 2009: 155–56). Similar conclusions have been drawn by Howard Williams regarding the positioning of cremation cemeteries, which ‘can be shown to be situated in relation to distinctive topography’, as well as ‘major routes, existing monuments and structures’, and ‘centres of late Roman political authority’ (Williams, 2004: 109–34). Williams makes a case study of Loveden Hill (Lincs), the site of a mixed-rite cemetery on a prominent hilltop highly visible to settlements (and

¹² The burial of Scyld Scefing at sea, though not a cremation, could also be considered in this context.

more generally) in the surrounding landscape, which is one of many such sites that played an important local function in the creation and development of communities of the living and the dead (Williams, 2004: 119–28).¹³ As Semple summarises in relation to case studies from North Wiltshire, West Sussex, and East Yorkshire:

Cemeteries and individual graves were placed with reference to inter-visibility, accessibility, proximity to land and coastal routes, settlements, the edges of the cultivated lowland, places frequently traversed or passed or visible to travellers, cross-roads, and borders. The choice of an ancient barrow or Roman site was informed by a wide variety of geographic and aesthetic aspects. It is this multiplicity of influences— natural and historic—that informed the imagination of communities, allowing them to build narratives about their origins, place in the world, and relationship with the landscape in which they lived (Semple, 2013: 45).¹⁴

It is, at this point, important to consider what this might reflect about the context in which this poem was written, and how the landscape it presents might have been ‘read’ by a contemporary.

In a similar vein to Nicholas Howe’s arguments that *Exodus* functioned as a recasting of the biblical Exodus in a light that would have paralleled the ancestral migration myth of the Angles, Saxons, and Jutes (found in Gildas and Bede) (Howe, 1989), Angela Fulk has recently suggested that the *Genesis A* poem was part of a way of understanding the paganism of a relatively recent past (Fulk, 2019). R. D. Fulk and Christopher Cain note that *Genesis A*, the portion of the poem containing this episode, is ‘usually dated no later than the eighth century’ (Fulk and Cain, 2003: 113).¹⁵ More specifically, Fulk’s seminal study of Old English metre concluded that *Genesis A* is most likely Anglian, and ‘roughly coeval’ with *Beowulf* (Fulk, 1992: 369). While both are post-Cædmon (c. 685), Fulk concluded that *Beowulf* was ‘not composed after ca. 725 if Mercian in origin, or after ca. 825 if Northumbrian’, and is most likely Mercian (Fulk, 1992: 390).¹⁶ If this is the case, and *Genesis A* dates to approximately the same temporal window, the poem could then reflect a material-textual continuum in which textual landscapes were changing to reflect developments ‘on the ground’ in the preceding decades, but also the *understanding* of how these developments had taken place. Geographically, the poem’s commentary on cremation, in this light, would also broadly fit with the

¹³ See also further discussion of Loveden Hill and a comparable site at Hall Hill, also in Lincolnshire, in Williams (2002: 355–57, 352–55).

¹⁴ See also recent case studies in Mees (2019).

¹⁵ See also Lucas (1992) and McKill (1995–96).

¹⁶ This is also supported in Neidorf (2014); and Neidorf (2017: 2–4).

‘clear propensity towards cremation in eastern England and inhumation in southern England’, though there is ‘overlap in differing proportions between regions’ (Williams, 2006: 24; also see Lucy, 2000: 142–43).

Chronologically, cremation had become unfashionable by the end of the 6th century, falling out of favour entirely in the seventh, likely owing to religious change, though Alec Down and Martin Welch argued for cremation at Apple Down, considered below, into the later 7th century (Welch, 2011). *Genesis A* and *Beowulf* are not likely, if Fulk’s dating is correct, to have been written when cremation was still practiced. A few hypothetical examples across this temporal spectrum may serve to illustrate the religious and cultural changes with which these poem’s authors may have been familiar at first, second, or third hand. An Anglian poet born in 620, who lived as long as Bede (who died in his mid-60s), and who composed his magnum opus in his twilight years, would have been old enough to have known the conversion of the Northumbrian and Mercian kingdoms and their pre-Christian customs directly. Writing in the middle of the dating range (c. 705), and in his mid-30s, a poet born in the 670s would not have had these experiences himself, but would likely have known such customs second hand. At the latest, an Anglian John Keats, born at the turn of the century, could have made his deadline of 725, concluding *Beowulf* with the hero’s funeral pyrotechnics, or *Genesis A* with its sacrificial pyre, on the basis of accounts received at third hand. Though it can be known with no certainty that this was the case, on this basis both poems may offer insight into how literary productions were seeking to understand the customs of previous generations in a religious landscape from which they had disappeared.

