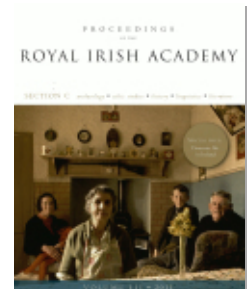Domestic production and the political economy in prehistory:
evidence from the Burren, Co. Clare

Carleton Jones, Olive Carey, Clare Hennigar

Domestic production and the political economy in prehistory: evidence from the Burren, Co. Clare

CARLETON JONES*, OLIVE CAREY AND CLARE HENNIGAR
Department of Archaeology, NUI Galway

Abstract

Three closely related prehistoric landscapes located in the Burren in Co. Clare are investigated with the aim of exploring the relationships between households and the wider societies within which they functioned. Particular emphasis is placed on the spatial expression of residential, economic and ritual activities across the landscapes. The changing relationship between domestic production and the developing political economy is placed in its wider Irish and British context and discussed in terms of gift exchanges and debt relationships.

Introduction

The core activities of households have been identified in both ethnographic studies of contemporary societies and archaeological studies of ancient societies as production, distribution, reproduction, co-residence and transmission (primarily of wealth and social position). Although there is often a 'pull' towards the pursuit of these activities at the level of the individual household, ethnographic studies have shown that even in fairly simple societies, households are frequently incorporated into larger kin groups, work parties or residential groups to form efficient production units.[1] Production concerned primarily with maintaining and perpetuating the family (domestic production) is, therefore, shaped in part by the wider relationships within which households function.

The formation and maintenance of supra-household production groups is generally brought about through economic interdependence, ideology and symbolism working together to extend the definition of kinship relationships and thereby extend the labour available for domestic production. Even in fairly simple societies, domestic production is frequently increased and a percentage diverted to fund

---

[1] Timothy Earle, 'Property rights and the evolution of chiefdoms', in Timothy Earle (ed.), *Chiefdoms: power, economy, and ideology* (Cambridge, 1991), 71–99. Andrew Fleming, 'Land tenure, productivity, and field systems', in G. Barker and C. Gamble (eds), *Beyond domestication in prehistoric Europe* (London, 1985), 129–46. Augustin Holl, 'Community interaction and settlement patterning in northern Cameroon', in Augustin Holl and Thomas Levy (eds), *Spatial boundaries and social dynamics* (Ann Arbor, MI, 1993), 39–62. Marshall Sahlins, *Stone Age economics* (Chicago, 1972).

community ceremonies and building projects (the political economy).[2] Relevant evidence for this type of behaviour in western European prehistory is the construction and use of megalithic tombs in the Neolithic, particularly those that emphasize collective burial practices and those which echo the architecture of ancestral houses.[3]

In more hierarchical societies, the political economy encompasses not only communal ceremonies and projects but also the financing of élites who are removed, at least partially, from the domestic economy. In prehistoric Europe, the Bronze Age is generally viewed as a time when inequalities were heightened and the political economy expanded to support élites. The use and display of metalwork seems to have been particularly important to these élites as a means whereby they identified themselves and legitimised their superior positions.[4]

Ethnographic studies have also shown that relationships of production, kinship and domination can all be related to the spatial expression of residential, economic and ritual activities across a landscape.[5] The spatial dimension of these activities means that studies of archaeological landscapes, particularly when they are well-preserved landscapes, are a good route of investigation into the social dynamics of past societies, including relationships between households and the wider society.[6]

This paper looks at three closely related areas situated in a region renowned for its well-preserved archaeological landscapes, the Burren in north-west Co. Clare. This region is characterised by a karstic limestone terrain with thin soils that has been mainly used for pastoral rather than arable farming over the millennia. Archaeologically, this means that a wide range of prehistoric features such as field walls and farms, which are often buried or ploughed-out in other regions, are visible in the Burren today.

The three areas considered here are Roughan Hill in the south-east Burren, the Coolnatullagh Valley in the eastern Burren, and the Carran Plateau just west of the village of Carran (Fig. 1). All three areas contain landscapes composed of a variety of prehistoric farms, enclosures, special activity areas, field systems and ritual

---

[2] Timothy Earle, *How chiefs come to power: the political economy in prehistory* (Stanford, 1997). Timothy Earle, 'The evolution of chiefdoms', in Earle, *Chiefdoms: power, economy, and ideology*, 1–15. Allen Johnson and Timothy Earle, *The evolution of human societies: from foraging group to agrarian state* (Stanford, CA, 1987). Sahlins, *Stone Age economics*.

