

Dating Navan Fort.

Author: Mallory, J.P.; Brown, D.M.; Baillie, M.G.L.

Date: Jun 1, 1999

Words: 1855

Publication: Antiquity

ISSN: 0003-598X

Navan Fort, the Emain Macha of early Irish literary and historical tradition, lies two miles west of the town of Armagh. The importance of the site rests not only with its identification as the ancient seat of the kings of Ulster but also with its archaeological importance as one of the paramount ritual and tribal centres of Late Bronze Age and Iron Age Ireland along with the other provincial 'royal sites' of Tara, Dun Ailinne and Rathcroghan. The site consists of a hengiform enclosure, some 230 m across, surrounding two surface monuments: Site A, a low ring-barrow, and Site B, an earthen mound some 50 m in diameter and 6 m high [ILLUSTRATION FOR FIGURE 1 OMITTED]. Both features were excavated by the late Dudley Waterman between 1961 and 1971, and an account of his excavations was completed for publication by C.J. Lynn (Waterman 1997).

The evolution of Site B has been rehearsed many times before (Mallory & McNeill 1991: 146-50; Aitchison 1994: 81-5; Waddell 1998: 334-43) and need be only briefly summarized here.

- * Phase 1: An initial phase of Neolithic settlement

- * Phase 2: A period of abandonment followed by subsequent ploughing, probably during the Bronze Age

- * Phase 3(i): The erection of a circular ditched enclosure some 45 m in diameter which surrounded a series of about 28 substantial timber posts, believed to date to the Late Bronze Age

- * Phase 3(ii-iii): The erection of a series of periodically renewed figure-of-eight structures, consisting of a smaller circular building of about 10-13.5 m diameter and a larger enclosure on the order of 20-25 m diameter. These dated to the transition between the 'terminal' Bronze Age and the Early Iron Age, i.e., 4th-2nd centuries BC, and they yielded among other things the skull and mandible of a Barbary ape, an indication that Navan was probably part of a widespread system of prestige exchange

- * Phase 4: A large circular structure, 40 m in diameter, consisting of 280 oak timbers with a central post dendro-dated to 95 BC (Baillie 1988)

* Phase 5: Which may have followed on almost immediately from phase 4, saw the infilling of the entire structure with limestone boulders to a height of 2.8 m, followed by the firing of the existing timber on the cairn, and then the encasement of the cairn in an earthen mound.

The structure and its encasement have been subject to various interpretations (Lynn 1992; 1994; 1996) employing both specifically Celtic and more broadly Indo-European models of interpretation. From a purely architectural standpoint there is debate on whether the 40-m structure was roofed (and if so, how?) and the nature of the interval between phases 4 and 5. Was the 40-m structure initially erected to serve as a temple or public hall and only later (though during the life-time of the timber uprights) ritually transformed into a sod-covered cairn or were the timber posts never intended to support a free-standing structure but merely to serve as the timber spine of an 'Otherworld' structure ritually encased in stone and then earth?

Although Dudley Waterman had intended to excavate the surrounding bank and ditch of the outer enclosure, he unfortunately died before this part of his project could be completed. A moratorium was placed on any further excavations at Navan until the publication of Waterman's report, but non-invasive research continued and remote sensing has uncovered the traces of a double-ringed 30-m structure (here termed Site C; [ILLUSTRATION FOR FIGURE 1 OMITTED]) between Sites A and B (Kvamme 1996; Ambos et al. 1996). This structure remains unexcavated and undated.

Because of the moratorium, there was fairly intense speculation as to the date of the surrounding outer bank and ditch, with two main schools of thought. The first suspected the hengiform enclosure to be of Neolithic date (Simpson 1989). The case for such an early date was supported by several lines of data:

a the evidence of Neolithic occupation on the site (Phase 1);

b the evidence of Neolithic ritual activity in the vicinity (the surrounding fields yielded the remains of two destroyed passage tombs);

c the morphology of the enclosure with its outer bank and inner ditch which would better have conformed to a Neolithic henge rather than a Bronze Age/Iron Age defensive site;

d the presence of pine pollen in a core (Weir 1987) extracted from the ditch as pine pollen virtually disappears from pollen spectra in the northern part of Ireland by c. 2200 BC.

According to this hypothesis, an earlier Neolithic enclosure was reutilized as a centre of Late Bronze Age and Iron Age ritual activity, the site of which was subsequently incorporated into Irish tradition as the ancient capital of Ulster.