So far, we have seen how aspects of landscape and environment in *Genesis A* seem to have been adapted to help an early medieval English audience, and particularly one living in the late 7th or early 8th centuries, to understand the landscapes of mount Moriah and the binding of Isaac using the lexis they employed to describe their own environments. This may have been the case both in terms of its perceived ‘natural’ features and those that were more obviously consequences of human intervention, whether in terms of modifying the landscape through construction (e.g. barrow-building), or in using existing features for activities such as assembly. An exact parallel between mount Moriah in *Genesis A* and a place that can be directly evidenced in the landscape, i.e. a pyre site on a hill, on a border, next to a cremation burial displaying evidence of ritual *human* sacrifice, very likely does not exist. But each of the elements present in this episode did exist, so long as we remember that Isaac himself was not killed, and a ram was sacrificed in his stead.¹⁷ Though pyre sites, elevated places (and mounds), cremation (or mixed-rite)

¹⁷ There is good evidence in early medieval England, of course, for the cremation (and likely ritual killing) of animals to be cremated with the dead, as discussed by Williams (2001).

cemeteries, and boundary/border features were distributed to different extents in the landscape, their drawing together in *Genesis A* references each element in such a way that its resonances could be felt and understood widely, without being attached to any one place at the exclusion of another. In this respect, it would have reflected the diversity of practice surrounding cremation in early medieval England. In the Book of Genesis, and in *Genesis A*, where it forms the conclusion to a (composite) poem nearly the length of *Beowulf*, the binding of Isaac is a transitional episode, an act of proving by which Abraham demonstrates his commitment to God through an ultimate test of faith. In so far as Abraham's faith follows Noah's, the episode represents continuity with the past, but also an important moment of change and realignment, in which the poetic treatment of scripture could be used to reflect the reorganisation of the funerary rituals of recent history. This may be one of the earliest textual re-presentations of burial rites, but this process of the reinterpretation, or perhaps appropriation of former places of burial is widely visible in other contexts in early medieval England in relation to prehistoric and Roman burials and monuments. Highly visible barrows on or close to ridges reused as sites for early medieval burial, for example, include: two (likely) prehistoric barrows reused at Whitehorse Hill (Oxon) close to the Ridgeway (Miles et al., 2003: 54–55); the Bronze Age barrow reused for a 7th century burial at Swallowcliffe Down (Wilts) (Speake, 1989); and Lowbury Hill (Oxon), where an early medieval barrow was constructed close to the remains of a Romano-Celtic temple (Williams, 1999).¹⁸

This process of renegotiating the landscape of burial in response to religious and cultural change, and the diversity of approaches taken, is usually far more visible in the archaeological record than in literature. I take here, as an example, the two cemeteries at Apple Down, Compton (West Sussex), excavated in 1982–87. Two cemeteries were unearthed here. Cemetery 1 is described in Alec Down and Martin Welch's report as a 'mixed-rite burial ground' where '121 inhumations and 64 cremations were excavated, with a further 74 cremations being inferred from the remains of field monuments and by artefacts recovered from the topsoil' (Down and Welch, 1990: 9). A core of 'rich' burials identified here, on an area 'half-way down the North-facing slope of the hill' was 'dated to c. late 5th–early 6th century, with the cemetery remaining in use until the late 7th century, if not later' (Down and Welch, 1990: 9). Cemetery 2 was discovered 'on top of the hill', and though damaged by the creation of two reservoirs, excavations yielded eleven inhumation burials, all of which were east-facing, and two of which had 'knife forms datable to the 7th and early 8th centuries' (Down and Welch, 1990: 10). Down and Welch concluded that the burials of these 253 individuals, represented perhaps

¹⁸ See also Williams (2006: 185–86) and elsewhere broader discussion of this phenomenon in a variety of contexts in Williams (1997).

