<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>A reassembly of the monumental fragments in Dowth townland and their significance as an integral part of the prehistoric numinous precinct of Brú na Bóinne, Co. Meath.</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

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INTRODUCTION

This article, intended as the first of two, presents a reassessment and reinterpretation of some of the surviving and oft-times overlooked, or unrecognised, prehistoric archaeological remains in Dowth townland. These sites and monuments predominantly date from between the middle Neolithic and the early Bronze Age, though a number of other features are potentially related to later prehistoric activity. The influencing factors behind the siting of the focal passage tombs of Dowth, Newgrange and Knowth, towards the creation of a more clearly defined numinose precinct, are addressed. The location of these sites, in turn, had far-reaching implications for the subsequent layout and development of the late Neolithic/early Bronze Age monumental landscape. Far from ignoring the presence of pre-existing passage tombs, the later monumental additions appear to have been deliberately integrated into the fabric of the extant funerary and ritual landscape in a way that suggests continuity in the thread of ritual tradition and religious belief over the course of the greater part of a thousand years.

The extent and limits of the Brú na Bóinne UNESCO World Heritage Site were defined largely by the spatial distribution of its more sizeable, durable and celebrated archaeological monuments, and most especially the focal passage tombs of Newgrange, Knowth and Dowth (Smyth 2009). The majority of the surface features in and around this area, however, have been either ploughed out or ploughed smooth over the years, leaving only a very fragmentary, often disarticulated, visual picture of the true limits of this remarkable archaeological landscape (Stout 2002, 174–82). Much more of this picture has yet to be discovered beneath the blanket of plough-zone disturbance.

Of the three focal passage tombs, Dowth (ME020–017) is often perceived in the public consciousness as the poor relation of Newgrange and Knowth, both of which have been subject to extensive scientific excavation and the glare of public attention in recent decades (Figs 1 and 2; Table 1). Similarly, the detailed survey of Dowth tumulus undertaken by O’Kelly and O’Kelly (1983) has been largely

The Journal of Irish Archaeology Volume XXIV, 2015 19–49
Dowth’s perceived lowly status is reinforced still further by the fact that the shuttle bus service from the Interpretative Centre currently visits only two sites, Newgrange and Knowth. Perhaps, in time, this too will change.

The core area of the World Heritage Site, surrounded by a buffer zone, occupies a relatively compact area of rich, undulating farmland overlying a geology dominated by Carboniferous limestone (Stillman and Sevastopulo 2005, 53–4; Stout 2002, 3–5). It is neatly contained within ‘the bend of the Boyne’, lying some 5km east of Slane, Co. Meath, and 7km west of Drogheda, Co. Louth. It encloses an area of c. 3,300ha, of which approximately 495ha lie within the townland of Dowth. The boundaries of this townland are framed by the River Boyne to its east and south (with the exception of the diminutive townland of Glebe, occupying a block of land stretching between the medieval manorial remains and the river) and by its tributary, the Mattock, to the north–west (Fig. 1). Dowth abuts the townlands of Proudfootstown to the north-east and Newgrange and Balfeddock to the west.

A broad, elongated, shale-capped glacial ridge oriented west-south-west/east-north-east runs the length of Dowth townland and extends beyond its eastern border into the adjacent townland of Newgrange. The great passage tomb stands prominently on the crest of the eastern end of this ridge, at the very centre of the townland. This pronounced glacial ridge is flanked by two similarly aligned, though less conspicuous, ridges. The western extremities of these parallel ridges, to its north and south, provide the elevated vantage points for the significant passage tomb concentrations in the townlands of Newgrange and Knowth respectively. Collectively, these three ridges and the river floodplains to the south comprise the land contained within the ‘bend of the Boyne’ (Fig. 2).
Dowth makes an interesting case-study. The interwoven strands of prehistoric and historical archaeologies bear testament to the unique social, cultural and political significance of this place over the course of several thousand years, right up to the present day. The prehistoric monuments of Dowth, similar to those of the greater Brú na Bóinne area, consist primarily of a dispersed, though by no means random, scattering of passage tombs, barrows, mounds, embanked enclosures and linear earthworks, in addition to a standing stone and ‘stone circle’ (sadly, no longer extant) (Fig. 1; Table 1). The surviving prehistoric monuments at Dowth, of course, are likely to represent only a small fraction of those that once populated this exceptional place. The human interventions of historic times, however, have had a more telling impact on the townland and its surroundings. The early historic settlement pattern, the once-thriving Anglo-Norman manor nestled in the shadow of the great mound and the more recent impositions of Dowth demesne—which brought about enormous reordering of the landscape during the eighteenth and nineteenth centuries—have all left their imprint (Fenwick, forthcoming). The successive evolution of the social, political and religious perceptions of this dynamic landscape can be read in the generations of building and rebuilding, in the modifications to access and communication, and in the changes in landholding and

<table>
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<tr>
<th>SMR no.</th>
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tenure over the centuries. These have all played their part in the formation, layout and progressive transformation of the greater Brú na Bóinne landscape as we perceive it today.

THE PASSAGE TOMB LANDSCAPE

The great megalithic tumulus of Dowth, containing two passage tombs (north and south), is among the earliest known archaeological monuments to have been built in the townland, and its commanding location on the eastern summit of the ridge ensured that it would remain a focal landmark for subsequent human activity over the course of several millennia (O’Kelly and O’Kelly 1983). This passage tomb, like its fellow monuments of Newgrange and Knowth, was clearly designed to be a permanent and very visible expression of cultural cohesion, religious belief and social power within, and far beyond, the confines of the bend of the Boyne.

It is a curious fact, however, that these three ‘focal’ passage tombs were not amongst the first erected at the bend of the Boyne and therefore, from the outset, were not the central sites around which later ‘satellite’ tombs were arranged. It would appear instead that these monuments were built towards the end of an extended sequence of passage tomb construction. This corresponds to phase III of a four-phase development of the Brú na Bóinne passage tomb complex as proposed by Cooney (2000, 153–8)—a simplification of the remarkably insightful six-stage developmental sequence of passage tomb development in Ireland advanced by Sheridan (1985–6, 17–27). In accordance with this, Hensey (2015) identifies the particularly large and complex passage tombs as the latest expression of their class—his type 3 of a threefold chronological development of passage tombs in Ireland.

There is a demonstrably complex inter-relationship between Knowth, Newgrange and Dowth and the smaller tombs in their immediate surroundings. Many of the smaller tombs at Knowth, for instance, were built prior to the erection of the largest tumulus (passage tomb 1), though a small number of significant and similarly complex tombs also appear to have been built subsequent to it (Eogan 1984; Cooney 2000, 115–16;
Cooney *et al.* 2011; Schulting *et al.*, forthcoming). More intriguing, however, is the suggestion that the final monumental configuration of Knowth passage tomb 1 was the result of two distinct phases of development (1B and 1C) following the razing of an earlier passage tomb, or tombs (1A), to clear the ground to make way for the new site (Cleary and Eogan, forthcoming). The newer tomb (1B), containing two impressive chambers, cruciform to the east and undifferentiated to the west, appears to have recycled at least some of the building materials and structural stones (many bearing decoration) from the fabric of pre-existing tombs. This monument, in turn, was substantially enlarged and its passageways extended to envelop what had gone before within the mantle of a more massive tumulus encircled by 127 kerbstones (1C). This phase, of course, would also have necessitated the removal or remodelling of some of the extant nearby tombs (e.g. passage tomb 16) to accommodate its finalised massive form (Eogan 1998). A similarly complex sequence of building phases seems to have occurred at Newgrange, where there is evidence to suggest that its cairn conceals traces of an earlier turf-built mound subsumed largely within the northern sector of its delimiting kerb (O’Kelly 1982, 92, 128; Lynch 2014, 23–4).

