Research Article

Ways of death: cremation and belief in first-millennium AD Ireland

Patrick Gleeson[1,*] 🆔 & Rowan McLaughlin[2]

[1] Archaeology and Palaeoecology, Queen's University Belfast, UK
[2] Department of Scientific Research, The British Museum, UK
* Author for correspondence: ✉ p.gleeson@qub.ac.uk

Archaeological studies of belief, ideology and commemorative strategies in Ireland, and elsewhere in Europe, neglect the continuation of cremation far beyond the supposed fifth-century AD threshold for the shift to inhumation under the influence of Christianity. A database of radiocarbon dates from first-millennium AD Ireland permits the identification of new patterns in early medieval (AD 400–1100) mortuary practices, including a new phase of cremation. The authors discuss archaeological and historical implications to demonstrate how data-driven approaches can enhance and challenge established metanarratives. They also highlight serious methodological and interpretative issues that these data pose for current narrative frameworks, and their influence on post-excavation strategies.

Introduction

Archaeology is widely recognised as a powerful tool for assessing past social, religious and cultural developments. Diachronic accounts of mortuary practice, however, have always encountered considerable methodological and conceptual challenges, with poorly resolved data, chronological uncertainty and the predominance of explanatory frameworks borrowed from narrative history (e.g. migration, Christianisation) representing key issues. Nevertheless, Ireland presents a data-rich case study for addressing these problems, due to a boom in recent excavations that have produced a volume of radiocarbon dates capable of revealing radical new patterns that stand outside of, and in opposition to, traditional paradigms (see Armit *et al.* 2013; Hannah & McLaughlin 2019). The first millennium AD is particularly well attested in this dataset, encompassing a quarter of all radiocarbon-dated samples. While the dataset

offers an important empirical basis for questioning dominant views of burial rites and their socio-religious imperatives, its potential remains underexploited.

Specifically, evidence for human cremation across the first millennium AD in Ireland has accumulated. Despite recent syntheses (e.g. O'Brien 2020: 30–32), however, there has been little re-appraisal of general models and the basic principles narrating the evolution of burial rites; *a priori* assumptions linking burial, religion, ideology and commemoration have remained relatively static since the 1990s (O'Brien 1992, 2003, 2009, 2017, 2020; O'Sullivan *et al.* 2013: 320–21). This article identifies newly recognisable patterns in the radiocarbon data, reviewing their nature, and establishing a new chronology for the evolution of burial practices in Ireland. Here, we present a new model for how ideologies and commemorative strategies evolved within a crucial period of social flux and religious transformation in Northern Europe.

Archaeological background

The study of the dead in first-millennium AD Ireland has been transformed considerably due to an upsurge in new excavations, scientific dating of legacy material and new theoretical developments (e.g. Seaver 2011). Alongside the publication of large-scale, developer-led cemetery excavations (e.g. Corlett & Potterton 2010), two projects have contributed a step-change to the empirical basis of funerary archaeology: the *Breaking ground, finding graves* publication (Cahill & Sikora 2012), and the 'Mapping Death' project led by Elizabeth O'Brien (2020). The latter, in particular, provides a synthesis and transformative reappraisal that builds on, but also corrects, earlier scholarship (e.g. Raftery 1981; O'Brien 1990, 1992, 1993), presenting a new model for how burial evolved throughout the first millennium AD (O'Brien 2003, 2009, 2017). Despite presenting a firmer basis for dating change, with few exceptions (e.g. Ó Carragáin 2009; McGarry 2010), this wider interpretative framework has remained unchallenged.

It is generally agreed that cremation was the dominant burial practice in later prehistoric Ireland until the fourth century AD (McGarry 2008). Although a short phase of Iron Age crouched and flexed inhumation has been identified (McGarry 2008, 2010: 173; O'Brien 2009; Eogan 2012: 13–44), this was limited to a small number of high-status, exotic burials. O'Brien (2003, 2009, 2017) argues that crouched inhumation developed in Ireland due to influence from Britain, and that from the fourth century AD, a new rite of west–east, extended inhumation developed under influence from Roman Britain, before becoming dominant.

Significant variation more comparable to the diversity recognised elsewhere in early medieval Europe (Williams 2006; Price 2008; Petts 2009; Maldonado 2013), however, is now recognised within inhumation practices across Ireland (e.g. Seaver 2011). Extended inhumations can, for example, be found in simple dug graves, stone-lined cists, burials with pillow stones, and burials laid upon planks of wood (sometimes charred), or accompanied by prime cuts of meat, antler tine or burnt grain (O'Brien 2009, 2017, 2020: 58–131). Grave goods are rare and generally restricted to dress items representing a funerary costume or burial shroud, rather than material offerings. O'Brien (1999, 2003, 2020: 171–81) argues that some such examples of seemingly non-normative and/or 'furnished' burials were exotic or

'intrusive', representing individuals from northern or eastern Britain (i.e. 'Pictish' or 'Anglo-Saxon'). Subsequent isotopic research has often failed to confirm this theory, while also suggesting non-local origins for other burials accorded established, local and normative mortuary treatment (Cahill-Wilson *et al.* 2014; Cahill-Wilson & Standish 2016). Similarly, west–east extended inhumation in Britain has been shown to encompass a heterogeneous group of commemorative strategies that defy normative classifications, or specific ethnic or religious descriptors (Williams 2006; Petts 2009; Maldonado 2013). While more research is needed to clarify this evidence, specific burial practices can no longer be regarded as 'intrusive' within such ostensibly culture-historical frames of reference.

This diverse heterogeneity is increasingly evidenced in Ireland, particularly regarding the locus of burial. Inhumations are known from flat cemeteries that are sometimes highly organised, sometimes enclosed within ring-ditches or penannular enclosures, or inserted into older monuments (O'Brien 2009, 2017: 263–65, 2020: 58–102). Enclosed burial complexes seemingly proliferate *c.* AD 400–600, with a variety of associated activities (e.g. crop-processing) leading to their classification as 'cemetery-settlements' (Ó Carragáin 2009; O'Sullivan *et al.* 2013: 306–12). Some such complexes expanded over subsequent centuries, with further enclosures added to accommodate larger numbers. Until recently, evidence for cremation after AD 400 was limited (McGarry 2008; O'Sullivan *et al.* 2013: 285), and it is only with the development of methods for radiocarbon-dating cremated bone (Lanting & Brindley 1998) that the number of early medieval cremations otherwise assumed to be prehistoric has become apparent. Correspondingly, using both focused analysis and synthetic, cross-cultural and diachronic studies, cremation has been theorised globally as a complex and refined mortuary technology (e.g. McKinley 2013; Kujit *et al.* 2014; Cerezo-Román *et al.* 2017). Nevertheless, a general consensus persists in Irish and early medieval European scholarship that post-conversion cremation is isolated, pagan and exceptional, rather than commonplace.

Few in Ireland have challenged the idea that west–east extended inhumation became the dominant mode of burial in the fifth to sixth centuries, becoming widespread by AD 600 (McGarry 2010: 174; O'Sullivan *et al.* 2013: 285 & 320–21). Following trends in British scholarship, O'Brien (2003, 2009) has been reticent about assigning ideological labels such as 'pagan' or 'Christian' to specific inhumation practices, while insisting that cremation remained 'pagan' (e.g. O'Brien 2020: 32). The earliest radiocarbon dates for west–east extended inhumation, however, span the later third to early sixth centuries. We cannot be certain, therefore, that this practice originated before AD 400. Consequently, some scholars suggest an origin for west–east extended inhumation in conversion-period Ireland that more closely aligns to Christianising contexts (Ó Carragáin 2009; McGarry 2010: 196–97; Gleeson 2017: 307–308). O'Brien, however, remains insistent (2017: 261, 2020: 49) on a Late Roman origin—distinct from the Romano-Christian practices—of northern and western Britain, in particular. Instead, she suggests that evidence for 'Christianisation' is stronger from the later seventh century, a time when 'ancestral' cemeteries fell out of use due to churchyards becoming the focus of burial. The archaeological evidence for this, however, is limited, and post-excavation bias must be considered: stratigraphically early burials tend to be dated to establish foundation dates, with phasing in many cases determined arbitrarily through changes in burial orientation or overall site morphologies (see various examples in Corlett & Potterton 2010).