‘some 80–90% of the community buried in this cemetery over just 200 years, say from c. AD 490–510 to c. AD 680–90’ (Down and Welch, 1990: 108). Significantly, cremation burials were found in Cemetery 1 ‘from its foundation into the second half of the 7th century’, contrasting with Cemetery 2, which includes no cremations whatsoever, the inhumation burials being unaccompanied save for knives (Down and Welch, 1990: 108). On this basis, Down and Welch concluded that it was ‘probable’ that Cemetery 2 represented ‘the earliest Christian successor to the pagan cemetery of this community and that it was founded at the insistence of Wilfrid’s missionary priests in the 680s, continuing into the early 8th century’ (Down and Welch, 1990: 108). This was, then, a place of burial that spanned generations, likely six or seven in the case of Cemetery 1, before it was supplanted by Cemetery 2, and the shift between the rites in these two locations, if it was a motivating factor for the establishment of the latter, is unlikely to have fallen from memory with any haste (Down and Welch, 1990: 108). In revisiting discussion of Apple Down more recently, Duncan Sayer has drawn attention to the way in which this and other such cemeteries reflect ‘social events within mortuary contexts’, such as preparing bodies, digging graves, and participating in funerary rites (Sayer, 2020: 28). Within these contexts, Sayer notes, ‘individuals [...] are capable of conscious reflection and change; consequently it is a combination of agents and structure which affects social transformation and thereby materiality’ (Sayer, 2020: 28). What we see at Apple Down, discussed in detail by Sayers, is a complex reflection of processes of cultural change and development that reveal various aspects of ‘social difference’ in the community or communities that produced them (Sayer, 2020: 25).

One further point of note, in light of the discussion above, is that the cemeteries at Apple Down are marked out in the place-name evidence as a border region. The cemeteries at Apple Down occupy the down itself, ‘an elongated hill or ridge on the dipslope of the South Downs’ (Down and Welch, 1990: 12). Apple Down lies southwest of North Marden, northeast of West Marden, and west of East Marden. Immediately to the south is Up Marden—‘up’ on the same down. Down and Welch note that Domesday records four Mardens (*Meredone*) in Westbourne Hundred, part of the Rape of Chichester. This word derives from *Maere-dun*, meaning ‘boundary down’ taking this to describe ‘the parish’s former size and location on the Sussex/Hampshire border, before the creation of the parish of Compton’—a settlement to the west of Apple Down (p. 1). The name of the down accommodating Apple Down and Up Marden is then most likely to have meant ‘boundary hill’ to local inhabitants. In summary, then, we can describe the burial grounds at Apple Down as a pair of conversion-era cemeteries, located on a boundary hill, where cremation rites and burial were practiced, initially alongside inhumation, with cremation being discontinued when a burial began at a second cemetery, likely under the contemporary Christian influence that was motivating change both nearby and further afield.

My aim in discussing the landscapes of *Genesis A*, Apple Down, and other relevant material evidence, has not been to provide an archaeological context for the poem, or vice versa, but rather to show how both forms of evidence can be understood as part of an ongoing set of interactions between textual and material landscapes and human action within them. In doing this they form part of a continuum of conversations between people, places, things, and the narratives created around them that served to record, organise, and reorganise memories through their distinct ‘technologies of remembrance’.¹⁹ In what follows, with the shared world of *Genesis A* and Apple Down firmly in view, I aim to establish some of the ways in which this textual-material continuum might be understood within the cognitive archaeological approaches of Material Engagement Theory, and this framework be further adapted to include the study of textual sources.

