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An Intriguing Monument

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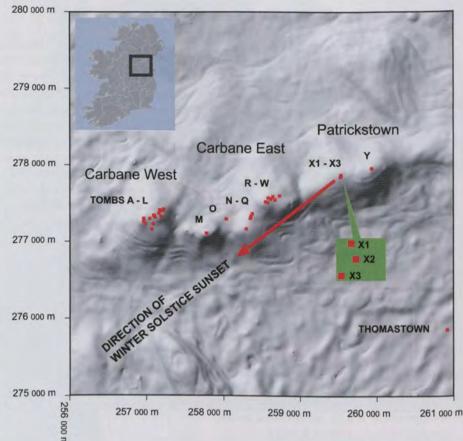
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f those who visit the passage tombs at Loughcrew, Co. Meath, only a tiny minority turn aside to visit the sites clustered together Patrickstown, the wooded hill at the eastern end of the chain (Fig. 1). Here lie the remains of an intriguing monument, site X₁, the location of a stone (C1) decorated with a striking rayed design or sun motif (Fig. 2). The centre of the monument is now largely destroyed, but it is generally assumed that the stone with the sun motif is an in situ chamber orthostat, possibly the backstone of the right-hand recess in a cruciform tomb opening to the south-west (Fig. 3). Nineteenth-century explorations at the site recovered Carrowkeel pottery, stone pendants and fragments of pin, both antler and bone, probably in the vicinity of the depression now visible where the chamber was presumably located (M. Herity, Irish passage tombs (Dublin, 1974), 243-4). Two related discoveries have brought this tomb into sharpened focus.



AN INTRIGUING MONUMENT

Muiris O'Sullivan, Frank Prendergast and Geraldine Stout on new discoveries at Loughcrew cairn X₁

Above: Fig. 1—The Loughcrew passage tomb complex, showing the location and alignment of site X₁ (orthographic shaded relief map based on digital data supplied by Ordnance Survey Ireland).

Right: Fig. 2—Watercolour illustration by G. V. du Noyer (1865) depicting megalithic art on the north-west face of orthostat C1 at cairn X₁ (by permission of the Royal Irish Academy Library; MS 3D3).



Fieldwork

The first was an astronomical survey undertaken by one of us (Frank Prendergast) in 2006. The survey method included measurement of the monument location, the orientation of the passage axis (insofar as it can be inferred) and the angular altitude of the local horizon in the direction indicated by the putative axis of the monument. These data allowed for the calculation of astronomical declination (the celestial equivalent of latitude on earth) and yielded a value of c. -24° . This result is consistent with an alignment (of the passage) towards the setting sun at the winter solstice during the Neolithic.

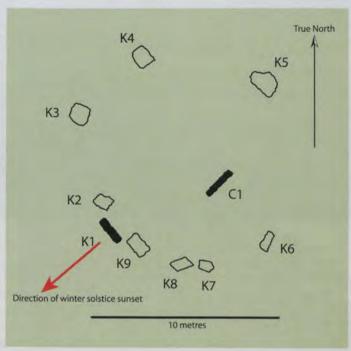
A return visit to the site was undertaken on 27 December 2008 in order to observe the solar phenomenon predicted by the calculations. Allowing for the small shift in the direction of sunrise over the 5,000 years since the monument was constructed, the survey and associated calculations were verified by the dramatic spectacle of the setting solar orb aligned with the putative line of the tomb passage. This drew attention to stone K1, the kerbstone now favoured as the entrance stone, and led to the second discovery. Lying almost prone and slightly forward of the other kerbstones along the south-western perimeter of the monument, K1 can now be revealed to be a decorated kerbstone (Figs 4 and 5). The decoration, obscured by vegetation and the downward inclination of the face, was noted for the first time through a small cavity under the intense light of the setting sun on that return visit in December 2008.

Local context

The solar alignment established here will not be confirmed until the position of the tomb passage is revealed by geophysical and possibly archaeological survey excavation. Already, however, the evidence is compelling. Allowing for the weathered condition and still incomplete record of decorated stones at Loughcrew, the occurrence of megalithic art on one of only nine kerbstones still visible at cairn X1 is unusual in the Loughcrew complex, where previously only two examples of kerb art were recorded amongst the 33 known monuments: the Hag's Chair at cairn T (K29) and kerbstone 8 at cairn H. Indeed, kerb art is an unusual phenomenon

Right: Fig. 3—Plan of site X₁ (SMR: ME009-071001-), showing the decorated stones C1 and K1 and the suggested alignment of the tomb.

Below: Fig. 4—View of site X₁ from the south-west. The decorated orthostat stands directly behind the upright ranging rod, and the decoration on the lower face of K1 is visible near the lower front edge of the stone, immediately above the prone ranging rod in the foreground (photo: Frank Prendergast).



generally outside the Boyne Valley, the only comparable examples occurring at Baltinglass Hill, Co. Wicklow, and Knockroe, Co. Kilkenny. In the Boyne Valley, the most spectacular series of decorated kerbstones occur along the perimeters of the great mounds at Newgrange, Knowth and Dowth respectively, thus emphasising the considerable status of sites featuring kerb art.