Similarly, few large-scale excavations have occurred within ecclesiastical precincts. The small eighth-century radiocarbon dataset from these sites provides little indication of contemporaneous expansion in inhumation burial. A growing number of non-ecclesiastical sites with large numbers of dated burials show continuity in burial tradition spanning AD 800–1200 and beyond (e.g. Lehane *et al.* 2010). Nevertheless, it appears that non-ecclesiastical cemeteries were generally not *established* after the eighth century—a factor potentially indicative of wider socio-cultural trends, such as changing group identities or demographic decline (Gleeson 2017; Hannah & McLaughlin 2019). While other explanations are possible, this overview clearly highlights major empirical issues with established models and the culture-historical paradigms surrounding them. There remains much to unravel about changing contexts of burial and the role of mortuary theatre in religious transformation. Holistic analyses of radiocarbon data can help to resolve this, with cremation chronologies as one key example.

Methodology

We collated radiocarbon data from various published sources, 'grey' literature and online databases (e.g. Chapple 2019; Mapping Death n.d). Dates pertaining to cremation were identified by reviewing excavation reports and other metadata, with background data for Ireland provided by Hannah and McLaughlin (2019) and for Britain by Bevan *et al.* (2017). Radiocarbon data were calibrated using IntCal20 (Reimer *et al.* 2020). As our interest lies in modelling the temporal frequency distribution of cremation events as a continuum without prior knowledge of their distribution in time, we use kernel density estimation (KDE; e.g. Bronk Ramsey 2017). Using Monte Carlo simulation (the *MCdensity* algorithm; see McLaughlin 2019) and a Gaussian kernel with a 50-year bandwidth, our KDE models estimate the temporal frequency of dates from cremations, while simultaneously expressing calibration uncertainty.

Results

Table S1 in the online supplementary material (OSM) catalogues the radiocarbon dates spanning 200 BC–AD 1200 for directly dated cremated bone, or grain found within cremation material. This includes 27 dates before AD 400 and 27 dates for the period AD 300–1200, with 22 of the latter on cremated human bone from seven sites (Figure 1): Carrickmines (Dublin); Mullaghbane, Annaghilla and Armalughey (Tyrone); Ask (Wexford); Dún Aonghasa (Galway); and Prumpelstown Lower (Kildare). Additionally, cremations from six further sites are probably early medieval, given their direct association with dated material. These comprise five examples of grain in pits containing cremated human bone at Castletown-Tara (Meath); one from Knoxpark (Sligo), where animal bone stratified below cremated bone was dated to AD 559–663 and AD 716–971; charcoal from a cremation at Glebe South (AD 232–531); and charcoal associated with cremated bone within a ditch at Ardsallagh 2 (AD 643–774). Similarly, cremations associated with a ring-cairn at Furness (Kildare) were dated to AD 430–591 (Grogan 1984: 304), while several cremations were stratigraphically contemporaneous with eighth- to tenth-century AD inhumations at the Rath of the
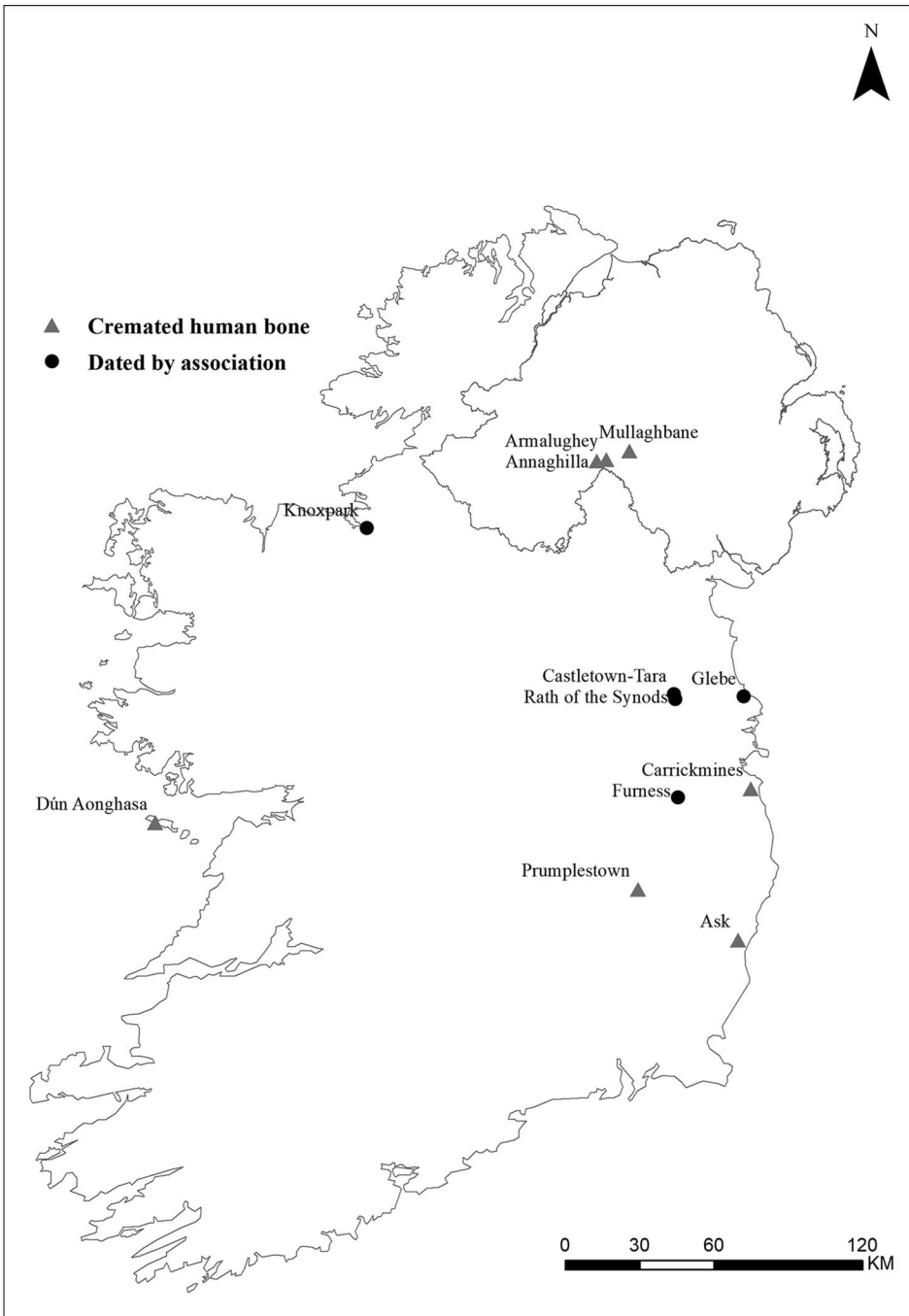
© The Author(s), 2021. Published by Cambridge University Press on behalf of Antiquity Publications Ltd

Figure 1. Map of dated early medieval cremations (map by the authors).

Synods, Tara (burials V and W: Grogan 2008: 42–53 & 142–43; Mapping Death n.d). This gives a minimum of 35 probable cremations spanning AD 300–1200 at 13 widely dispersed sites. Of these, two are perhaps unsecure (Tara, Furness), two samples come from charcoal and could therefore suffer from the old wood effect (Ardsallagh, Glebe South), and only one (Armalughey) certainly pre-dates AD 400. Date ranges from Glebe South, Mullaghbane, Prumplestown and Carrickmines span the fifth to sixth centuries.

It should be noted that although cremations at many sites are as yet undated, analysis reveals two largely discrete periods of peak visibility: an Iron Age tradition 200–1 BC and an early medieval peak during the seventh to eighth centuries (Figure 2). A degree of continuity, however, may be postulated, as some cremations clearly date to the centuries between both 'phases', while others are later (e.g. Mullaghbane, dated to AD 265–535, 709–950 and 1028–1158). No significant breaks seem apparent, although relative differences in visibility might be reflected if changes in depositional contexts occurred over time. Equally, a discontinuity of <25 years would not be clearly visible in radiocarbon data, especially given the relatively small sample size.