Extended Minds, Bodies, and Borders

Though the constraints of space necessarily limit what can be said in a study of this length, I will begin by introducing the Extended Mind Thesis (EMT) and some of the broader debates within the field, before going on to outline the specific developments of Lambros Malafouris’ Material Engagement Theory (MET), which employs the concept of the *exogram*. In outlining this concept, I will show how both the cemetery landscape of Apple Down and the leaves of MS Junius 11 inked with *Genesis A* can be understood as exograms within the framework of MET. Taking the concept of the exogram one step further, I will suggest ways in which the existing cognitive archaeological framework of MET might be adapted to include textual evidence of the kind discussed here. I will outline how an *exogrammar* might be created as a means of carrying out research on textual and material sources, drawing on a set of ideas distributed across exograms. This intervention is not, then, intended as a refinement of existing work on the ‘mind’ in early medieval England,²⁰ nor as an expansion of work on cognitive approaches to texts and material culture in this period.²¹ Instead, it proposes to adapt an existing methodological framework (MET) to improve inter-/transdisciplinary approaches to questions that cut across disciplines.²²

¹⁹ Howard Williams develops the concept of ‘technologies of remembrance’ in this period in Williams (2006), building on its use in Jones (2003).

²⁰ See key works by Godden (1985); Low (2001); Lockett (2011); and Veldhuizen (2021).

²¹ Seminal work on cognitive approaches to Old English literature was undertaken by Antonina Harbus, and more recently by Daniel Donoghue, while a range of groundbreaking approaches is found in Miranda Anderson and Michael Wheeler’s edited volume *Distributed Cognition in Medieval and Renaissance Culture*. See Harbus (2012); Donoghue (2018); and essays in Anderson and Wheeler (2019).

²² This portion of the argument builds on case studies in Bintley (2020b); Bintley (Forthcoming a); Bintley (Forthcoming b).

Proponents of the Extended Mind Thesis (EMT) offer a framework for human mind that extends beyond the biological human brain, and the embodied human brain, to include things external to the body that are encountered by the human organism. This could, for example, include objects such as tools, other organisms, and architectural/environmental arrangements. This framework takes its lead from the works of Edmund Husserl, Martin Heidegger, and Maurice Merleau-Ponty; the latter, in his *The Phenomenology of Perception*, presents an oft-referenced but no less insightful example of how this might be understood using the thought experiment of the ‘blind man’s stick’ (Merleau-Ponty, 2010). This questions where our conception of a ‘mind’ might begin and end if an object such as the stick, external to the human brain-body, is essential to the workings of the mind, in this case ‘seeing’ what the blind man cannot. This was developed further in seminal work by Andy Clark and David Chalmers, who discussed forms of extended cognition in which the processes of mind are understood to extend beyond the body in this way to include other objects (such as tools), or which operate in conjunction with the brain-body so as to enable memory retrieval (Clark and Chalmers, 1998).²³ Since these early developments in the late 1990s, a number of studies and collective projects have worked to critique and refine EMT’s position (for examples, see Gallagher, 2005; Wheeler, 2005; Clark, 2007; Clark, 2008; and Adams and Aizawa, 2008).²⁴ A particular problem with this approach is the extent to which factors external to the embodied brain can be considered to have a direct impact on the workings of this model of mind, commonly referred to as cognitive ‘bloat’. As Sean Allen-Hermanson argues, in a critique of EMT, ‘a genuine mark of the cognitive needs to offer conditions that are jointly necessary and sufficient’ (Allen-Hermanson, 2013: 794). For some, it is easier to accept that a tool in my hand becomes a temporary part of my extended cognition than the wind whistling through the keyhole, the effects of solar flares, or the distant light of the star Betelgeuse. There is not space here to address the extents of this debate, which I mention here both to acknowledge some of the difficulties EMT has encountered, but also to point out that these are the sorts of questions concerning distance and proximity that specialists in the study of texts and material culture in this period are already familiar with in their own discrete research contexts. Geology, the water table, and climactic conditions may not be the *most* significant factors affecting the development and success of a settlement, for example, but they are nonetheless vital considerations for its inhabitants. Likewise, the libraries and networks of human and material knowledge fundamental to the education of an early medieval poet are not

²³ See also Clark (1997) and other contemporary studies such as Rowlands (1999) and Haugeland (1998).