[3] Ian Hodder, 'Burials, houses, women and men in the European Neolithic', in Daniel Miller and Christopher Tilley (eds), *Ideology, power and prehistory* (Cambridge, 1984), 51–68.

[4] John Waddell, *The prehistoric archaeology of Ireland* (Galway, 1998), 179–278. Kristian Kristiansen, 'The formation of tribal systems in later European prehistory: northern Europe, 4000–500 BC', in Colin Renfrew *et al.* (eds), *Theory and explanation in archaeology: the Southampton conference* (New York, 1982), 241–80.

[5] Marshall Sahlins, 'Land use and the extended family in Moala, Fiji', *American Anthropologist* 59 (1957), 449–62. Glen Stone, 'Agrarian settlement and the spatial disposition of labor', in Holl and Levy (eds), *Spatial boundaries and social dynamics*, 25–38.

[6] Fleming, 'Land tenure, productivity and field systems', 129–46. Richard Hingley, 'Towards social analysis in archaeology: Celtic society in the Iron Age of the Upper Thames Valley (400–0 BC)', in Barry Cunliffe and David Miles (eds), *Aspects of the Iron Age in central southern Britain*, University of Oxford Committee for Archaeology Monograph 2 (Oxford, 1984), 72–88.
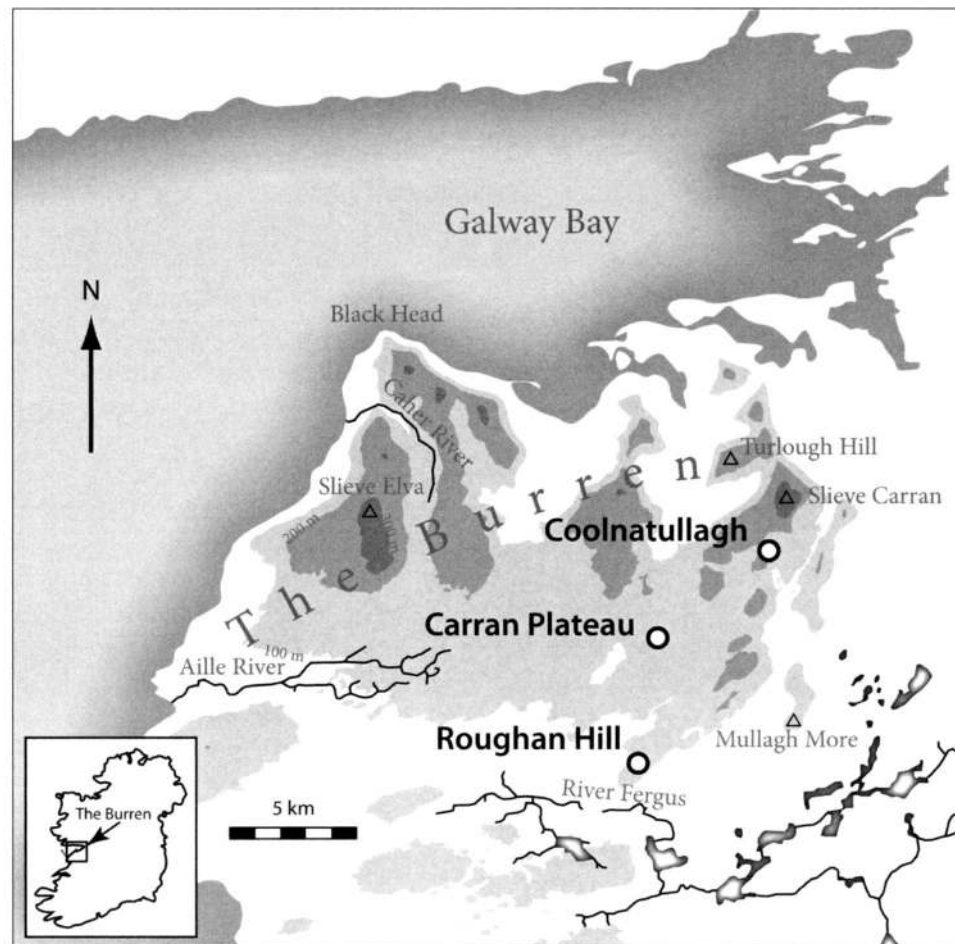
Fig. 1—Location of the three study areas on the Burren.

monuments. Excavations at some of the farms, enclosures and ritual sites, as well as excavations of sections across some of the ancient field walls, allow us to assign definite dates to some of the sites and features, and probable dates (based on similar morphology) to many of the other sites and features.