Figure 3 compares the frequency of radiocarbon-dated inhumations and cremations for Ireland. To assess these data, we should consider early medieval cremations (35 from 13 sites) against total dated inhumations (409 from 113 sites). While dated inhumations are clearly more numerous, considering taphonomy and a lack of systematic dating of cremations (see below), this evidence is significant. Even with only 35 probable examples of cremation, the frequency across 13 sites is comparable to the earlier, Late Iron Age cremation peak.
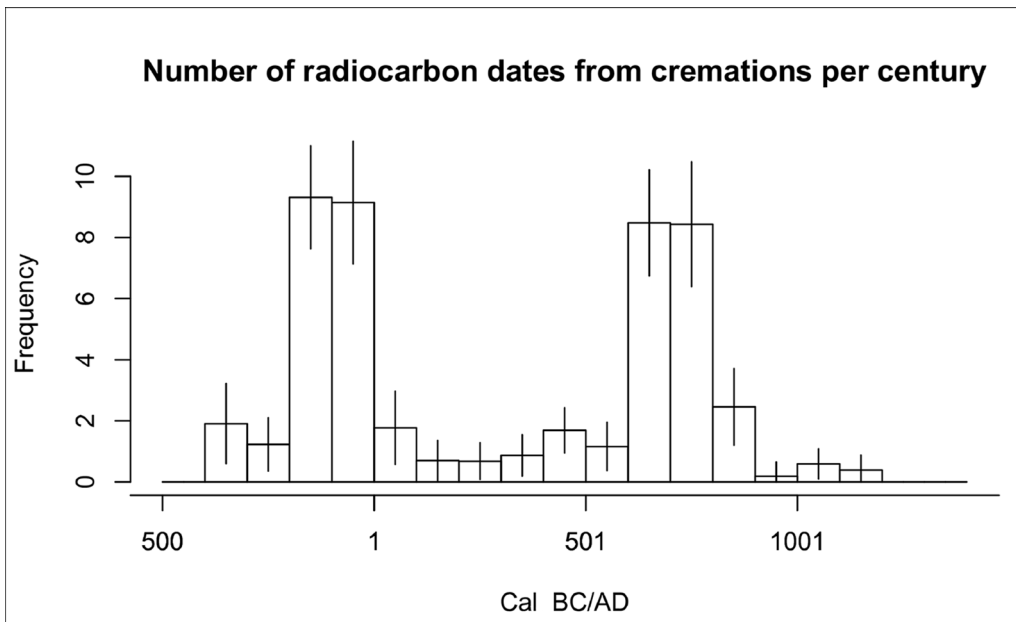

Figure 2. Number of radiocarbon dates from cremations in Ireland per century. The error bar represents uncertainty introduced by laboratory error and calibration, calculated through resampling from the posterior probability distribution of radiocarbon dates (McLaughlin 2019) (figure by the authors).
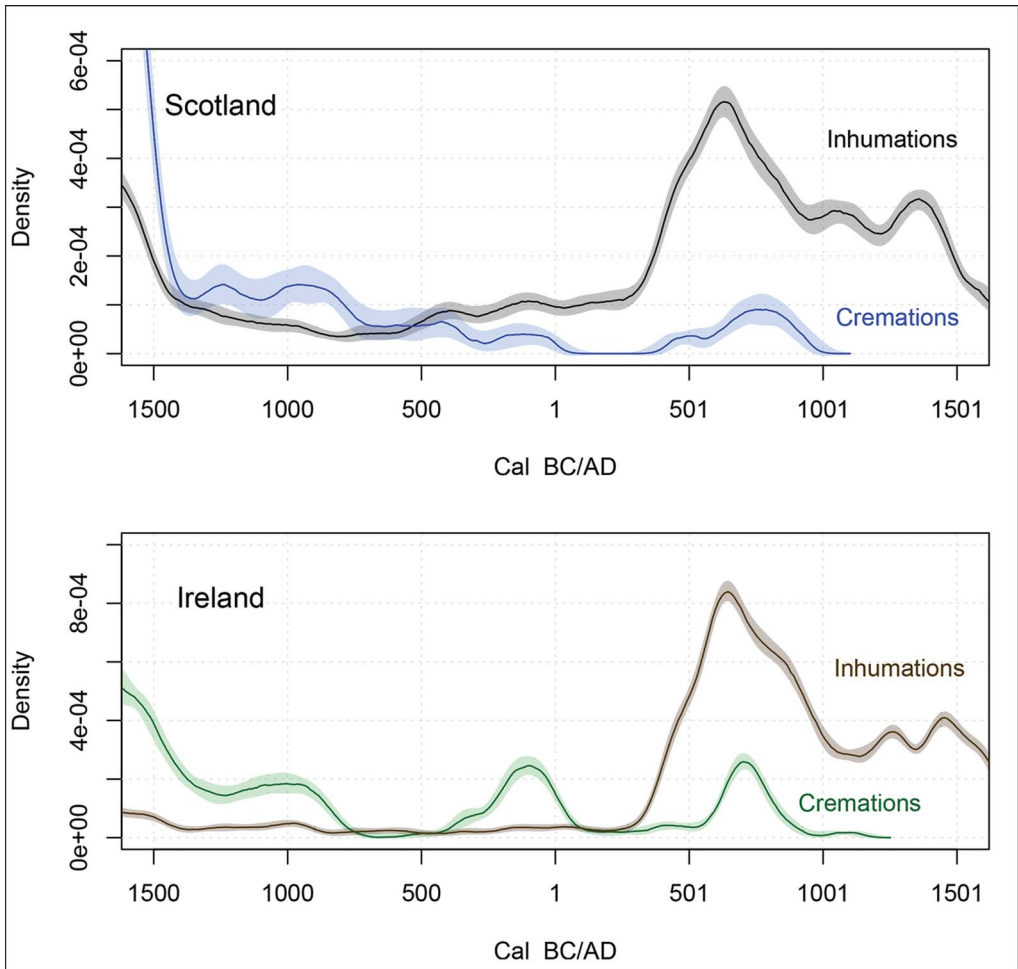
Figure 3. Graph showing the relative frequency of radiocarbon-dated inhumation and cremation burials in Scotland and Ireland (figure by the authors).

Indeed, there are more dated cremations *c.* AD 400–1200 than for AD 1–400, despite cremation being widely regarded in Ireland as the principal archaeologically detectable mode of burial AD 1–400.

The KDE model presents these data as a continuous time series, and compares the temporal frequency distribution of cremations from Ireland with those from Scotland and Britain more generally (Figures 3–4). The available data suggest a peak for cremation in Ireland AD 688–725 (at 95 per cent certainty), before declining through the eighth to ninth centuries. A minor fifth-century peak is interesting, but not statistically significant. Irish cremation begins to peak when the practice was no longer dominant in early medieval Britain (Figure 4). There are, however, several isolated but important Scottish examples of cremation. These include: Sanaighmhor, Islay (AD 257–536); Stromness, Shetland (AD 390–600); Balnauran of Clava, Inverness (AD 250–900; AD 600–980); Rhiconich, Sutherland (AD 400–640);
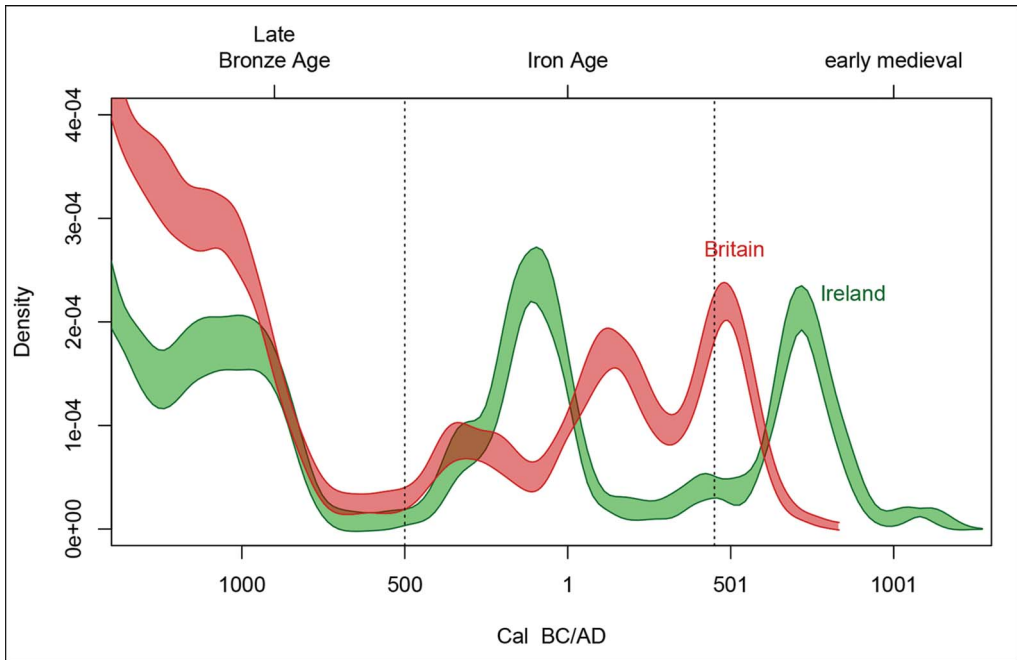
Figure 4. Kernel density estimates for the distribution of radiocarbon dates of cremations from Britain and Ireland, calculated using a Gaussian kernel and bandwidth of 50 years (figure by the authors).