²⁴ See also papers in Menary (2010); and more recently overviews of various forms of ‘4E cognition’ (i.e. embodied, embedded, enacted, or extended cognition) in Newen, de Bruin, and Gallagher (2018), especially Menary (2018) and Malafouris (2018).

solely responsible for the content of their work, but they are nevertheless indivisible from the broader contexts of its creation.

EMT has more recently been taken up and developed in a cognitive archaeological context by Lambros Malafouris, whose Material Engagement Theory (MET) is expounded most fully in *How Things Shape the Mind* (Malafouris, 2013). Both here and elsewhere, Malafouris uses the example of a potter producing a vessel on a wheel to illustrate a ‘cognitive ecology of pottery making’ dependent on the various elements at work, including the potter’s embodied human brain (neurons, muscles, sense organs), the affordances of the wheel, the properties of the clay being transformed into a pot, the typologies the potter follows in creating the pot, and the more general social and economic contexts in which the creation of pottery takes place (see Malafouris, 2013: 209–13; Malafouris, 2004: 59–60; Malafouris, 2008; and Gosden and Malafouris, 2015: 703–6). When we consider a pot in this way, then, we are examining not simply a ‘finished’ article, but what Malafouris describes as an ‘index and constitutive residual component’ of the potter’s extended mind—a mind constituted by the interaction between the embodied brain and objects external to the human (Malafouris, 2008: 22).

Malafouris’ MET makes use of a concept employed by other proponents of Extended Mind, first described by Merlin Donald in 1991 as an *exogram*: an external material analogue to the conceptual biological *engram* of human memory proposed by Karl Lashley in 1950 (see Donald, 1991: 313–24; and Lashley, 1950). An exogram is an ‘external memory record of an idea’ that serves an analogous function; when encountered by the embodied human brain, it has the capacity to ‘remember’ what the biological brain forgets (Donald, 1991: 314).²⁵ These ‘non-biological memory media’, as Donald would describe them nearly two decades later, could potentially include a range of different types of objects (inscribed or not) and assemblages (Donald, 2010: 71). Donald outlines the development of ‘generic exogram systems’ in human cultures in rough order of emergence (Donald, 2010: 72). Preceding the European Middle Ages, these included ‘significant objects, amulets, totems, masks, magical tokens’, then ‘transient and permanent iconography’, ‘crafted mnemonic devices’, ‘the built environment’, ‘painted and sculpted images’, ‘astronomical measuring devices’, and ‘trading tokens’ (Donald, 2010: 72). Moving into Antiquity and the early Middle Ages in Britain, though far earlier elsewhere, they would also include ‘early scripts for trade and crop administration’, ‘longer written records of crops, laws, edicts, genealogies’, ‘works of literature, poetry’, ‘mathematical and geometrical notations’, ‘architectural and engineering drawings, and ‘libraries and archives’ (Donald, 2010: 72). Though I will discuss them further below, the arrangement of burials and funerary

²⁵ See also important discussion in Sutton (2010: 189).

monuments, recording and remembering the processes of burial would here be included in conceptions of the built environment (and likely iconography and painted and sculpted images), while a work of poetry such as the *Genesis A* poem (written down in its manuscript context) would have been understood as a record of (divine) laws, edicts, and genealogies, as well as a work of literature.

One particularly significant advance in Malafouris' work is his treatment of the development and function of the written word, through a case study of Mycenaean Linear B tablets as exograms. The writing system Linear B, as he explains, emerged 'around the fifteenth century BC to serve the administrative (record keeping and accounting) demands of the gradually emerging Mycenaean palatial system' (Malafouris, 2013: 68). When these Linear B tablets began to be used by the Mycenaean as a means of record keeping, Malafouris explains, rather than acting as a means of extending the existing memory system, they 'brought about a radical change into the nature of the cognitive operations involved', effecting an '*extended reorganisation*' (emphasis Malafouris) that meant a Mycenaean reading these tablets was engaging in a new and 'different sort of cognitive behaviour' (Malafouris, 2010: 63). Practically speaking, then, a Linear B tablet can be understood as an exogram that formed part of the extended cognitive activities of its creator and reader. Rather than relying on the brain's internal memory to remember a set of accounts, the clay tablet inscribed with Linear B script would accomplish this for them. Significantly, in a way that is fundamentally different to the memory of the biological human brain, this external element is capable of being destroyed, modified, and altered by human action, and passed on to other humans to become part of *their* processes of extended cognition.