The most ubiquitous features are mound walls. These are the low, grass-covered remains of collapsed ancient field walls. Because the mound walls have protected the underlying soft limestone bed-rock from erosion, it has been possible to date these walls by excavating trenches across them and then measuring the preserved height of the bed-rock under the walls in relation to the lower, more eroded bed-rock on either side.[7] Results of this procedure have shown that most of the mound walls on Roughan Hill date to the Beaker Period and Early Bronze Age and are characterised by an underlying bed-rock pedestal between 16cm and 26cm

---

[7] Carleton Jones, 'The discovery and dating of the prehistoric landscape of Roughan Hill, Co. Clare', *The Journal of Irish Archaeology* 9 (1998), 27–44.

high. Because similar pedestal heights have also been recorded under mound walls in Coolnatullagh and on the Carran Plateau, it seems that the majority of the mound walls in all three areas are at least roughly contemporary.

Another chronologically significant parallel that can be drawn between the three areas is the morphology of enclosure walls (most, and possibly all of these, contain farms). These enclosure walls are not all identical but they are variations on a theme. That theme is the use of very large slabs set on edge, sometimes forming just one face of the wall, sometimes forming both faces, and sometimes forming contiguous box-like compartments filled with rubble. Enclosure walls of this type encompassing farms on Roughan Hill have been dated to the Beaker Period and Early Bronze Age and similarities between the Roughan Hill enclosures and those in Coolnatullagh suggest that they are at least roughly contemporary. A similar enclosure wall on the Carran Plateau has been dated to the Late Bronze Age and similarities within the Carran group of enclosures suggest that they are all contemporary with each other.

Another feature, which all three landscapes share, is cairns. There are two excavated and dated cairns in the Burren, the large cairn at Poulawack and a small cairn at Coolnatullagh. Poulawack began as a Neolithic Linkardstown tomb (a circular cairn containing a central megalithic burial cist), and was subsequently reused as a burial cairn in the Beaker Period and again in the Early Bronze Age. The small cairn at Coolnatullagh appears to have been constructed in the Beaker Period, used again in the Early Bronze Age, and then possibly again in the Late Bronze Age.[8] Although it is not certain, it seems likely that most of the other cairns in the study areas were used and possibly constructed in the Bronze Age (although some may have been constructed and used earlier and some later).[9] Wedge tombs are another type of monument associated with burial that are found in two of the study areas—Roughan Hill and Coolnatullagh. Although no Burren wedge tombs have been excavated, it has now been established by excavations elsewhere and with a human bone radiocarbon date from an unexcavated Burren wedge tomb (*c.* 2033–1897 BC), that these are Beaker Period monuments.[10] One of the study areas, the Carran Plateau,

[8] H. O'Neill Hencken, 'A cairn at Poulawack, County Clare', *Journal of the Royal Society of Antiquaries of Ireland* 65 (1935), 191–222. Michael Ryan, 'Poulawack, County Clare: the affinities of the central burial structure', in Donnchadh Ó Corráin (ed.), *Irish antiquity: essays and studies presented to Professor M.J. O'Kelly* (Dublin, 1981), 134–46. A.L. Brindley and J.N. Lanting, 'Radiocarbon dates from the cemetery at Poulawack, County Clare', *Journal of Irish Archaeology* 6 (1991/92a), 13–17. James Eogan, 'Excavations at a cairn in Coolnatullagh townland, Co. Clare', *North Munster Antiquarian Journal* 42 (2002), 113–50.

[9] A partially excavated cairn at Cahermackirrilla produced Iron Age radiocarbon dates for a cremation burial located high in the body of the cairn (Christine Grant, pers. comm.).

[10] William O'Brien, 'Aspects of wedge tomb chronology', in Elizabeth Shee-Twohig and Margaret Ronayne (eds), *Past perceptions: the prehistoric archaeology of south-west Ireland* (Cork, 1993), 63–74. William O'Brien, *Sacred ground: megalithic tombs in coastal south-west Ireland*, Bronze Age Studies 4 (Galway, 1999). Anna Brindley and Jan Lanting, 'Radiocarbon dates from wedge tombs', *The Journal of Irish Archaeology* 6 (1992), 19–26. Rick Schulting, A. Sheridan, S.R. Clarke and C. Bronk Ramsey, 'Largantea and the dating of Irish wedge tombs', *Journal of Irish Archaeology* 17 (2008), 1–17. Christine Grant, 'Early Bronze Age date for Burren wedge tomb', *Archaeology Ireland* 23(4) (2009), 5.

contains ring barrows. These monuments are chronologically ambiguous, but they are most likely Late Bronze Age or Iron Age.