Based primarily on O’Kelly and O’Kelly’s (1983) detailed survey, Eogan (2009) proposes that the great passage tomb at Dowth may also have been constructed in more than one phase and suggests the possibility that three separate mounds, built in sequence, may ultimately have been incorporated into its western flank. He argues that the curious annex to the southern (right-hand) recess of the northern tomb’s cruciform chamber is part of an earlier passage tomb, though Herity (1974, 30) explained this oddity as a change of mind on the part of the tomb architects to have been a separate, free-standing, tumulus in its own right, built prior to the construction of the present mound. The chronological relationship between the northern and southern tombs, however, remains largely a matter of speculation. So too is the source of the vast bulk of material needed to build the cairn, but perhaps the broad shallow hollows and irregular pits occupying the southern end of the adjacent field, some 60–120m to the south-east, might provide the answer.

It is a puzzling feature of Dowth that such a large cairn covers two (or three) relatively diminutive passage tombs within its western sector, with the vast bulk of its mass seemingly devoid of internal structures (Fig. 3, PTN and PTS). Herity (1974, 34) has postulated the existence of an as-yet-undiscovered tomb entrance at an incurring of the surrounding kerb at the north-eastern sector. Bergh (1995, 126) further speculates that such a tomb might be aligned to the rising sun of the midsummer solstice and, if so, would complement the alignment of the southern tomb, whose chamber is apparently illuminated by the setting sun of the winter solstice (Moroney 1999).

Given the evidence above, it might very well be the case that the great passage tombs of Newgrange, Knowth and Dowth were constructed simultaneously, or closely consecutively, as part of a single grand scheme intended to bind together the previously dispersed passage tombs distribution of Brú na Bóinne into a more coherent, unified ensemble (see Smyth 2009, 117–29; Schulting *et al.*, forthcoming). Though Dowth has yet to be independently dated, it is notable nonetheless that all three of these monuments fall into Hensey’s (2015, 95–6) type 3 category of passage tomb construction, which he tentatively ascribes to the centuries between approximately 3200 and 2900 BC. Moreover, these three tombs are of roughly equal size (c. 80m in diameter) and all stand in conspicuously elevated vantage points in order to articulate a triangulation of intervisibility across the length of the extended passage tomb cemetery (Fig. 2). It is notable, however, that they each have distinctly different aspects and, perhaps more significantly, all command attention from different parts of the surrounding landscape and river valley—concepts explored in detail in relation to the passage tombs of Cuil Irra, Co. Sligo, by Bergh (1995, 130–3), for example.

Detailed visibility analysis in relation to the Brú na Bóinne area has also been undertaken as part of the Boyne Valley Landscapes Project, but the results as presented are somewhat inconclusive (Megarry 2010, 50–79). Computer simulations aside, it is evident that Knowth dominates the landscape to the west and is clearly visible against the skyline on ascending the River Boyne from the direction of Slane. Similarly, Newgrange presents its façade, with what was originally a symmetrical array of two smaller passage tombs to either side (O’Kelly *et al.* 1978; Cooney 2000, 158), towards the sweeping curve of the river floodplain to its south and the range of undulating hills on the opposite side of the river. The location of Dowth, however, is quite different in one key respect. Unlike the more focused ‘directed visibility’ of Knowth and Newgrange, Dowth seems to command a ‘general visibility’ to the wider landscape (perhaps on account of its greater height, c. 72m OD) and a more ‘restricted visibility’ within its local context of the bend of the Boyne. Somewhat conversely, Sir William Wilde (1849, 204) commented that the builders of Dowth chose ‘a
Fig. 3—An electrical resistance grey-scale image of the field to the immediate east of Dowth passage tomb superimposed over a surface-shaded model generated from lidar data. In addition to selected features bearing labels, the north and south passage tombs are outlined in blue, the souterrain is outlined in green, and kerbstones and other large boulders are outlined in red. The electrical resistance survey was conducted using a Geoscan RM85 instrument with electrode a-spacing of 1m. Individual readings were taken at 1m intervals along parallel north-south transects 1m apart. The resulting image was generated from a total of 12,283 individual readings of electrical resistance. (© Lidar data reproduced courtesy of the Discovery Programme, the Heritage Council and Meath County Council.)
spot from whence could be obtained one of the noblest prospects of Meath’. Unfortunately, the view to and from the great mound today is substantially obscured by surrounding stands of trees and hedgerows, contrary to the obvious intention of the original tomb-builders. It is possible using GIS, nonetheless, to establish that the Irish Sea, some 14km to the east, is visible from the summit of Dowth (Fig. 4). It is interesting, too, to note that the mound would also have been a very clearly visible landmark from the sweeping curve of the River Boyne and its flood-plains to the south of Newgrange.

Of more significance, however, is the fact that the mound would have stood out in stark profile against a narrow window in the skyline on navigating upriver along the intertidal estuary and approaching the first looping bend in the River Boyne at Oldbridge/Townley Hall (Fig. 5). It would appear, therefore, that Knowth and Dowth were deliberately positioned to act as visual beacons heralding the entry to ‘the bend of the Boyne’ to those approaching it from upriver (from the west) or downriver (from the east) respectively. Newgrange, accordingly, functioned as a visual keystone between the two, dominating the vista from the river valley to its south. The desired result, it would seem, was to bind together and define more clearly the spatial and perceptual limits of the extended passage tomb cemetery. In effect, it marked the creation of a great ominous precinct framed by the sweeping curve of the River Boyne. In order to realise this grand plan, the precise placement, or imposition, of these great tumuli in the ritual landscape was crucial, and required careful forethought and planning. It is little wonder, therefore, that it was necessary to subsume some of the earlier passage tombs under the mantle of these massive focal monuments in order to achieve this objective. If the premise, as outlined above, is accepted as true, it must stand as an example of Neolithic landscape design on a truly monumental scale.

Notwithstanding the various excavations undertaken at Dowth—the mid-nineteenth-century RIA-sponsored excavations by Frith (O’Kelly and O’Kelly 1983, 141–4; Harbison 2007; Herity 1974, 248–50), the further investigations by Deane (1886–7, 64) on behalf of the Commissioners of Public Works and the more scientifically based, smaller-scale excavations conducted by Leask (1932–4) and more recently by Lynch (1990)—the phasing of construction and the spatial relationship of the various passage tomb components that constitute the great mound at Dowth must remain somewhat speculative in the absence of
firmly established stratigraphical contexts and absolute dating evidence. The relationships, in turn, between this tumulus and the other related monumental features within the townland and throughout the wider Brú na Bóinne area also present interpretational challenges for the very same reason, and, of course, in the knowledge that we are only aware of a certain proportion of these early sites and monuments. Some of these remain visible as low-relief earthworks, while others survive below the plough-zone horizon as ‘invisible’ subsurface features, detectable only through remote sensing techniques. A great many others, however, have simply been erased permanently from the archaeological record. Even where features or sites survive, the difficulty posed in attempting to place these into an appropriate monument classification is considerable.