Objects, assemblages of objects, and inscribed objects can all, in this framework, be understood as exograms, and the case studies which have been the focus of this discussion are no exception. An individual burial in itself (and indeed its constituent objects) can be understood as an exogram: an external record created by a community that, consciously or otherwise, preserves a set of understandings about their relationship with the deceased. A cemetery full of burials, created over generations, forms a more complex exogram that in many cases will record changes in these understandings as they shift and develop over time. In the case of Apple Down, the break between the earlier mixed-rite cemetery, and the later inhumation cemetery, is thought to mark a defined shift in religious praxis: in this case, the two cemeteries together act as an exogram recording and reflecting this decisive change. A single leaf in a manuscript, or even a single line, can similarly be understood as an exogram: an external record of a genealogy, a law code, or a line of poetry, whether copied from an exemplar, noted from biological memory, or taken down as dictation. A manuscript is an exogram in its own right, made up of other exograms, just as a cemetery contains many graves. Thus MS Junius 11, home

to the composite *Genesis* poem, is an external memory record both of the work of its compilers (c. 965), and of the poets whose words were written down much earlier, likely in the late 7th or early 8th centuries in the case of *Genesis A*. As I have argued here, those leaves of Junius 11 which preserve the lines of *Genesis A* describing the Binding of Isaac are, like the cemeteries at Apple Down, external memory records of a shift in religious understanding and practice. Their composition took place later, of course, than the shift in burial practice at Apple Down; *Genesis A*, if penned in the period c. 685–725, is likely to have been written at some remove from personal experience of cremation.

With due consideration for their limitations, there is little disagreement that different forms of textual and material culture offer useful insights into the past, though there is less agreement about what should be privileged, and when. Understanding both textual and material forms of evidence as exograms, and as part of the reciprocal entanglements between the embodied human brain and the material environment, offers one way of bridging this gap. These exograms, whether they take the form of a field full of mortal remains, or a gathering of calfskins (trimmed, inked, and bound), emerge from the same continuum. Both are forms of material evidence engaged, inextricably, in feedback loops between humans and the environments in which they are embedded. For the purposes of investigating evidence which might be found across contexts traditionally thought of as archaeological, literary, historical, or art-historical (e.g.), which can be understood as exograms using MET, I have suggested employing the concept of an *exogrammar*, simply defined as a set of ideas distributed across one or more exograms.

Here I have identified one such exogrammar, distributed across one cemetery site and one poem, both considered (to a limited extent) in the broader contexts of death, cremation, burial, and borders. Practically speaking, the process of defining an exogrammar for analysis and discussion involves compiling a body of evidence in a way that will be familiar to those involved in inter- or transdisciplinary research. Exogrammar aims to refine these methods by reconstruing the approach to these bodies of evidence, which would be seen not as materials produced (consciously or unconsciously) as part of cultural processes enacted by embodied human minds *on* their environment, but as residual components of those minds in action. Importantly, though some exograms might end up contributing more significantly to an exogrammar, due to survival bias (for example), all would be understood as material components involved in the processes of mind. An exogrammar of hunting in a particular region, therefore, might draw on bodies of evidence including poetry, law codes, charters, wills, historical chronicles, hagiographies, tapestries, weapons, faunal remains, archaeobotanical evidence, toponyms, landscape archaeology, and manuscript illustrations. All would be understood as part of ongoing feedback loops between the human and the material environment. None could be misconstrued as solely offering abstracted commentary

on processes more tangible and concrete, and none could be accounted as containing a more significant level of transcendental insight on account of the quality of their artifice.