The second theory saw the enclosure as contemporary with the major building phases encountered at Site B, i.e., a date of the Late Bronze Age was seen as the most acceptable. Coring of the ditch of the outer enclosure in order to obtain pollen samples recovered organic material (peat) which was radiocarbon dated (UB-3091) to 2420 [+ or -] 40 BP/766-398 cal BC (Weir 1989). This suggested that the enclosure pre-dated the 40-m structure (Phase 4) and probably also the Phase 3(ii & iii) figure-of-eight structures but might have been contemporary with the Phase 3(i) 45-m ditched enclosure. Coring had suggested that the outer (230 m) enclosure's ditch was about 3.7 m deep.

With the publication of Waterman's report in 1997 the moratorium was lifted, and the Environment and Heritage Service of the Department of the Environment, Northern Ireland, supported a six-week excavation across the enclosure ditch in order to ascertain its shape, date, the presence of artefactual material, and to obtain a pollen profile of the ditch sediments. The excavation cleared to the base of the ditch which proved to be c. 4.5 m in depth and, irrespective of its hengiform configuration, the substantial ditch with its earthen bank would have provided a formidable barrier. It might be suggested that, as the Irish Otherworld was often personified by a female deity, the enclosure (historically attributed to the goddess Macha) was intended primarily to confine the sacred forces of the Otherworld within its limits rather than to exclude enemies (cf. Sjoblom 1994; and R.B. Warner pers. comm.). Much of the ditch fill consisted of layers of peat and abundant remains of wood that had fallen into or grown in the ditch. Other than some worked timbers from a depth of c. 0.5 m, there were no archaeological finds until the bottom of the ditch when two heavily charred oak timbers and the remains of a wooden bowl were recovered. The oak timbers, which were embedded in the grey silt deposits which constitute the lowest fill of the ditch, offered the best opportunity for providing a precise date for the outer enclosure.

The two timbers were examined dendrochronologically. One sample (Q9736) possessed 104 annual growth rings but lacked any of the outer heartwood or sapwood. The surviving portion grew between 267 and 164 BC (significant t-values were found against chronologies from the Dorsey, Co Armagh (7.5), Navan (6.5) and Corlea, Co. Longford (7.6)). Its estimated felling date, computed by subtracting the requisite number of sapwood rings, was 132 [+ or -] 9 BC or later. The second piece of timber (Q9735) contained 146 growth rings with 26 sapwood rings present. The timber grew between 245 and 100 BC (significant t-values against the Dorsey (5.1), and Navan (4.7) with a backup correlation against Corlea (3-6)). The estimated felling date would be 94 [+ or -] 9 BC (but obviously after 100 BC).

While the dendro-date indicates that the ditch was open after 95 BC, an obvious problem is reconciling the radiocarbon date, taken from a peat deposit stratigraphically higher in the ditch ([ILLUSTRATION FOR FIGURE 2 OMITTED], point 'x'), that suggests a date during the major fiat portion of the calibration curve, sometime before c. 400 BC. There was no evidence for recutting and later deposition, and the oak timbers were excavated within about 10 m or less of where the peat core itself was extracted. As the timbers were found both in absolute

depth and stratigraphically below the dated peat sample, and as they are reliably dated by dendrochronology, this calls into question the radiocarbon date previously obtained. Unfortunately, there is no obvious way to resolve the contradictory data short of sectioning the ditch at the precise location cored by Weir. The contradiction must remain for the time being. Irrespective of the anomalous radiocarbon determination, we can conclude that the enclosure of Navan was undertaken at approximately the same time as the erection of its most substantial monument, the 40-m structure, and they are both part of a single horizon of construction.

The date opens up a number of avenues for further discussion. Although the timbers may have derived from the newly discovered (and as yet undated) 30-m structure at Site C, it would seem more likely that they derived from the contemporary 40-m structure (the 'temple') at Site B. If this is the case, then we have the probable remains of structural timbers that spanned the uprights of the 40-m structure. That the timbers were roughly squared off and not uprights supports the proposition that the 40-m structure may have been roofed in some fashion. That the two timbers were burnt before being deposited within the ditch supports the distinction between Phases 4 and 5, i.e., between the erection of the 40-m timber structure and its burning and subsequent encasement, and renders it less likely that the timbers were erected only as a symbolic component in the building of the mound.