Roughan Hill

Roughan Hill is the southernmost tip of the south–west to north–east trending ridge that forms the eastern edge of the Burren. It rises to only a little over 130m, and its north side where the prehistoric activity was concentrated, is a gentle slope (Pl. I). Although the soils on the hill are thin rendzinas,[11] and areas of bare bed-rock are exposed in places, the soil cover is generally better than in most upland parts of the Burren. Today it is used for winter grazing.

Survey and excavation have revealed a prehistoric landscape characterised by farms, field walls and ritual monuments. The farms are visible today as complexes of conjoined enclosures embedded in contemporary fields defined by mound walls that radiate from them. There is no set layout to these farms but they are all roughly the same size and they occur in a fairly tight cluster, all within 200m of their nearest neighbour (see Farms RH1, RH2, RH5 and RH7 in Fig. 2). Informal walk overs of the fields just west of the surveyed area revealed no similar sites and it seems, therefore, that the cluster consisted of four individual farms.

Excavations at the centre of Farm RH1 and much more limited excavations at Farm RH2 have produced domestic artefact assemblages and radiocarbon dates from animal bone refuse that place the occupations of these farms in the Beaker

PL. I—View of Roughan Hill from the north-east.

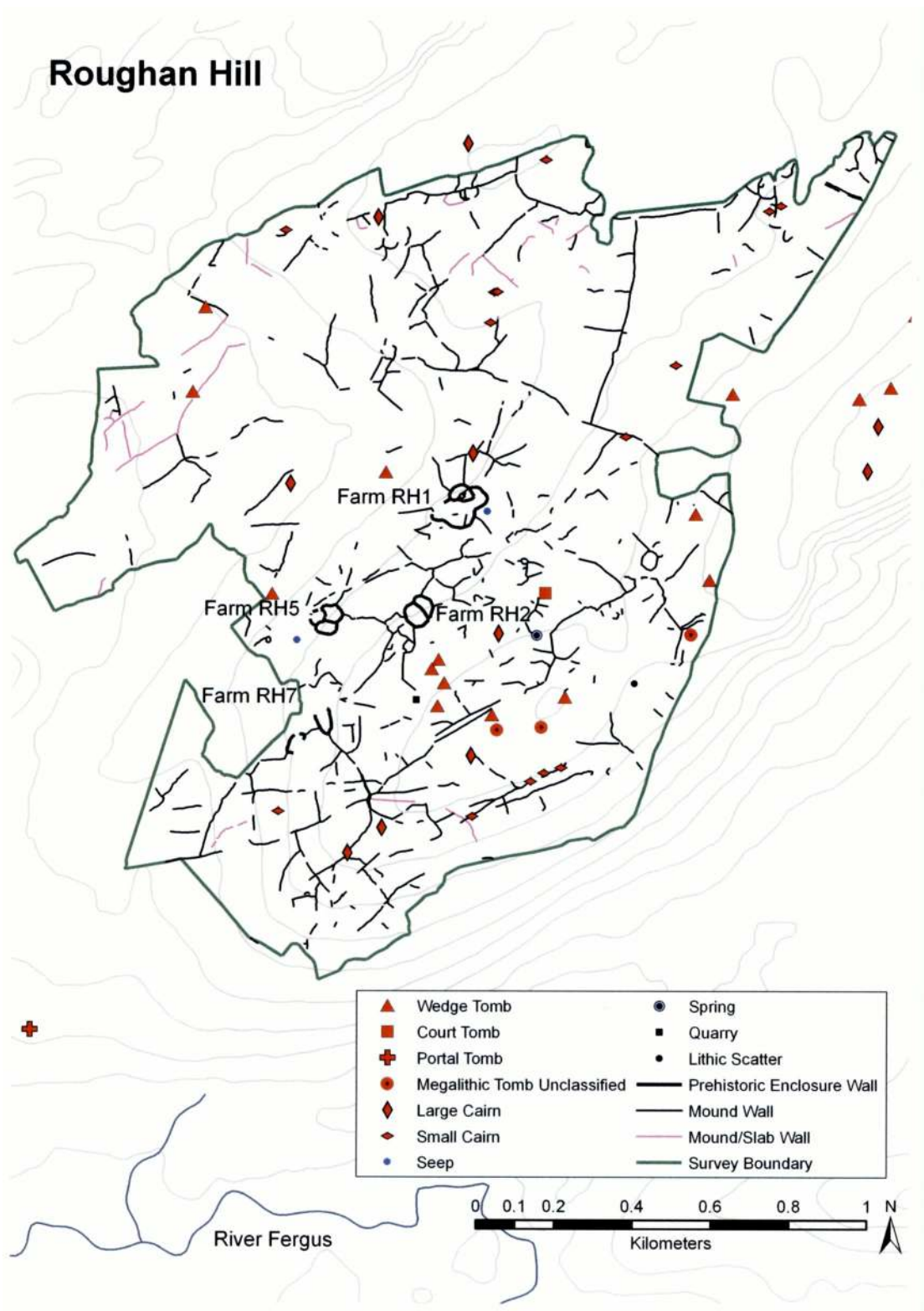[11] T.F. Finch, *Soils of County Clare*, Soil Survey Bulletin 23 (Dublin, 1971).