Eight definite cruciform tombs are known at Loughcrew, distributed on Carnbane West and East. Accordingly, the occurrence of a cruciform tomb at Patrickstown would not be a surprise. Only one astronomical alignment has previously been known at Loughcrew, however: the claimed equinoctial orientation of cairn T. Not only would a solar alignment at cairn X_1 be an important addition here, but its orientation in relation to cairn T is also





Left: Fig. 5—Detail of the decoration on K1 (photo: Frank Prendergast).

unusual. The azimuths of all eight passage tombs on Carnbane West are tightly clustered within a 35° arc, and the tombs face the hilltop cairns on Carnbane East. The passage tomb at Thomastown, 2.4km to the south-east, is also aligned towards the elevationally higher focal tomb, cairn T, also on Carnbane East. Tomb X1, however, appears to avoid cairn T and, based on the evidence presented here, could have had an orientation towards the position of the sun at its extreme azimuth limit in the southwest, i.e. at the winter solstice. This independence from cairn T, along with the occurrence of two decorated stones that are remarkable for different reasons, confers special status on cairn X1.

Wider context

On a national scale, just 138 known passage tombs (64%) have extant passages, of which sixteen (11%) exhibit evidence for solstice alignment, being equally divided between the summer and the winter solstice. There is a strong association between solar alignments and the location of megalithic art in passage tombs. Approximately 35 (16%) passage tombs are decorated, of which about twelve exhibit kerb art, including five with decorated entrance stones, all in the Boyne Valley: Knowth 1 (both tombs), Knowth 13, Knowth 15, Newgrange and Dowth South. For that reason, artwork on the entrance kerbstone of site X1 at Loughcrew would place this site in exceptional company. It should also be noted that the rayed design featured on the decorated orthostat at site X₁ is known elsewhere only at Knowth and Newgrange, occurring a number of times in both complexes, most spectacularly on kerbstone 15 at Knowth.

Specific comparisons are noticeable between site X1 at Loughcrew and the passage tomb complex at Knockroe, Co. Kilkenny. In both cases the monument lies not on the summit of a hill but downslope in a more sheltered location. Again, in both cases the site is dominated by a large cairn on a higher eminence to the west, cairn T and Slievenamon respectively. Both sites feature tomb and kerb ornament and a solar alignment. Although several decorated kerbstones occur at Knockroe, there is a noticeable change to undecorated quartzite blocks and conglomerates at the tomb entrances. At this site none of the kerbstones along the northern half of the perimeter are decorated, apart from the one directly across the cairn from the western tomb and directly in line with its orientation. Knockroe is the most elaborate passage tomb in the Lingaun region, but unlike nearby Baunfree, which is orientated towards Slievenamon, it focuses on the midwinter setting sun rather than the cairn on the summit of the mountain. Likewise, cairn X1 at Loughcrew opens towards a solstice experience rather than the focal site, cairn T, on an eminence to the west.

Megalithic art is generally found on structural stones in the chamber or passage area, sometimes in hidden or obstructed positions. Kerb ornament is rare at Loughcrew, exceptional in Ireland generally and almost non-existent elsewhere in western Europe (apart from Crec'h Quillé in Brittany). Its occurrence may reflect emerging social changes during the centuries approaching 3000 BC, as the wider public were allowed to see artwork that would normally be seen only by the privileged. This was celebrated especially in

the exceptional splendour of the kerb ornament at Knowth and Newgrange, but its occurrence at Patrickstown site X_1 would also have been a noteworthy phenomenon. Likewise, the alignment of passage tombs, whether to solar events, favoured hilltops or other currently unknown attractions, can be taken as a reflection of Neolithic priorities and cosmologies.

Implications

All the indications suggest that cairn X1 is an important monument in the context of Loughcrew specifically and of Irish passage tombs in general. As at Knockroe and other sites, various rock types were used in the construction, which suggests that a geological survey would highlight further distinctions and patterns. LiDAR survey would also improve the visibility of the footmark left by this and the two adjacent monuments. Depending on ground conditions, limited geophysical survey, focused primarily on the sunken area at the centre of site X₁ and the supposed location of the passageway between here and the kerbstones, would be expected to clarify the basic structural plan of the monument. The survey might also be extended beyond the limits of the kerb, especially on the south-western side, to check for stone settings or other features that are sometimes observed at the entrance to passage tombs. While the downward inclination and protected location of the decorated face on stone K1 has preserved its artwork in better condition than elsewhere at Loughcrew, a proper examination of the decoration to reveal its full extent would require that the stone be stood upright in the context of a limited archaeological excavation.