Forteviot, Perthshire (eighth to ninth centuries); King's Cross, Arran (mid ninth-century coin); Ardnave, Islay (AD 721–980); Baliscate, Mull (AD 725–967); and Cleigh, Lorn (AD 541–771). At least five further sites have cremations that are not directly dated, but where an AD 400–1100 date seems likely: Machrins; Hallow Hill, Fife; Hermisgarth; Ostro Broch, Orkney; and Easterton, Moray (Sheridan 2005; Maldonado 2011: 87 & 106–108, 2013: 11–12, 2017: 337; Ó Ríagáin 2016: 156–60). While many of these examples have problematically long date ranges, a seventh- to ninth-century phase stands out. In general, the KDE analysis reveals (Figure 3) that the cremation traditions in early medieval Scotland are contemporaneous with those in Ireland.

Other potential sites in Ireland

In Ireland, a survey of Mapping Death (n.d) and Excavations.ie (2020) identifies a further 33 sites where cremations have been excavated. Of these, 22 are assumed to be prehistoric, despite the presence of early medieval material. While ten of these are probably Bronze or Iron Age—as suggested by associated finds or indirect radiocarbon dates—only four cases have direct radiocarbon dates to support this assumption. Relatively large and complex sites where cremation has been identified alongside early medieval material, and where a later prehistoric origin may no longer be justified, include the following locations: Bellinstown; Cahircalla-More; Carrigaline Middle; Cush; Cappydonnel Big, Carbury Hill; Ardreigh; Balrigan 1; Corbally 2/3; Cross; Grange 2; Haynestown; Holdenstown 1; Kilree 4; Kiltullagh 2; and

Ratoath (Mapping Death n.d; Excavations.ie 2020). At many sites (e.g. Kiltullagh and the Rath of the Synods), cremations associated with early medieval inhumations were assumed to be prehistoric solely because cremation was perceived to be pre-Christian (i.e. pre-AD 400) (McCormick *et al.* 1995; Grogan 2008). Both practices, however, were used contemporaneously at seventh- to eighth-century Annaghilla (Dunlop & Barkley 2016: 126–31). This demonstrates a precarious situation in which *a priori* assumptions that cremation terminated during the fifth century AD are no longer tenable.

The context of cremation has also been debated at many sites. Kelly (2009) identifies Knoxpark in Sligo as a Viking *longphort*, while Stevens (2012: 46) implies similarly cultural/ethnic interpretations at Ask. Radiocarbon dating, however, demonstrates that these cremations pre-date the Viking Age (animal bone from below cremated remains at Knoxpark, AD 559–663 & AD 716–971; cremated bone from Ask, AD 650–772 & AD 660–794), and instead they align with the seventh- to ninth-century peak identified above. In Atlantic Scotland, cremated human bone at Ardnave, Baliscate, King's Cross and Cleigh, has also tentatively been proposed as representing Scandinavian-style burials within a colonial context (Ó Ríagáin 2016). Except for Cleigh, this is plausible. The radiocarbon date ranges, however, agree with Forteviot (eighth to ninth centuries) and elsewhere, as well as the peak now recognisable across Ireland, making such assertions unnecessary.

Discussion

Within established, traditional paradigms, seventh- to eighth-century Irish society was firmly Christianised, with churches widespread during a 'golden age' of ecclesiastical art, metalwork, sculpture and illuminated manuscript production. The widespread transformation of burial that began *c.* AD 400 saw west–east extended inhumation become the dominant rite by *c.* AD 600, with the foci of inhumation shifting from rural cemeteries to churchyards from the eighth century (O'Brien 2020: 57). Notwithstanding, whether one regards inhumation as being 'Christian' from the fifth century, or only from the seventh to eighth centuries, on the basis of the abovementioned evidence, such models are equivocal. Evidence is lacking for a shift in inhumation burial to churchyards from *c.* AD 700, while a significant upsurge of cremation as a viable and appropriate burial practice throughout Ireland occurred at this point. This challenges assumptions about changes in inhumation practices embodying the culmination of 'slow-burn' Christianising trajectories. One may choose to interpret the data for cremation as evidence of persistent paganism—perhaps even a reaction against Christianisation. Alternatively, cremation could be regarded as being indicative of plague, whereby communities burned the bodies of victims, or cremated the dead to facilitate transportation of a cadaver for burial (e.g. Oestigaard 2013).

The Black Death probably influenced changing patterns of dated inhumations in the fourteenth century (Figure 3). Yet, for our earlier peak in cremations, persistent paganism or a reaction to disease seem insufficient explanations when considered within wider landscape and social contexts. Cremations do not cluster or correlate with any single period or specifically documented outbreaks of plague. Although a more detailed future analysis of the treatments afforded cremated remains is required, remains were still carefully treated and meaningfully deposited.

Many seventh- to eighth-century cremations were placed near churches, in a period when Ireland had one of Europe's densest concentrations of churches (Ó Carragáin 2009). Within the major royal centre of Tara, cremations and inhumations at Castletown-Tara and the Rath of the Synods were contemporaneous with renewed activity (Figure 5: V & W; Grogan 2008: 141–48) and the use of the church of Tech Cerpan, which was probably located in the adjacent St Patrick's churchyard. Immediately to the south, a new monumental focus was constructed on the hillcrest with the figure-of-eight-shaped complex of Tech Cormaic and An Forrad during the seventh to ninth centuries AD (see Gleeson 2017: 305). As with some high-status inhumations (O'Brien 2017: 263–65), cremations were inserted into prehistoric monuments elsewhere, such as at the major Scottish royal centre Forteviot (Maldonado 2013: 11–12, 2017: 337; Ó Ríagáin 2016). At Annaghilla, Mullaghbane and other sites, cremation occurred alongside inhumation, albeit with notable spatial differences. At Annaghilla,
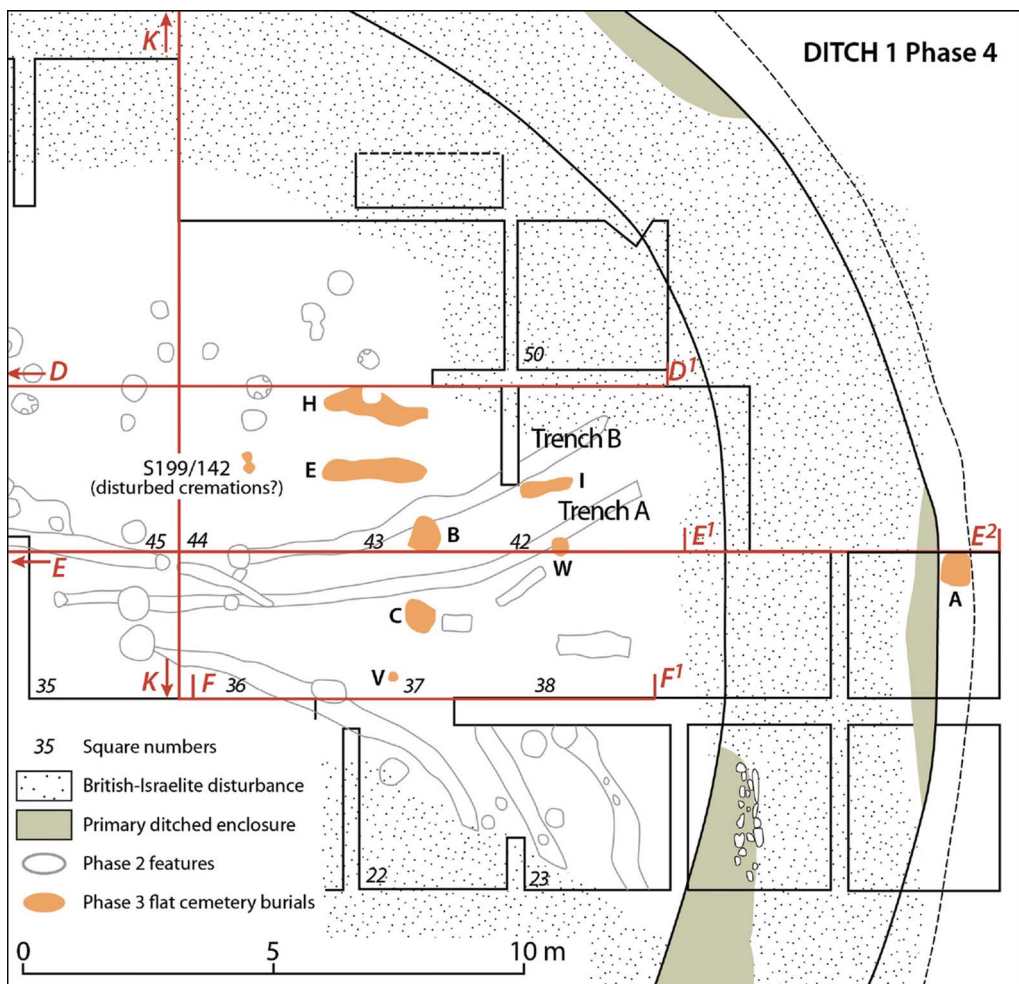