Other than the great mound (ME020-017), the National Monuments Service (NMS) has positively identified only one other passage tomb in the townland of Dowth (ME020-013/site J), though it is very likely that a number of other monuments variously identified as mounds or barrows etc. might also, on closer examination, be reclassified as probable or possible passage tombs (Fig. 1; Table 1). The other passage tomb is, in fact, one of two closely set monuments situated north/south of each other to the immediate west (rear) of Dowth Hall, some 650m east of Dowth tumulus (Coffey 1892, 51; Herity 1974, 250). That to the south, the passage tomb (ME020-013/site J), contains a well-preserved five-chambered (or possibly cruciform) tomb beneath a circular mound measuring approximately 20m in diameter (Fig. 1; Table 1). The chamber is currently only accessible via an aperture in its corbelled roof where the apex stone has been removed (Fig. 6). The whereabouts of its original entrance have not been identified and the passage leading to the tomb is now hidden beneath a considerable accumulation of sediment over the chamber floor (O’Kelly 1982, 54–5). The adjacent circular monument lying 30m to its north is classified as a ‘barrow—mound barrow’ (ME020-012/site I) (Fig. 1; Table 1). It too is approximately 20m in diameter, but in this instance the tops of upwards of ten kerbstones can be observed delimiting its base (Fig. 7). Its central internal area, however, contains a sizeable

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**Fig. 5**—The field of views from Dowth tumulus, based on a topographical model generated from the Brú na Bóinne lidar dataset. This surface model is significantly more detailed than that generated from the OSI 10m surface contours (Fig. 4) and so enables a more precise visualisation of those parts of the landscape that are intervisible with the great mound. (© Ordnance Survey Ireland. All rights reserved. Licence number NUI Galway 230615. Lidar data reproduced courtesy of the Discovery Programme, the Heritage Council and Meath County Council.)
Fig. 6—View of the present-day entry to the five-chambered (or possibly cruciform) passage tomb ME020-013/site J, accessible via an aperture in its corbelled roof where the apex stone has been pushed to one side. This site is to the rear of Dowth Hall, some 650m east of Dowth tumulus.

Fig. 7—Some of the visible kerbstones (marked with arrows) of ME020-012/site I, the remains of a passage tomb, situated to the rear of Dowth Hall, some 30m north of ME020-013/site J and 650m east of Dowth tumulus. The vegetation covering this monument was cleared as part of estate site works in 2015.
hollow as a result of digging at some unknown time in the past. On the balance of probability, it is also likely to represent the remains of a passage tomb, as has been proposed elsewhere (Herity 1974, 250; O’Kelly 1978, 54). Indeed, the discovery in 2014 of a nearby isolated stone slab bearing megalithic art (ME020-080) in a ha-ha to the east of Dowth Hall perhaps adds additional weight to this suggested reclassification (Fig. 1; Table 1).

Another impressively large mound (ME020-023), some 75m in diameter and several metres high, is located 950m to the east-south-east of Dowth tumulus (Figs 1 and 8; Table 1). Though nestled unobtrusively in a low-lying riverine location between ridges to east and west, it nonetheless presents an impressive sight from the vantage point of the river and would have presented a particularly theatrical vista on navigating upstream and rounding the second significant loop of the river at this point (Fenwick 2013, 30). Though lacking diagnostic attributes on which to base a definitive classification, it too might very well be the remains of a passage tomb, though it seems to share a number of characteristics with the other low-lying, dome-profiled, riverside mounds (sometimes associated with embanked enclosures) which are found a little further upriver in the townland of Newgrange (Stout 1991; Davis et al. 2013, 228–31). The site was subject to exploratory excavation by Clíodhna Ní Lionáin in the summer of 2015 and these results await publication (Stephen Davis, pers. comm.).

The megalithic monument at Cloghlea (ME020-009), destroyed by quarrying activity in the late eighteenth and nineteenth centuries, is classified as a ‘stone circle’ in the Historic Environment Viewer database. It was situated just 200m to the north-east of Dowth embanked enclosure and c. 1,300m to the east-north-east of Dowth tumulus (Fig. 1; Table 1). Though surface evidence of this monument has been all but erased today (a couple of large stones may still be observed lying in the vicinity), a number of antiquarian descriptions and two particularly fine late eighteenth-century illustrations of the site by the artist Gabriel Beranger have survived and give a good impression of the nature of the monument (Harbison 2004, 48–9). According to Thomas Pownall (1773), who visited the site in 1769, it was composed of eleven exceptionally large boulders set on end, surviving as a series of eight, two and a single stone, between which were gaps where stones were noticeably absent or removed (Coffey 1892, 51; 1912, 44; Herity 1974, 251; 1967, 142–5; O’Kelly 1982, 58). Pownall mentions that the circle had an entrance (probably facing west) and a ‘kistven’, which formed the northern/left side of the
circle on entering (perhaps a cist or recess). Beranger’s somewhat romanticised illustration confirms the large size and closely set nature of these stones, suggesting that this ‘circle’ might once have been outlined by a perimeter of contiguous orthostats (Fig. 9). Curiously, the circle is remarkably small at just 6.5m in diameter—21ft, as paced by Pownall (Herity 1967, 142–3). Sir William Wilde (1849, 221) visited the site a half-century later, at which stage the monument had been reduced to just four upright stones (slabs laid side by side, to judge by Wakeman’s accompanying illustration—Fig. 10), with two additional boulders lying prostrate nearby and an additional two in the nearby quarry (eight in total). He states that these stones were ‘evidently a part of the side wall or basement of a sepulchral chamber similar to New Grange’ and mentions the fact that human remains had been found on a number of occasions in the vicinity. Perhaps more intriguingly, he records the fact that some of the edges of these stones bore megalithic art, noting one in particular with ‘indentations’ on its surface, which he compares to one of the portal orthostats (R2) flanking the entrance to the chamber at Newgrange (Wilde 1849, 194; O’Kelly 1982, 141, pl. 79, 173, fig. 43). It is very probable, therefore, that the so-called ‘stone circle’ at Cloghlea represented the denuded orthostatic remains of a very sizeable passage tomb chamber, devoid of roof, cairn or delimiting kerb. The details of the antiquarian descriptions, however, might suggest that it was more akin in layout and plan to the passage tomb chamber at Fourknocks, Co. Dublin (Hartnett 1956–7), or indeed Dowth South, which share large, almost circular central chambers (O’Kelly and O’Kelly 1983, 156–8), than to that of Newgrange.