The extents of a researcher's exogrammar would be defined by the subject of study, and the (ever-problematic) nature of the evidence available. The range of possible evidence that might be brought to bear on any given topic, were we to range from the hammer in my hand to the influence of the star Betelgeuse (as above), could be endlessly entangled, and in this sense rhizomatic. Here an exogrammar faces the same challenges as cognitive bloat, in terms of where one might draw the limits of an external object's degree of entanglement in human cognition. Our sun is a distant star, not so distant as Betelgeuse, but suddenly and radically close to the earth when involved in the orientation of graves, buildings, or farms (for example). Likewise, distant constellations become a much more powerful presence in the daily lives of humans if, for example, they are viewed sincerely as having determined the personality traits of those born under their sign. In part, the use and value of an exogrammar lies in the admission that cognitive bloat, and a corresponding exogrammatical bloat, are contained and constrained by the boundaries of research. This is, of course, a familiar practical necessity, often born of the limits of researchers' practical expertise and the constraints of time, funding, and training. An exogrammar can offer the opportunity for a more-complete set of understandings drawn from these external memory records, but by the same stroke acknowledges the partiality and incompleteness of the available evidence.

What, then, would be the benefit of adopting this approach—why is it useful? In extending Malafouris' Material Engagement Theory and its inclusion of Donald's exograms, the approach to exogrammar described here offers a practicable application of the theory, and an adaptable working method for understanding a range of objects and assemblages as external memory records and residual components of extended human minds. Importantly, this also draws on, and draws in, bodies of written evidence, which in this framework are also understood as material sources. In this regard, it offers the potential for greater conceptual parity and equivalence across the materials customarily grouped into 'textual' and 'material' camps, both for those already engaged in inter-/transdisciplinary research, and for those who have hitherto supposed the gap between forms of evidence to be too great to accommodate practical comparative work. To those working more directly with developments in cognitive theory, cognition, and so on, the application of MET extended to draw on texts-as-materials offers further opportunities for the consideration of theory in practice. Study of the early Middle Ages in Britain may offer especially suitable territory for exploratory work of this kind, particularly given the substantial gaps in the written record that are, in part, the legacy of this temporal and geographical region's highly oral and differently-literate cultures.

Conclusions

I began this article with a case study of the Old English *Genesis A* and the cemeteries at Apple Down. The poem takes a detour from the biblical Genesis, leading readers on a more circuitous journey through wilderness and woodland, before ascending to a hilly or mountainous place on a border, where Abraham prepares to sacrifice his son and cremate his body on a burial pyre. This, I argued, represents a set of developments undertaken by a poet mindful of the experiences of audiences in early medieval England, and reflects a landscape they might have encountered in their own environment. In an archaeological context, a comparable example can be found in the conversion-era cemeteries at Apple Down in Sussex. This place, identifiable through the place name Marden as boundary hill (or hills), saw a mixed-rite cemetery of cremations and inhumations later succeeded by a smaller cemetery thought to represent a change in the grammar of burial reflecting a shift in the religious landscape, this being the conversion to Christianity.

If *Genesis A* was, as Fulk argues, composed in the late 7th or early 8th centuries, and thus within decades of the kind of shift in burial practice evident at Apple Down, both of these cultural records can be interpreted as complementary forms of evidence reflecting changing attitudes towards cremation, burial, and the physical landscapes and environments in which these activities took place. In this respect, both the poem in the manuscript and the arrangement of these cemeteries on the ground can be understood as exograms. These exograms, understood in this study through the lens of Material Engagement Theory, are external memory records of ideas originally held within the biological brains of early medieval people about how they should bury and commemorate their dead. Here, my aim has not been to claim anything like a direct relationship between Apple Down and *Genesis A*, but rather to demonstrate how a common store of ideas about landscapes of death and burial can be found distributed across these exograms. Here, and elsewhere, as an extension of MET to accommodate textual study and inter- or transdisciplinary work more broadly, I have referred to a set of ideas distributed across one or more exograms as an exogrammar. A framework of this kind, as I have argued, would offer an adaptable method of investigation across a range of disciplinary contexts in which forms of evidence as apparently disparate as poetry and burials would not be understood solely as ‘texts’ and ‘materials’, but, more equally, as residual components of embodied human minds engaged in an ongoing set of feedback loops with the material world they inhabited, and inhabit.

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The author has no competing interests to declare.

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