Figure 5. Plan of the Rath of the Synods burials showing the locations of inhumation and cremation burials (after Grogan 2008: fig. 3.5) (figure by the authors).

inhumation was confined largely to the complex's south-east corner, while cremated remains were deposited in graves within this cemetery, in an earlier ring-barrow and in postholes and gullies of buildings (Figure 6; Dunlop & Barkley 2016: 126–31). These buildings are unlikely to be domestic structures, as habitation evidence at comparable complexes is equivocal (Ó Carragáin 2009; Gleeson 2017). Rather, they may illuminate an emerging class of purpose-built architecture within mortuary contexts (Walsh 2011), perhaps used for cultic, bodily display, transformation or excarnation purposes.

Alongside cremation, these facets of funerary rituals have yet to be explored systematically. During the seventh to ninth centuries, disarticulated remains from different individuals were
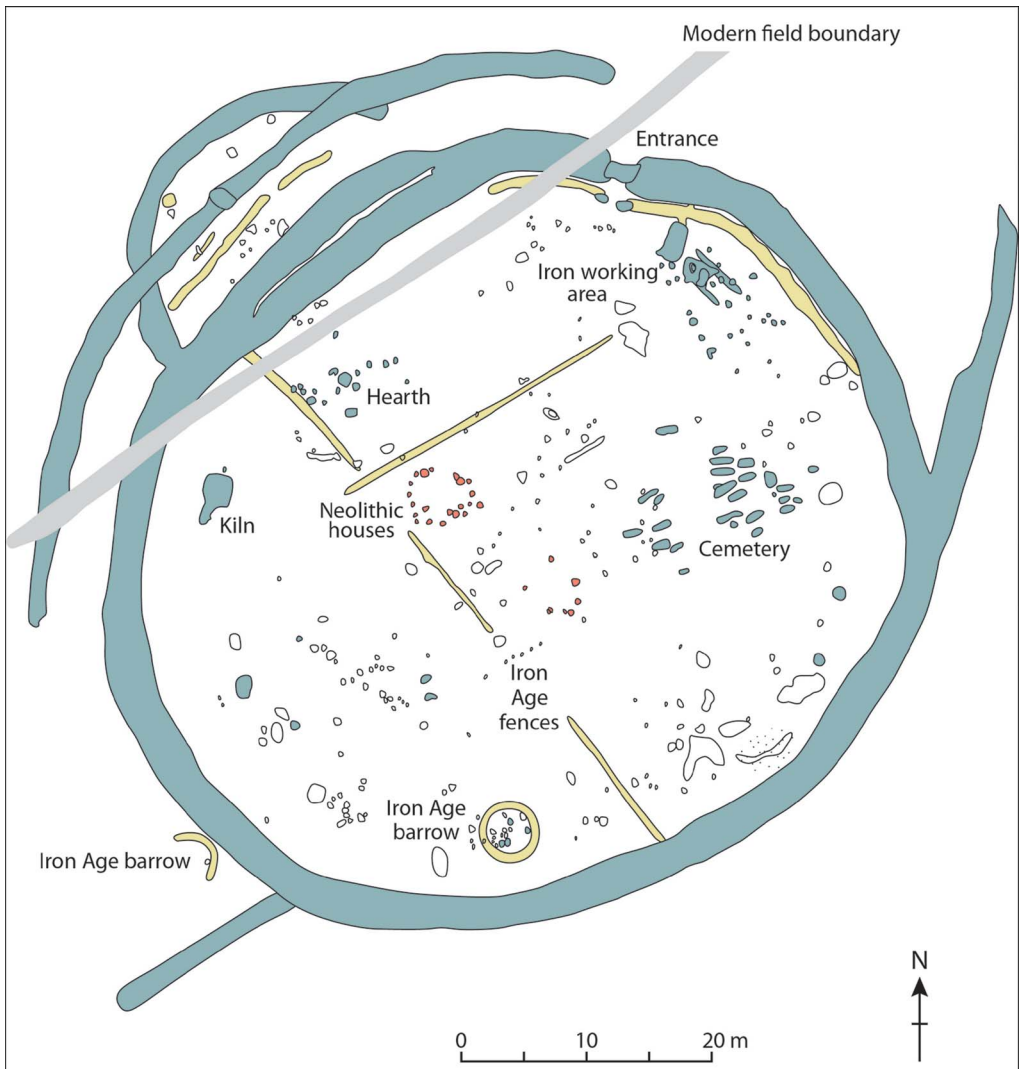

Figure 6. Plan of the complex at Annaghilla, showing the location of the cemetery and key features (after Dunlop & Barkley 2016: 126) (figure by the authors).

combined in cave burials at Cloghermore (Kerry) (Connolly *et al.* 2005: 165) or deposited in passage tomb chambers at Knowth (Meath) (Eogan 2012: 45–82), suggesting that excarnation was practised. Excarnation in seventh-century Scotland (Cille Pheadeair: Maldonado 2013: 12) further underlines a greater diversity in burial practices in post-conversion contexts than previously assumed. Moreover, the scale of cremation further challenges narratives of a dominant—even formalised and regulated—west–east extended inhumation rite. Indeed, one of the most striking examples of cremation is from Ask. Here, an early medieval penannular enclosure, which was delimited by a palisade, contained seven pits with cremated remains, including one with a gilded copper-alloy cross-shaped mount (Figures 7–8). Although the highly fragmented cremated remains precluded positive identification as human, this unique find was interpreted as a pagan burial of Viking Age date (Stevens 2012: 46). Two radiocarbon samples (AD 660–794 and AD 650–772; O'Brien 2020: 31), however, now demonstrate cremation at Ask that pre-dates the Viking Age. While
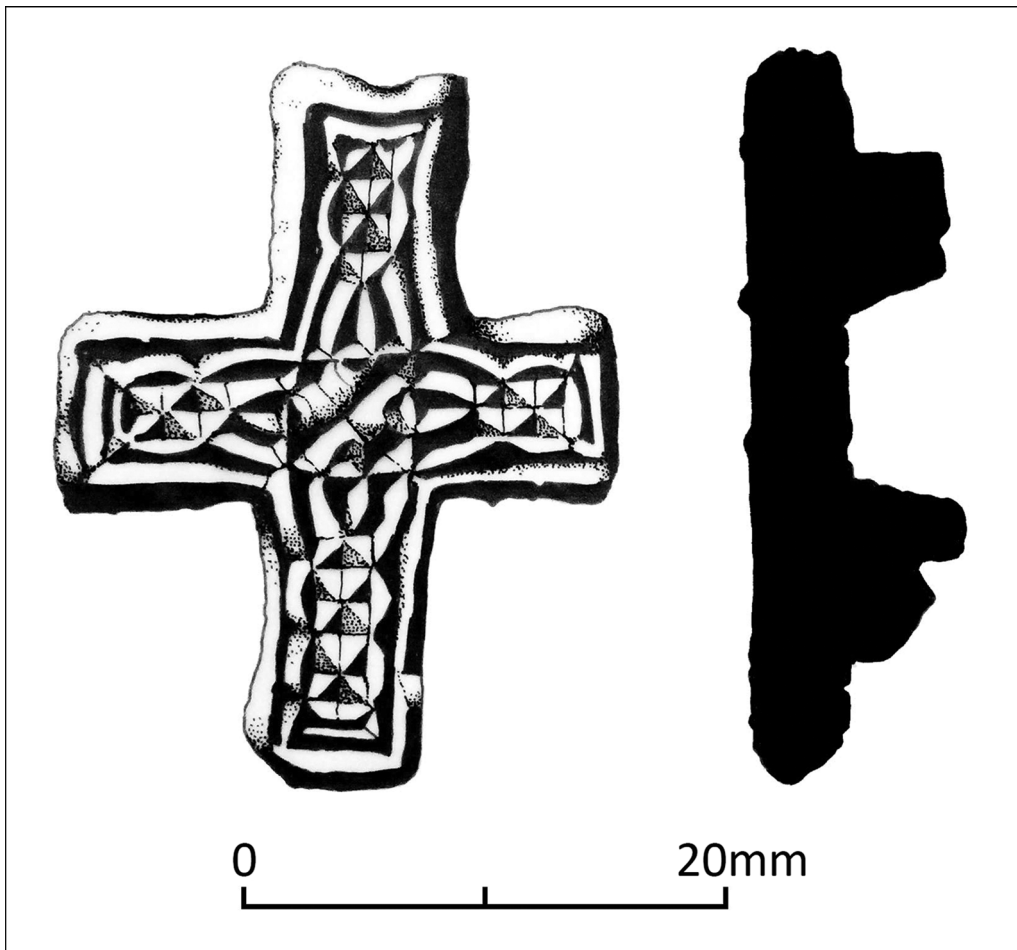