Also worthy of re-examination is a string of four or more monuments extending eastwards along the ridge from the Newgrange passage tomb cemetery into Dowth townland to terminate close to Ballinacrad House. A site classified as ‘Barrow—mound barrow’ (ME019-043/site E) is situated towards the western extremity of the townland, some 1.225m to the west-south-west of Dowth tumulus (Coffey 1892, 51) (Fig. 9).
It is a well-preserved monument, 31m in diameter and 4m high (Fig. 11). Its circumference is defined by a gapped but originally contiguous ring of c. 30 kerbstones (primarily Lower Palaeozoic greywacke) circumscribing a broad berm and central domed mound. Though identified as a possible passage tomb by Herity (1974, 251) and O’Kelly (1982, 59), its curious morphology might suggest that it was at some later stage modified to serve as a barrow. In addition, during the course of fieldwork in 2015 a circular soil discolouration, c. 20m in diameter, was recorded lying just 40m to the south-west of ME019-043 in the adjoining townland of Newgrange (Fig. 11). Coffey (1892, 50) also noted the remains of ‘several large stones, probably the remains of some sepulchral monument’ (ME019-051), also situated in Newgrange townland, lying some 200m to the south of ME019-043. These can still be observed today. In addition, some sizeable river-rounded stones were noted during the course of current fieldwork in the narrow rivulet channel marking the townland boundary at this point.

Further east, a linear array of three closely set monuments has been recorded in the fields adjacent to Ballymacad House, approximately 575m to the south-west of Dowth tumulus (from west to east: ME019-040; ME019-041; ME019-042/sites F, G and H respectively) (Figs 1 and 12; Table 1). These are classified as ‘Barrow—mound barrow’, ‘Mound’ and ‘Barrow—mound barrow’ respectively in the Historic Environment Viewer database, though the physical evidence suggests that they are more likely to be the remains of passage tombs. The westernmost site (ME019-040/site F) survives as a rather denuded low circular mound c. 16m in diameter. Its centre has been substantially robbed out. The middle monument of the three (ME019-041/site G), damaged by quarrying along its northern side, survives as a broad elongated mound measuring 65–70m east/west by 30–35m north/south and averaging 3m in height (O’Kelly 1982, 58). It is likely, however, to have originally been circular in plan. Where exposed along its northern flank, the internal structure appears to be composed of earth and water-rolled cobbles. Curiously, Herity (1974, 251) believed this to be a natural mound, though this seems unlikely to be the case. The easternmost monument (ME019-042/site H) is a poorly preserved circular mound, 20m in diameter, displaying a tell-tale central depression, once again as a result of digging (Coffey 1912, 43; Herity 1974, 251; O’Kelly 1982, 58). Of three remaining slabs in situ, two suggest a passage entrance oriented northwards. In addition, four large boulders lie nearby to its west (between sites G and H), in an area where the ground displays a marginal elevation. Some of these stones might very well have

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Fig. 10—Wakeman’s woodcut illustration of Cloghlea (ME020-009), taken from Wilde’s The Boyne and the Blackwater, first published in 1849.
served as kerbstones or other structural elements of a fourth, substantially destroyed passage tomb (Fig. 1; Table 1). It is also interesting to note that a boulder bearing megalithic art (ME019-041001) was recovered from a nearby drain (Leask 1932–4, 166; O’Kelly 1968) (Table 1). This stone was subsequently moved to Newgrange in 1967; it was re-erected for display in the corner of the OPW grounds, where it remains to this day (O’Kelly 1982, 59).

Various other mounds and barrows occur in the townland but these offer few, if any, diagnostic features on which to base a definitive classification, though the possibility remains, of course, that some of them may also represent denuded or modified passage tombs—for example, the curious barrow-like monument (Fig. 13) classified as a ‘mound’ (ME020-015) situated 300m to the east-north-east of Dowth tumulus (O’Kelly 1978, 55–6). It is noteworthy, too, that the Historic Environment Viewer records a number of additional megalithic tombs (ME019-057; ME020-016002) and megalithic art (ME019-056), the precise locations of which remain unknown (Table 1). One of these, ‘a cromlech, consisting of four large upright stones, with several others lying near’, was noted by Lewis (1837, 146) in the vicinity of the church (ME020-019) and tower-house (ME020-018) at Dowth (Fig. 1). This is likely to be the ‘giant’s grave’ mentioned in passing by Wilde (1849, 210) during his subsequent visit to the area. This monument is no longer extant, but it is conceivable that it represented the last skeletal vestiges of a passage tomb.

During the course of the present field survey some physical remains, supported to a degree by geophysical evidence, suggested the former presence of at least two additional passage tombs in the vicinity of the great mound (Fig. 1; Table 1). An area of unreclaimed ground, confined within an irregularly shaped elongated field lying immediately to the north, east and south-east of the mound, displays the earthworks and field systems associated with the nearby medieval manor (Fig. 3). One particularly intriguing feature of this field, however, is the presence of a
Fig. 12—View westward towards the remains of a series of three probable and one possible passage tombs in the grounds of Ballinacrad House. These mounds appear to be aligned on Newgrange (seen in profile in the distance to the right). Three of these monuments have been recorded in the SMR database: from west to east, ME019-40/site F (obscured from view), ME019-41/site G and ME019-42/site H respectively.

Fig. 13—View eastward towards a barrow-like mound with encircling fosse (ME020-015) that might originally have served as a passage tomb. This site is c. 300m to the east of Dowth tumulus.
number of large boulders, several of which are firmly embedded in the ground (though others are clearly in disturbed contexts). These appear to occur in two separate diffuse clusters. One cluster (Fig. 3, BC1), some 85–100m to the north-east of the mound, consists of two large, earth-embedded boulders (Fig. 14a–c), with additional loose stones (Fig. 14d) cleared to the edge of the nearby boundary in the adjacent field. The other cluster (Fig. 3, BC2) is composed of upwards of a dozen stones (Fig. 15a–f) within a generally disturbed context, situated (for the most part) between 60m and 90m to the south-east of the great mound. Some of these particular stones may be those illustrated by Wakeman in the foreground of his view of Dowth tumulus from the south, completed sometime prior to the RIA-sponsored excavations of 1847–8 (Wilde 1849, 204) (Fig. 16). At that time the tumulus appears to have stood centrally in a large square field, as depicted on the first-edition Ordnance Survey of Ireland 6-inch County Meath map sheet no. 19, published in 1837. This field has since been divided north/south by a zigzagging field boundary (Fig. 3, FB), which runs along the western and southern sides of the mound, with Glebe House and its outbuildings now occupying what formerly was the north-west corner of the square field.

It is intriguing to note, too, that a closer geological inspection of the two boulder clusters at Dowth (Fig. 3, BC1 and BC2) revealed them to be composed of an unusual diversity of rock types, many of which appear to be exotic to the locality (Figs 14 and 15). Those identified include greywacke, sandstone and conglomerate, with others of acid volcanic or other igneous derivation (George Sevastopulo, pers. comm.). It was not possible in every instance to identify the precise type or provenance of these stones based solely on a cursory field evaluation owing to surface patination, weathering, lichen and moss growth. The presence of Lower Palaeozoic greywacke is particularly significant, however, as this type of stone is not native to the Brú na Bóinne region but was quarried and imported into the area in enormous quantities during the Neolithic period as large slabs for the purposes of passage tomb construction (Eogan 1986, 113–15; Stillman and Sevastopulo 2005, 60). The precise location of these prehistoric quarries remains unknown; the nearest subcrop of greywacke occurs
several kilometres to the north of Dowth and the tract of greywacke extends north-eastwards as far as Clogher Head, on the coastline of County Louth. Corcoran and Sevastopulo (forthcoming) have argued that the quarries were at Clogher Head, some 9km north of the River Boyne estuary. Interestingly, on the basis of field inspection and comparison with the smaller passage tombs at Knowth, both George Eogan\(^2\) and George Sevastopulo (pers. comm.) are of the opinion that the dispersed boulders at Dowth seem likely to have originally constituted kerbstones, or other structural components of destroyed, or partially destroyed, passage tombs.