Figure 7. *Drawing of the cross-shaped mount from a cremation burial at Ask (figure by P. Stevens).*

© The Author(s), 2021. Published by Cambridge University Press on behalf of Antiquity Publications Ltd
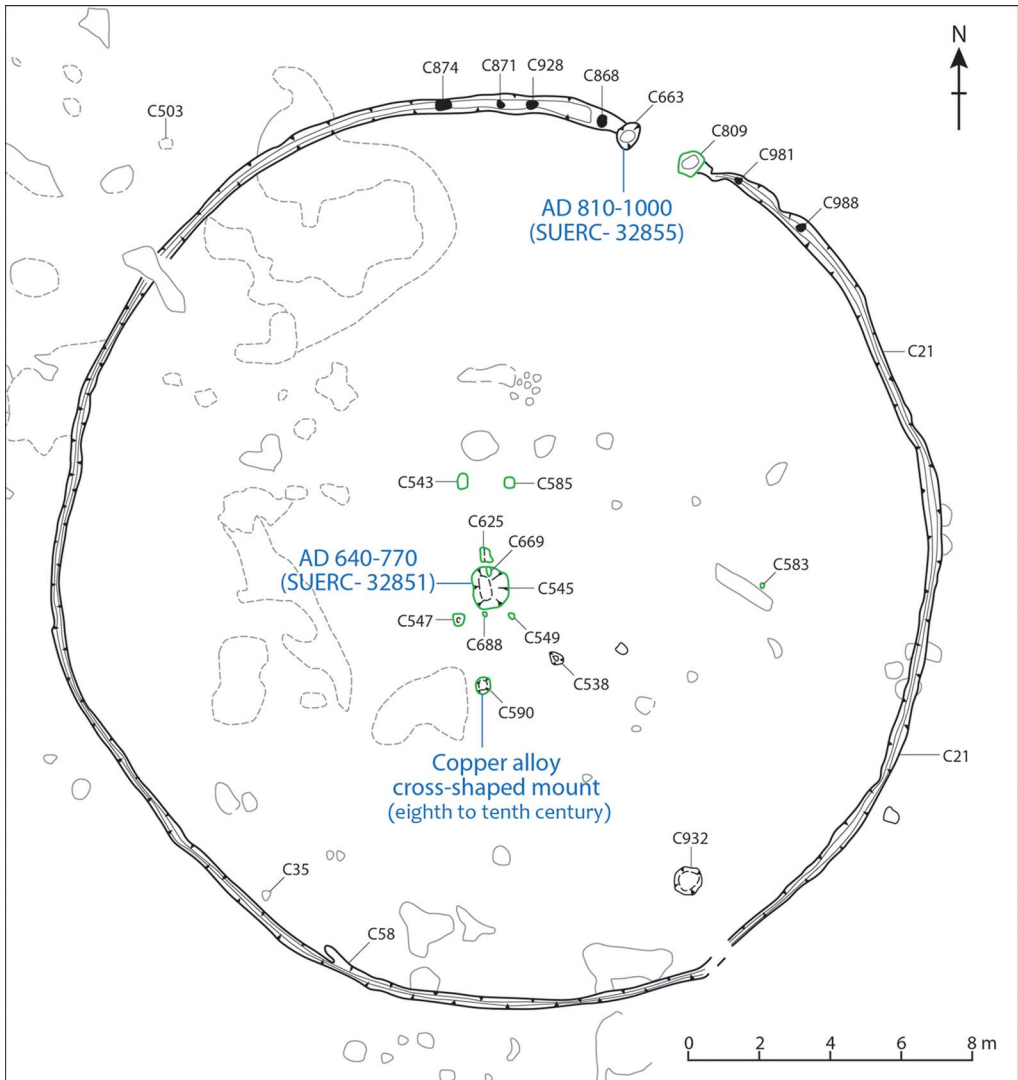
Figure 8. Plan of the Ask cemetery showing cremation burials and the enclosure (after Stevens 2012: illustration 6) (figure by the authors).

cremation is common in Scandinavia during this period (Price 2008), it is rare in Viking Age colonies. In Ireland or Britain, Viking cremation is only certain at Heath Wood (Richards *et al.* 2004). Of course, we cannot rule out that some cremations were colonial expressions of Scandinavian practices (Kelly 2009; Ó Ríagáin 2016). Yet such ethnically centred attributions seem unnecessary when these examples are situated within established local and regional practices.

The Ask cremations and associated cross-shaped mount suggest caution against dichotomous oppositions between 'pagan' and 'Christian' burial practices. The iconography and

symbolism of the cross suggest an intentional and meaningful expression for communities performing the cremations, which was arguably in no way incongruent with Christian belief. If so, this expression has profound implications for wider European scholarship. Both an implicit and explicit assumption of such scholarship is that cremation was antithetical to Christian belief in the inviolability of the corpse, which is required to facilitate resurrection on the Day of Judgement (e.g. Lucy 2000: 121; Meaney 2003: 238). Although the development of west–east inhumation practices, or the presence of grave goods, have more recently been separated by scholars from the respective spread of Christian belief or declining paganism, cremation often remains steadfastly regarded as 'pagan'. Cremation (with remains often placed in cinerary urns, e.g. at Spong Hill), for example, was commonplace in fifth- to sixth-century England, alongside inhumation. Both practices could be furnished, but because they largely differed from previous late Roman practices in terms of accompanying materials, containers or rites, their appearance was commonly regarded as evidence of pagan 'Germanic' belief and ethnicity (Williams 2002; Hills 2003; Meaney 2003: 238).

Despite recent analyses convincingly demonstrating that cremation and inhumation were complementary practices (Williams 2014; Nugent 2017), the seventh-century decline in British cremations is often regarded as a barometer for declining paganism and a chronological marker of conversion (Geake 1997; Meaney 2003; Hoggett 2007; for recent chronologies, see Hines & Bayliss 2013; Lucy & Hills 2013). Yet the recognition of cremation within later seventh- or early eighth-century conversion-period contexts, such as St Mary's, Southampton (Stoodley, in Birbeck 2005: 76), demonstrates the problems with such assumptions. Indeed, within continental scholarship, such culture-historical ethnic and religious assumptions are illustrated by seventh- to eighth-century burials that combine inhumation and cremation (Wamers & Périn 2013: 179). Under Frankfurt Cathedral, for example, the lavishly furnished eighth-century inhumation of a young female was accompanied by the cremated remains of a child (Wamers & Périn 2013: 161–81). Despite both burials being covered by a sheet bearing a woven gold cross, the cremation—as at Ask—was interpreted as an expression of persistent pagan belief (Wamers & Périn 2013: 172–76). Lippok (2017) encourages critical reflection on these assumptions, identifying a corresponding corpus of cremation burials from contexts and periods in the Low Countries where a Christian ideological milieu seems likely. Lippok (2017: 37–38) also critically assesses documentary source material that seemingly regulated burial practices, arguing that there is little evidence that cremation was either antithetical to Christian belief or widely prohibited by the Church.

Recognising this has profound implications for archaeologies of religious transformation and commemorative strategies across Europe. Related, however, are issues surrounding standards of recording and the absence of specialist analysis when cremated remains are encountered on excavation sites (McKinley 2013). The direct dating of cremated remains from all contexts by either stratigraphic relationships or radiocarbon sampling must be a future priority. Cremation was clearly more common across the Irish Sea region than currently acknowledged. It is almost certainly still under-represented in Ireland and Scotland, and one may wonder whether it has been similarly overlooked because of dominant culture-historical frameworks in Wales, south-western Britain or elsewhere. In Ireland, cremations could be represented by small deposits of cremated bone within contexts not conventionally regarded as

funerary (i.e. postholes, gullies, spreads). In some instances, cremated human bone was associated with deposits of burnt animal bone, charcoal or grain (e.g. Castletown and Knoxpark).

The chronological patterning in these examples and the nature of their deposition makes it unlikely that the material derives from accidental burning of remains disturbed from within funerary contexts. Grave goods are known but rare, with their deposition also occurring in pits or spreads, as well as with conventional cremation burials. Equally, intentional deposits of cremated remains within buildings—perhaps embodying mortuary functions—complement these recognised practices. Thus, if we recognise these deposits as meaningful and intentional, this raises issues regarding whether: (i) cremated human bone on early medieval sites has been mistaken for burnt animal bone; (ii) the bone is generally overlooked within burnt and mixed deposits (e.g. 'midden' material); or (iii) burnt spreads/soils within settlement contexts could represent funerary pyres. Pyres are extremely rare, but have been identified at Cloghermore Cave (Connolly *et al*. 2005), and could perhaps have been placed within ditches (for Iron Age examples, cf. McGarry 2008). Clearly, therefore, acknowledging cremation as a widespread early medieval funerary practice poses conceptual, interpretative and methodological issues that must be addressed in future analysis, recording and post-excavation strategies.

Conclusions

In identifying cremation as a crucial but neglected aspect of early medieval burial practice, we suggest that established narratives of burial in relation to ethnic and religious identities are problematic. These new data have implications for wider European scholarship and assumptions regarding religious transformation and commemorative strategies. Cremation must now be acknowledged as a meaningful element of diverse mortuary technologies that remained viable long after conversion and Christianisation. This is not to say that all cremation burials must be understood as 'Christian', and nor should we exclude the possibility that they are, in fact, 'pagan'. Arguably, such categories are unhelpful. That cremation intensified in periods of plague may be one plausible scenario, albeit perhaps less probable, given its frequency at sites such as Mullaghbane from the third to twelfth centuries AD. Similarly, the contexts of deposition considered above indicate that these interpretations are inconsistent with the data. In some cases, it is highly probable that cremation was being conducted by Christian communities. Indeed, most striking is the evidence for the contemporaneous use of cremation and inhumation at the same sites. The use of these rites together, at the same sites, allowed these communities to implement diverse commemorative strategies through these acts of mortuary theatre. At least for Ireland, previous discussions have been biased towards the analysis and interpretation of extended inhumation between AD 400 and 1100, with evidence for cremation and other diverse mortuary strategies (e.g. excarnation) often dismissed or ignored.

The data presented here open up new avenues for studying ways of death—namely the fluid relationship between belief, commemorative strategies and burial practices during a crucial period of religious transformation and social differentiation. Moreover, they also highlight a fundamental problem, whereby post-excavation strategies have been biased by

culture-historical paradigms. This poses significant methodological issues that must be rectified in future analyses.

Acknowledgements

Funding statement

Supplementary material

To view supplementary material for this article, please visit https://doi.org/10.15184/aqy.2020.251

References

Armit, I., G. Swindles & K. Becker. 2013. From dates to demography in later prehistoric Ireland? Experimental approaches to the meta-analysis of large ^{14}C data-sets. *Journal of Archaeological Science* 40: 433–38. https://doi.org/10.1016/j.jas.2012.08.039

Bevan, A., S. Colledge, D. Fuller, R. Fyfe, S. Shennan & C. Stevens. 2017. Holocene fluctuations in human population demonstrate repeated links to food production and climate. *Proceedings of the National Academy of Sciences of the USA* 114: E10524–31. https://doi.org/10.1073/pnas.1709190114

Birbeck, V. 2005. *The origins of mid-Saxon Southampton: excavations at the Friends Provident St Mary's Stadium 1998–2000*. Salisbury: Wessex Archaeology.

Bronk Ramsey, C. 2017. Methods for summarizing radiocarbon datasets. *Radiocarbon* 59: 1809–33. https://doi.org/10.1017/RDC.2017.108

Cahill, M. & M. Sikora. 2012. *Breaking ground, finding graves*. Bray: Wordwell,

Cahill-Wilson, J. & C. Standish. 2016. Mobility and migration in Late Iron Age and early medieval Ireland. *Journal of Archaeological Science Reports* 6: 230–41. https://doi.org/10.1016/j.jasrep.2016.02.016

Cahill-Wilson, J., C. Standish & E. O'Brien. 2014. Investigating mobility in later Iron Age Ireland. *Discovery Programme Reports* 8: 127–50.

Cerezo-Román, J., A. Wessman & H. Williams (ed.). 2017. *Cremation and the archaeology of death*. Oxford: Oxford University Press.

Chapple, R. 2019. *Catalogue of radiocarbon determinations & dendrochronology dates*. Belfast: Oculus Obscura.

Connolly, M., F. Coyne & L. Lynch. 2005. *Underworld: death and burial in Cloghermore Cave, Co. Kerry*. Bray: Wordwell.

Corlett, C. & M. Potterton (ed.). 2010. *Death and burial in early medieval Ireland*. Bray: Wordwell.

Dunlop, C. & J. Barkley. 2016. *Road to the West: a road to the past, volume 2*. Belfast: NAC.

Eogan, G. 2012. *The archaeology of Knowth in the 1ˢᵗ and 2ⁿᵈ millennium AD*. Dublin: Royal Irish Academy.

Excavations.ie. 2020. Database of Irish excavation reports. Available at https://excavations.ie (accessed 11 December 2020).

Geake, H. 1997. *The use of grave-goods in conversion-period England*. Oxford: Archaeopress. https://doi.org/10.30861/9780860549178

Gleeson, P. 2017. Converting kingship in early Ireland: redefining practices, ideologies and identities, in N. Edwards, M. Ní Mhaonaigh & R. Flechner (ed.) *Transforming landscapes of belief in the early medieval insular world and beyond*: 287–318. Turnhout: Brepols. https://doi.org/10.1484/M.CELAMA-EB.5.113594

GROGAN, E. 1984. Excavation of an Iron Age burial mound at Furness. *Journal of the Kildare Archaeological Society* 16: 298–316.

– 2008. *The Rath of the Synods, Tara, Co. Meath: excavations by Seán P. Ó Ríordáin*. Bray: Wordwell.

HANNAH, E. & R. MCLAUGHLIN. 2019. Long-term archaeological perspectives on new genomic and environmental evidence from early medieval Ireland. *Journal of Archaeological Science* 106: 23–28.
https://doi.org/10.1016/j.jas.2019.04.001

HILLS, C. 2003. *The origins of the English*. London: Duckworth.

HINES, J. & A. BAYLISS. 2013. *Anglo-Saxon graves and grave-goods of the 6th and 7th centuries AD: a chronological framework*. Leeds: Maney.

HOGGETT, R. 2007. Charting conversion: burial as a barometer of belief, in S. Semple & H. Williams (ed.) *Anglo-Saxon studies in archaeology and history 14: early medieval mortuary practices*: 28–37. Oxford: Oxbow.
https://doi.org/10.2307/j.ctvh1dq9h.9

KELLY, E. 2009. Re-evaluation of a supposed inland promontory fort: Knowxpark, Co. Sligo-Iron Age fortress or Viking longphort?, in G. Cooney, K. Becker, J. Coles, M. Ryan & S. Sievers (ed.) *Relics of old decency*: 485–97. Bray: Wordwell.