The irregularly shaped, elongated field to the east

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Fig. 15—A selection of stones to the south-east of Dowth tumulus that comprise boulder cluster 2.

- a—A possible greywacke boulder.
- b—A possible sandstone boulder.
- c—A boulder of indeterminate rock type.
- d—A boulder of indeterminate rock type.
- e—A conglomerate boulder and other stones of various type and size (some of which are water-rolled) scattered among the roots of a large hawthorn bush.
- f—Professor George Sevastopulo inspecting a conglomerate boulder.
of the mound in which these clusters of stones occur was also subjected to extensive geophysical surveys (electrical resistance, magnetic susceptibility and magnetometry) in the hope of identifying the tell-tale footprint of buried or partially destroyed nearby passage tombs, in addition to investigating the more obvious medieval earthwork remains (Fenwick, forthcoming). Two, or possibly more, potential passage tombs have been identified during the course of this field survey. The defining geophysical signature of what constitutes the buried remnants of an all-but-destroyed passage tomb, however, is a rather elusive entity. The claims, for instance, that the raised central feature within the low-relief remains of an embanked enclosure (ME019-094/LP 2) situated 700m to the south-east of Newgrange is that of a ploughed-out passage tomb is not entirely convincing (Barton 2010, 101–12; Davis et al. 2013, 231) (Fig. 17). In this instance the mound, 30m in diameter, exhibits a low electrical resistance compared to the surrounding ground, suggesting that it is substantially of earthen composition. In the equivalent magnetometer survey, Barton (2010, 111) identified a central trench, 16m long and 2m wide with splayed terminals, which is interpreted as a sunken area that might have contained roof-supporting elements and a passage tomb entrance respectively. By contrast, electrical resistance survey undertaken at various locations within the extended passage tomb cemetery at Sláibh na Calliagh, Co. Meath, by McCormack (2013, 2014) has revealed that the subsurface remains of these positively identified monuments exhibit a significantly higher resistance than the surrounding background soils. This, of course, largely reflects the underlying remnants of the cairn material, composed substantially of locally sourced sedimentary stone. A reassuringly similar electrical resistance response has been obtained for the periphery of the great passage tomb at Dowth (Fig. 3, R1). It seems quite possible, therefore, that the amorphous zones of high electrical resistance (Fig. 3, R2 and R3) that occur in the vicinity of these two clusters of exposed boulders represent the all-but-destroyed subsurface remains of at least two ‘satellite’ tombs (Fig. 1; Table 1).

Additional corroborating evidence for such destroyed tombs can be found among the later buildings, monuments and features in the surrounding area. For instance, large numbers of Lower Palaeozoic greywacke slabs and smaller greywacke stones were used in the construction of the Dowth souterrain

Fig. 16—Wakeman’s woodcut illustration of Dowth tumulus (ME020-017) as viewed from the south (taken from Wilde’s The Boyne and the Blackwater, first published in 1849). The original illustration was drawn prior to the RIA-sponsored excavations of 1847–8.
This substantial souterrain (Fig. 3, S), with two beehive chambers, joins directly to Dowth’s northern tomb (Fig. 3, PTN)—a conveniently ready-made ‘souterrain’ in its own right. It is particularly notable that greywacke has been used for the capstones of the souterrain passage and chambers almost to the exclusion of all other stone types (Fig. 18). Some appear to have been split, as the newly exposed stone surface still retains a fresh green hue in contrast to the cream-coloured patina of the original weathered surface. The reuse of greywacke in the construction of this souterrain is remarkably similar to that noted at Knowth and would suggest that significant damage was done to the megalithic monuments at both of these sites during the early historic period (Eogan 2012, 85). Indeed, it is interesting to note that both the eastern and western tombs of Knowth’s passage tomb 1 were also exploited during the early historic period as extensions to its souterrain complex—part of an open settlement dating from the tenth and eleventh centuries AD (ibid., 86). The most obvious explanation for their presence in the souterrain, of course, is that these slabs were taken from a nearby passage tomb (or tombs), which could easily have been exploited as a convenient source of building material. Though no formal megalithic art motifs have been noted on the exposed surfaces of the Dowth souterrain capstones, two examples do bear evidence of diffuse or scattered picking (Fig. 19), which is consistent with a form of megalithic art from the passage tombs of the area (O’Sullivan 2006, 659). These particular capstones occur adjacent to each other—perhaps separate pieces

Fig. 17—The suite of four embanked enclosures (marked with grey circles) arrayed in a sweeping arc in low-lying ground to the south of an alignment of five passage tombs (marked by yellow dots) along the crest of the Newgrange east–west ridge. The Newgrange stone circle and timber/pit circles are marked in cyan and orange respectively. SMR numbers (excluding in each case the prefix for County Meath, ‘ME’) and site labels of selected prehistoric monuments, along with a monument classification (some of which have been revised), are also indicated. Townland boundaries are marked with a red line, with rivers, ponds and standing water marked in blue. (© Ordnance Survey Ireland. All rights reserved. Licence number NUG 230615. Lidar data reproduced courtesy of the Discovery Programme, the Heritage Council and Meath County Council.)
Fig. 18—A view northwards along the curving section of Dowth souterrain (ME020-017001), showing a series of large Lower Palaeozoic greywacke capstones overhead. The souterrain was built into the western flank of Dowth tumulus to adjoin the pre-existing passage and chamber of its northern tomb.

Fig. 19—An example of diffuse pick-marks on one of the souterrain’s greywacke capstones (situated immediately to the north of the internal step).
of a larger slab—at a point where the souterrain rises in level at a significant step midway along the passageway (see O’Kelly and O’Kelly 1983, fig. 7, 155).

A limited number of greywacke slabs have also been used as lintels over internal doorways, a window embrasure, a fireplace and various structural corbels of the nearby medieval tower-house (ME020-018) (Figs 1 and 20). Curiously, however, this stone type is noticeably absent in the materials of construction of Dowth medieval church (ME020-019) (Fig. 1). It is also significant that a number of roughly hewn post-medieval grave-slabs (Fig. 21) within the interior of the roofless medieval church and below its external western gable, in addition to some stones incorporated into the stile beside the graveyard (ME020-019001) gate (Fig. 22) to the north-west of the castle, are also of greywacke. Perhaps these relatively modern (though undated) grave-slabs account for the absence of the nearby ‘cromlech’ that had been observed in the earlier part of the nineteenth century by Lewis (1837, 146).

THE LATER NEOLITHIC AND EARLY BRONZE AGE LANDSCAPE

There is strong evidence in support of a considerable degree of continuity between the late Neolithic and early Bronze Age periods in Ireland, between c. 2800 and 2300 BC, as witnessed by the Grooved Ware and Beaker Period associations, at which time large-scale monuments such as timber circles were being erected (Carlin and Brück 2012). In addition to activities associated with the development of the extended passage tomb cemetery of Brú na Bóinne over the course of a number of centuries, confined largely to the second half of the fourth millennium BC, a considerable body of evidence for the continuation of ritual activity into the final Neolithic and beyond was also unearthed during the course of excavations at Newgrange and Knowth (see, for example, Sweetman 1985; 1987; Eogan and Roche 1994; Eogan 1984, 245–322). This activity is more readily apparent in some of the impressively large embanked enclosures and other earthwork monuments of the surrounding area (Stout 2002, 33–9). Considerable strides have also been made in the understanding of the late Neolithic and early Bronze Age landscape of Brú na Bóinne in recent years, most particularly through the identification of previously unrecorded low-relief or subsurface monuments that have come to light as a result of lidar and geophysical surveys. These monuments broadly coincide with phase IV of Cooney’s (2000, 153–68) proposed development of the extended Brú na Bóinne ritual complex. It appears, however, that during this
A reassembly of the monumental fragments in Dowth townland and their significance

Fig. 21—Some examples of rough-hewn greywacke headstones within the nave of Dowth medieval church (ME020-019).

Fig. 22—Professor George Eogan standing beside the stile built into the wall of Dowth graveyard (ME020-019001). In addition to a medieval architectural fragment, some of its steps are composed of greywacke slabs.
time the nature of ritual activity changed significantly (Bradley 1998, 101–15; Hensey 2015, 110–12). In contrast to the restrictive spaces associated with passage tomb ritual, the large-scale embanked enclosures, timber circles and ceremonial avenues are more indicative of public assembly and ritual procession, perhaps events that coincided with predictable and universally observable solar or lunar events (see, for example, Mount 1994). The close physical proximity and apparently unbroken chronological thread between the foregoing passage tomb traditions and the succeeding embanked enclosure, timber circle and other associated Grooved Ware traditions of the Boyne Valley suggest strongly that there was a substantial continuity and stability of population through the generations (Stout 2002, 35; 1991). It was their ritual beliefs as expressed through the interrelationship and assimilation of older with newer monuments, however, which appear to have evolved and grown in increasing complexity throughout the duration of the Neolithic period and into the early Bronze Age (see, for example, Bradley 1998, 85–100). The change in monument form, therefore, need not be interpreted as a radical change in religious belief, cultural tradition or population but rather as a change in ritual emphasis. Perhaps it reflects a move away from ritual exclusivity towards a more inclusive form of ritual expression and observation.

The stone circle (ME019-045005) that circumscribes Newgrange passage tomb, along with the impressive cursus situated to its immediate east (ME019-044001), and the embanked enclosures (ME019-094/LP2; ME026-006/site P; ME019049002/site A; ME019-103/LP1), earthen mounds/barrows (ME019-049001; ME019-058001/site B), ritual ponds (ME019-067003; ME026-021002), linear earthwork (ME019-067005) and other monuments lying in the flood-plain of the River Boyne to the south are all very visible expressions of continued ritual traditions clustering around the earlier tumuli (Fig. 17). Excavations undertaken by Sweetman in the 1980s also revealed the presence of two later Neolithic/early Bronze Age pit/timber circles situated immediately to the south–east and west of the great passage tomb respectively. The larger, c. 80m in diameter and situated to the south–east (ME019-044002), is composed of several concentric rows of pits (Sweetman 1985). It encloses a pre-existing passage tomb ME019-044004 (site Z), tucked into its north-western interior, but apparently pre-dates the stone circle, which intersects with it across its north-western quadrant. The smaller circle to the west, measuring approximately 20m in diameter, is of similar date and cultural association (Sweetman 1987). Both monuments appear to be contemporary with two separate phases of Beaker activity, though some Grooved Ware material was also noted. Interestingly, the combined geophysical surveys undertaken by Kevin Barton in association with Martina McCarthy (GeoArc Ltd) in the early 2000s, in order to explore the larger area around the pit circle and cursus at Newgrange, have revealed the presence of what appears to be an elaborate post-pit avenue aligned north-west/south–east on ME019-044004 (site Z), along with other significant features (see fig. 1.35 in Smyth 2009, 22). The series of embanked enclosures and associated earthen mounds and ponds that occur in the lower-lying river flood-plains to the south are also likely to be broadly contemporary with these phases of activity (Fig. 17).

Archaeological excavation at Knowth has also revealed a significant Grooved Ware and Beaker presence in and around the earlier passage tomb cemetery, and also seems to demonstrate an unbroken thread of ritual activity at this site over the course of several centuries (Eogan and Roche 1999). At some stage towards the mid-third millennium BC a Grooved Ware timber circle was erected directly in front of the entrance area to the eastern tomb passage of Knowth’s largest tumulus (passage tomb 1C) (Eogan and Roche 1994). It is defined by an 8m-diameter circle of substantial post-pits, with a secondary arc of external post-pits at its eastern sector forming an eastward-facing portico, reflecting that of the passage tomb behind. An additional four internal post-pits forming a square, aligned with the entrance, may have supported a roof or other elaborate superstructure. Though erected just 10m from the kerbstones of passage tomb 1, its location appears to have carefully avoided the stone settings marking the entrance to the passage tomb. Interestingly, there also appears to have been a parallel and continued ritual use of the Knowth passage tombs at this time. The exquisitely carved flint macehead that was ritually buried in a pit in the eastern tomb chamber of passage tomb 1, for example, is a relatively late votive deposit, though its placement is now believed to precede the Grooved Ware period of activity at Knowth (Schulting et al., forthcoming; Roche and Eogan 2001, 128; Fenwick 1995).