KUJIT, I., C. QUINN & G. COONEY (ed.). 2014. *Transformation by fire: the archaeology of cremation in cultural context*. Tucson: University of Arizona Press.

LANTING, J. & A. BRINDLEY. 1998. Dating cremated bone: the dawn of a new era. *Journal of Irish Archaeology* 9: 1–8.

LEHANE, J., M. MUNIZ-PEREZ, J. O'SULLIVAN & B. WILKINS. 2010. Three cemetery-settlement excavations in Co. Galway at Carrowkeel, Treanbaun and Owenbristy, in C. Corlett & M. Potterton (ed.) *Death and burial in early medieval Ireland:* 139–56. Bray: Wordwell.

LIPPOK, F. 2017. The pyre and the grave. Unpublished MPhil dissertation, University of Leiden.

LUCY, S. 2000. *The Anglo-Saxon way of death*. Sutton: Stroud.

LUCY, S. & C. HILLS. 2013. *Spong Hill IX: chronology and synthesis*. Cambridge: McDonald Institute of Archaeological Research.

MALDONADO, A. 2011. Christianity and burial in late Iron Age Scotland, AD 400–650. Unpublished PhD dissertation, University of Glasgow.

– 2013. Early medieval burial in Scotland: new questions. *Medieval Archaeology* 57: 1–34.

– 2017. Barrows and conversion of the landscape at Forteviot, Perthshire, in N. Edwards, M. Ní Mhaonaigh & R. Flechner (ed.) *Transforming landscapes of belief in the early medieval insular world and beyond*: 319–50. Turnhout: Brepols.

Mapping Death. n.d Mapping Death database. Available at http://www.mappingdeathdb.ie (accessed 11 December 2020).

MCCORMICK, F., G. CRIBBIN, M. ROBINSON, D. SHIMWELL & E. MURPHY. 1995. A Pagan-Christian transitional burial at Kiltullagh. *Emania* 13: 89–98.

MCGARRY, T. 2008. Burials of later prehistoric Ireland. Unpublished PhD dissertation, University College Dublin.

– 2010. Late Pagan and early Christian burials in Ireland: some issues and potential explanations, in C. Corlett & M. Potterton (ed.) *Death and burial in early medieval Ireland*: 173–86. Bray: Wordwell.

MCKINLEY, J. 2013. Cremation: excavation, analysis and interpretation of material from cremation-related contexts, in S. Tarlow & L. Nilsson-Stutz (ed.) *The Oxford handbook of the archaeology of death and burial*: 142–72. Oxford: Oxford University Press.

MCLAUGHLIN, R. 2019. On applications of space-time modelling with open-source ^{14}C age calibration. *Journal of Archaeological Method and Theory* 26: 479–501.
https://doi.org/10.1007/s10816-018-9381-3

MEANEY, A.L. 2003. Anglo-Saxon Pagan and early Christian attitudes to the dead, in M. Carver (ed.) *The cross goes north*: 229–41. Woodbridge: Boydell.

NUGENT, R. 2017. Two of a kind: conceptual similarities between cremation and inhumation in Early Anglo-Saxon England, in J. Cerezo-Román, J. Wessman & H. Williams (ed.) *Cremation and the archaeology of death*: 72–87. Oxford: Oxford University Press.

O'BRIEN, E. 1990. Iron Age burial practices in Leinster: continuity and change. *Emania* 7: 37–42.

– 1992. Pagan and Christian burial in Ireland during the first millennium AD: continuity and change, in N. Edwards & A. Lane (ed.) *The early medieval church in Wales and the West*: 130–37. Oxford: Oxbow.

– 1993. Contacts between Ireland and Anglo-Saxon England in the seventh century. *Anglo-Saxon Studies in Archaeology and History* 6: 93–102.

– 1999. *Post-Roman Britain to Anglo-Saxon England: burial practices reviewed*. Oxford: Archaeopress.

– 2003. Burial practices in Ireland, first to seventh centuries AD, in J. Downes & A. Ritchie (ed.) *Seachange: Orkney and Northern Europe in the Late Iron Age, AD 300–800*: 62–72. Balgavies: Pinkfoot.

– 2009. Pagan or Christian? Burial in Ireland during the 5th to 8th centuries AD, in N. Edwards (ed.) *The archaeology of early medieval Celtic churches*: 134–54. Leeds: Maney.

– 2017. From burial among the ancestors to burial among the saints: an assessment of some burial rites in Ireland from the fifth to eighth centuries AD, in N. Edwards, M. Ní Mhaonaigh & R. Flechner (ed.) *Transforming landscapes of belief in the early medieval insular world and beyond*: 259–86. Turnhout: Brepols.

– 2020. *Mapping death: burial in Late Iron Age and early medieval Ireland*. Dublin: Four Courts.

Ó CARRAGÁIN, T. 2009. Cemetery settlements and local churches in pre-Viking Ireland, in J. Graham-Campbell & M. Ryan (ed.) *Irish/Anglo-Saxon relations before the Vikings*: 239–61. London: British Academy. https://doi.org/10.5871/bacad/9780197264508.003.0015

OESTIGAARD, T. 2013. Cremations in culture and cosmology, in S. Tarlow & L. Nilsson-Stutz (ed.) *The Oxford handbook of the archaeology of death and burial*: 497–510. Oxford: Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199569069.013.0027

O'RÍAGÁIN, R. 2016. Emotion and colonialism: building affective ties in contested landscapes. *Archaeological Review from Cambridge* 31: 144–73.

O'SULLIVAN, A., F. MCCORMICK, T. KERR & L. HARNEY. 2013. *Early medieval Ireland, AD 400–1100: the evidence from archaeological excavations*. Dublin: Royal Irish Academy. https://doi.org/10.3318/978-1-908996-29-9

PETTS, D. 2009. Variation in the British burial rite: AD 400–700, in D. Sayer & H. Williams (ed.) *Mortuary practices and social identities in the Middle Ages*: 207–21. Exeter: University of Exeter.

PRICE, N. 2008. Dying and the dead: Viking Age mortuary behavior, in S. Brink & N. Price (ed.) *The Viking world*: 257–73. London: Routledge.

RAFTERY, B. 1981. Iron Age burials in Ireland, in D. Ó Corráin (ed.) *Irish antiquity*: 173–204. Cork: Tower.

REIMER, P.J. *et al.* 2020. The IntCal20 northern hemisphere radiocarbon age calibration curve (0–55 cal kBP). *Radiocarbon* 62: 725–57. https://doi.org/10.1017/RDC.2020.41

RICHARDS, J., P. BESWICK, J. BOND, M. JECOCK, J. MCKINLEY, S. ROWLAND & F. WORLEY. 2004. Excavations at the Viking barrow cemetery at Heath Wood, Ingleby, Derbyshire. *The Antiquaries Journal* 84: 23–117. https://doi.org/10.1017/S0003581500045819

SEAVER, M. 2011. Back to basics: contexts of human burial on Irish early medieval enclosed settlements, in S. Cronan, E. Danaher & M. Stanley (ed.) *Past times, changing fortunes*: 113–29. Dublin: NRA.

SHERIDAN, A. 2005. An early historic steatite urn from Orkney: new information from an old find. *Archaeologia Aeliana* 34: 158–67.

STEVENS, P. 2012. Burial and ritual in early medieval north Wexford: new evidence from Ask, in *New routes to the past*: 35–47. Bray: Wordwell.

WALSH, F. 2011. Seeking sanctuary at Kilmainham. *Archaeology Ireland* 25(2): 9–12.

WAMERS, E. & P. PÉRIN. 2013. *Königinnen der Merowinger: Adelsgräber aus den Kirchen von Köln, Saint-Denis, Chelles und Frankfurt am Main*. Frankfurt: Schnell und Steiner.

WILLIAMS, H. 2002. 'The Remains of Pagan Saxondom'? Studying Anglo-Saxon cremation practices, in S. Lucy & A. Reynolds (ed.) *Burial in early medieval England and Wales*: 47–71. Leeds: Maney.

– 2006. *Death and memory in early medieval Britain*. Cambridge: Cambridge University Press.

– 2014. A well-urned rest: cremation and inhumation in early Anglo-Saxon England, in I. Kujit, C. Quinn & G. Cooney (ed.). *Transformation by fire: the archaeology of cremation in cultural context*: 93–118. Tucson: University of Arizona Press.