The four separate concentrations of Beaker activity identified at Knowth are represented by a scattering of hearth and pit features in association with a diagnostic lithic and pottery assemblage (Eogan 1984, 245–322). This activity, however, appears to be more domestic in nature, though a Beaker burial was found in passage tomb 15 (ibid., 308–12; Carlin and Brück 2012, 197). In addition, geophysical survey conducted in area 11 (the field to the immediate south–east of the Knowth National Monument complex) revealed the presence of a large subsurface elliptical enclosure which otherwise displays no surface expression (Fenwick...
A sinuous low-relief linear earthwork (Fig. 1), for example, has been identified in lidar imagery running east/west through Dowth embanked enclosure and onwards in the direction of Dowth tumulus (Davis et al. 2013, 231). This earthwork clearly pre-dates Dowth Hall and its associated demesne landscaping and field boundaries. It is tempting to think that it might be part of a ceremonial processional way, contemporary with the building or use of the embanked enclosure, as its winding route seems to suggest the deliberate intention to weave the more conspicuous prehistoric features into the fabric of the greater Brú na Bóinne monumental landscape. Indeed, another similar earthwork (Fig. 1) can be observed continuing south-westward from the end of what has been identified as a medieval ‘sunken way’, which marks the northern part of the Dowth/Glebe townland boundary (Stout 2002, 177). Regrettably this boundary was removed in recent decades to consolidate adjacent fields into a single unit. The fact that this has been recognised as a routeway and also defines part of a townland boundary is of interest in its own right, but it may be of particular significance because it appears to extend still further, as a single low-relief earthen embankment leading towards the south-western corner of Dowth townland. This section of the earthwork is not recorded on the first-edition Ordnance Survey 6-inch map sheet and neither is it consistent with the existing field subdivisions. If these two sections of low-relief bank have an underlying prehistoric origin, they might be considered to present a very tangible, physical thoroughfare through the landscape, connecting all the significant prehistoric monuments of Dowth with those on the riverine flood-plains in the neighbouring townland of Newgrange. It is particularly noteworthy that its south-western end is directly aligned on the low-relief remains of a large embanked enclosure with central mound (ME019-103/LP 1), though there is the possibility that it might have continued on further through the townland of Newgrange, where another similar linear earthwork (ME019-049002) has been identified by Tom Condit (Davis et al. 2013, 229–30; Barton 2010, 91–100) (Figs 1 and 17; Table 1). The embanked enclosure (ME019-103/LP 1), 120m in diameter and situated some 1,200m south-west of Dowth tumulus, is framed between two small stream gullies on the edge of an elevated river terrace. It is the most easterly of four roughly equidistant and similarly sized embanked enclosures—the others, extending east to west into Newgrange townland, being ME019-049002/site A, ME026-006/site P and ME019-094/LP 2 respectively (Fig. 17). These (in association with other features and monuments) are arrayed in a sweeping arc across the curvature of the river flood-plain, with the great mound of Newgrange (ME019-045) acting as the monumental focal point to the north. Considering the symmetrical array of smaller passage tombs (ME019-046001; ME019-046003; ME019-044004; ME019-044003) to either side of Newgrange, perhaps the builders of the embanked enclosures set out with the express intention of reflecting and extending this quasi-axial symmetry into the wider landscape. This, in effect, creates an amphitheatre of carefully positioned monuments embraced by the concave curvature of the river bend.

Like the embanked enclosures to the south of Newgrange, the low-relief example in the south-western corner of Dowth townland (ME019-103) seems also to be associated with a number of other significant monuments and features in the immediate vicinity (Fig. 1; Table 1). A magnetometer survey conducted over the site has identified part of a smaller-scale enclosure, approximately 40m in diameter, overlying its southern sector, in addition to a ring-ditch, 15m in diameter, on its north-eastern quadrant (Barton 2010, 92–5; Davis et al. 2013, 230–1). The Historic Environment Viewer database also lists a low oval ‘mound’ (ME019-052), recorded in 1968, to the immediate north of the embanked enclosure (Moore 1987, 35) (Fig. 1; Table 1). In addition, a greywacke standing stone (ME019-053/site D) is set at the southern edge of the embanked enclosure (Figs 1, 17 and 23; Table 1). This is one of two substantial standing stones in close proximity to each other. The second, of
sandstone (ME019-055/site C), stands just 85m away (to the south-west) in the townland of Newgrange (Figs 1 and 17). It may be significant, too, that a number of greywacke slabs have recently been identified along the River Boyne nearby (Claidhbh Ó Gibne, pers. comm.). One is built into a nearby weir (Fig. 24), another protrudes from the northern riverbank just to the south of these monuments, and other submerged boulders and slabs lie about 100m upstream—a reminder, if any were needed, that these stones were likely to have been originally shipped upriver and unloaded somewhere in the immediate vicinity. At this point it is also worth drawing attention to a large igneous boulder 700m to the west of Dowth tumulus in the western sector of Dowth townland (Figs 1 and 25; Table 1). It lies in a place formerly occupied by the farm village of Ballynacraide (Baile na Craide), which loosely translates as ‘the town of the stone’ (Jenkins 2008, 205–7; Kenny 2008, 144; Stout 2002, 128). The archaeological significance of this boulder is unknown, but it appears to be propped up by a number of smaller underlying stones.

The various nineteenth-century antiquarian investigations of Dowth tumulus (O’Kelly and O’Kelly 1983, 141–4; Harbison 2007; Herity 1974, 248–50) and the smaller-scale, twentieth-century, targeted scientific excavations undertaken by Leask (1932–4) and Lynch (1990) concentrated primarily on the great mound and its surrounding kerb. Few diagnostic features or artefacts that might be attributed to final Neolithic or early Bronze Age activities have been identified, though Lynch did note a number of prehistoric post-pits beneath the slumped cairn material, and a barbed-and-tanged arrowhead also came to light—comparable to the one recovered from Beaker concentration C at Knowth (Eogan 1984, 276).

It would appear, therefore, that at this late stage in the ritual development of the Brú na Bóinne landscape the focal monuments of Newgrange, Knowth and Dowth, though falling into disrepair, had retained their cult status and symbolic potency (Lynch 2004). Additionally, however, they seem to have acquired a mythical status above and beyond their original function and symbolism, which ensured that they would remain integral to the succeeding reorganisation and reinvention of the monumental landscape. As Whittle (1996, 248) astutely observed: ‘They were the central point of a cult focused on the fusion of past and present, a powerful ordering principle which fostered cohesion, integration and collectivity of action’. Indeed, it could be argued that the vision, scale and grandeur of this final phase of ritual landscape
development (Cooney’s phase IV), whose monuments were constructed substantially of earth and timber and have long since succumbed to erosion and decay, represented an even more ambitious phase of monumental building than that which had preceded it.

LATER PREHISTORIC LANDSCAPE

There appears to be a general hiatus in monumental building and a lull in ritual activities within the bend of the Boyne throughout the middle and later Bronze Age (Eogan 2012, 8–12; Stout 2002, 38–9), perhaps reflecting a decline in the fortunes of Brú na Bóinne and the emergence of other regional ritual centres such as Tara at this time. It may be of significance, however, that a number of tree rings and several annular grass-marks (buried fosses) of varying size have been noted in the fields surrounding Dowth embanked enclosure (Fig. 26). While the tree rings are undoubtedly landscape features related to the Dowth demesne pleasure-grounds, there is a distinct possibility that some of them may have been planted on pre-existing archaeological sites (Fenwick 2013, 30). The possibility remains, therefore, that some of these dispersed circles may represent a barrow cemetery clustering around the embanked enclosure. If this proves to be the case, it would be interesting to know, given the longevity of barrows as a monument type (Newman 1997, 153–70), where these might fit within the overall chronological context of Brú na Bóinne.

There is perhaps some degree of irony in the knowledge that many of the archaeological monuments within the Dowth demesne grounds may owe their preservation to having been deliberately incorporated into the contemporary vision of grand landscape design by its architect as garden follies. Indeed, the setting and orientation of Dowth Hall appear to have been significantly influenced by the distribution of a number of the more impressive and conspicuously located archaeological monuments within the demesne grounds (Fenwick 2013, 28–9). The house is located on the brow of the ridge, so that it overlooks Dowth embanked enclosure to the front and two passage tombs to the rear. It would seem, therefore, that the appropriation of monuments from
the distant past and their reinvestment with renewed meaning and significance in the ‘present’ has a remarkably long pedigree in Brú na Bóinne.

Also of probable late prehistoric date is an unusual parallel linear earthwork (ME019-117) situated in the north-western quadrant of the townland (Fig. 1; Table 1). It consists of a closely set pair of low-relief, slightly curving, broad earthen banks, and so its form is entirely different from that of the linear earthwork(s) described above. This example is aligned north-west/south-east and can be traced over the course of several hundred metres, traversing the fields between Dowth passage tomb and the wetlands surrounding Ballyboy Lake. Though described elsewhere as a hollow-way (Davis et al. 2013, 231), its morphology would suggest a much more enigmatic monument type broadly comparable to the Mucklaghs of Rathcroghan (Cruachain), Glenballythomas, Co. Roscommon (Waddell et al. 2009, 89–103), or the Knockans of Teltown (Tailliu), Oristown, Co. Meath (Waddell 2011, 195–9). All three of these sites consist of sizeable closely set, curving earthen banks and are associated with nearby standing water. Excavations of the southern Knockan have revealed a particularly complex history of artificial deposition and intermittent silting as a result of fluctuating water-levels in an adjacent artificial pond. The earlier levels produced late prehistoric material, dating from the centuries around the middle of the first millennium BC. Later deposits, however, produced early medieval dates ranging from the seventh to the tenth century AD. Waddell (2011, 198) suggests that these significantly later dates represent a deliberate reuse of a prehistoric monument form for ritual purposes. FitzPatrick (2015, 63) proposes that these and similar earthwork types, found primarily in association with Óenach sites, could have been used for the ceremonial coursing of wild pig. Perhaps this is the function of the unusual parallel linear earthwork at Dowth.

CONCLUSIONS

The results of this case-study, which has focused primarily on the prehistoric remains in the townland of Dowth, affirm the benefits of a primarily observational, field-based exploration of the Brú na Bóinne landscape, in parallel with remote sensing and desk-based archaeological research. During the course
of this work a number of previously unrecorded archaeological features and potential sites were identified, and a number of the other known sites have been re-evaluated and reclassified as 'possible' or 'probable' passage tombs (Table 1).

The destroyed megalith at Cloghlea (ME020-009), for instance, long accepted as a 'stone circle', has been reclassified as a 'probable passage tomb' on the basis of descriptive and illustrative documentary sources (Figs 1, 9 and 10). Similarly, at Ballymacrad the footprint of an additional 'possible' passage tomb has been identified among a linear array of three 'probable' passage tombs (ME019-040; ME019-041; ME019-042) (Figs 1 and 12). The presence of other destroyed or significantly disturbed passage tombs has been tentatively identified in the vicinity of the great mound of Dowth. Here, two distinct clusters of large, geologically exotic boulders were noted during the course of fieldwork in the field to the east of the mound (Figs 14 and 15). These, on the basis of archaeological comparison to the 'satellite' tombs unearthed at Knowth, are likely to have served as kerbstones to a number of smaller passage tombs surrounding the larger mound at Dowth. It is notable, too, that zones of high electrical resistance values appear to correlate broadly with the distribution of boulder clusters, indicative of irregular areas of underlying hard stony material, possibly the disturbed remains of all-but-destroyed passage tombs (Fig. 3). Additional indirect corroborating evidence for such tombs can also be found in the presence of Lower Palaeozoic greywacke slabs used in the construction of Dowth souterrain (ME020-017001), as window and door lintels in Dowth tower-house (ME020-018), and for use as gravestones, among other features, in Dowth graveyard (ME020-019001) (Figs 18–22). These particular stone slabs, imported into the area in large quantities during the Neolithic period for the purposes of passage tomb construction, are likely to have been robbed from a nearby passage tomb (or tombs) or some other secondary source(s).

The precise placement of the three focal passage
tombs of Newgrange, Knowth and Dowth would appear to have been dictated by the need to fulfill two predetermined and rather exacting requirements simultaneously (Figs 1 and 2). Each of the tombs was to be prominently located so as to be visible from the other two, while at the same time individual tombs were required to be visible from specific vantage points along the river valley—Newgrange dominating the curving sweep of ‘the bend of the Boyne’, and Knowth and Dowth commanding the upriver and downriver approaches respectively. This seems to have been part of a single ambitious scheme designed to bind the previously disparate elements of the extended passage tomb cemetery into a more clearly defined prehistoric numinous precinct, embraced by the sweeping curvature of the River Boyne (Figs 2, 4 and 5). This intervention, of course, will also have had far-reaching implications for the subsequent layout and development of the final Neolithic/early Bronze Age monumental landscape. A sinuous low-relief linear earthwork, for instance, recently identified in lidar imagery, can be seen extending from Dowth embanked enclosure (ME020-010) westwards towards Dowth tumulus (Fig. 1). A second earthwork, perhaps an extension of the first, then appears to continue southwards from the south of Dowth tumulus in the direction of four impressively large embanked enclosures (ME019-103; ME019-049002; ME026-006; ME019-094) nestled in the riverine lowlands to the south of Newgrange. These are approximately equally spaced in a semicircular array around the focal point of the great passage tomb of Newgrange (Fig. 17). Far from ignoring the presence of the pre-existing passage tombs, therefore, it would appear that these later monumental additions were integrated into the fabric of the extant funerary and ritual landscape in a way that might suggest a continuity of significance and a special veneration of these already ancient sites.

The sustained use and evolving development of this numinous precinct over the course of the greater part of a thousand years might also suggest some continuity in the thread of religious belief and its associated ritual practices throughout this time rather than any significant break with existing tradition (for contrasting views see, for example, Eogan and Roche 1999; Cooney 2000, 165–8; Roche and Eogan 2001; Carlin and Brück 2012). Furthermore, in the light of the more recent discoveries, outlined above, there is little to suggest a diminution in the ritual importance of this landscape in the centuries following the final flourishing of passage tomb construction at ‘the bend of the Boyne’. In a preliterate society, where religious practice and belief were built rather than written in stone, the latitude to adapt ritual, embrace novel architectural forms and adopt new items of ritually related material culture over the course of several hundred years, reflecting the ever-evolving technological, societal or political circumstances of the time, might not necessarily have involved major upheaval, incursion or significant discontinuity. Rather, such an evolution of ritual norms and their associated monumental architecture might be more indicative of contact, communication and the exchange of ideas within the wider passage tomb tradition of the north-eastern Atlantic archipelago and adjacent continental coastline. Evidence for late Neolithic contact and the mutual exchange of influences between Ireland, most particularly Brú na Bóinne, and Scotland, especially the Orkney Isles, as witnessed in the Grooved Ware ‘complex’, for instance, has long been acknowledged (Sheridan 2004). The recent establishment of the Boyne to Brodgar initiative, therefore, is a particularly timely and welcome enterprise (Sheridan and Cooney 2014). Building on the firm foundations of our current knowledge, it not only has the potential to transform our understanding of Neolithic monumentality and the dynamics of community but also presents an opportunity to chart the mechanisms of change and exchange across the span of time and coastal seaways between these islands.

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REFERENCES


NOTES
1. Emeritus Professor of Geology, Trinity College Dublin.
2. Emeritus Professor of Archaeology, UCD.