Fig. 2—Roughan Hill—prehistoric features.

Period and Early Bronze Age (the late third and early second millennia BC).[12] For Farms RH5 and RH7, the morphology of their enclosure walls, the fact that they are embedded in the same mound wall field system as the other farms, and the recovery of similar lithic artefacts (from very limited excavations at RH5 and from the surface of RH7), all combine to make it very likely that all four farms were lived in contemporaneously.

Set amongst the fields of Roughan Hill are a large number of megalithic monuments and burial cairns. Of these, the wedge tombs and many of the cairns are probably at least roughly contemporary with the farms. In general, the cairns are sited along the top of the ridge to the south and east, while the wedge tombs are sited below the ridge line, on the north-western slope of the hill. There are, however, cairns on lower sloping ground and one wedge tomb on the ridge line. The wedge tombs appear to have been sited to overlook areas immediately down slope (where the farms are located) but the cairns appear to have been sited to have panoramic views over the wider country-side. Other sites of interest on Roughan Hill are a megalithic slab quarry, a surface lithic scatter, a spring located east of Farm RH2, and two smaller seeps located adjacent to Farms RH1 and RH5 (Fig. 2).

The majority of the archaeology on Roughan Hill appears to date to the Beaker and Early Bronze Age periods. There are, however, mound walls on the hill with pedestal heights significantly higher than the norm and there are also slab walls (morphologically distinct from mound walls) with significantly lower pedestals.[13] This suggests that Roughan Hill was occupied both earlier and later than the Beaker/ Early Bronze Age period. The earlier occupation is demonstrated most fully by the excavated atypical court tomb in Parknabinnia townland, which has been dated to the fourth millennium.[14]

The era on Roughan Hill with which this paper is most concerned, however, is that encompassed by the Beaker Period and the Early Bronze Age. In this period, we can say with some confidence that Roughan Hill was the location of a cluster of four fairly similar farms spaced closely together and set within a landscape divided into many fields. Close by these farms were many wedge tombs, most of which were sited overlooking the farms; slightly farther away were cairns arranged along the ridge top.

Coolnatullagh

The Coolnatullagh valley and uplands are situated in the north-eastern part of the Burren, at the head of a long valley (Pl. II). The valley contains substantial areas of exposed limestone pavement while heathy vegetation covers the upland areas. Soils in the area are mainly thin rendzinas but a limited area of glacial till occurs in the

---

[12] Jones, 'Discovery and dating of the prehistoric landscape of Roughan Hill', 27–44. Carleton Jones, *Roughan Hill and the Beaker Period/Early Bronze Age landscape of northwest Munster*, (forthcoming).

[13] Jones, 'Discovery and dating of the prehistoric landscape of Roughan Hill', 27–44.

[14] Carleton Jones, 'Neolithic beginnings on Roughan Hill and the Burren', in Ian Armit *et al.* (eds), *Neolithic settlement in Ireland and western Britain* (Oxford, 2003), 188–94. Carleton Jones, *The Burren and the Aran Islands—exploring the archaeology* (Cork, 2004).

PL. II—Looking south-east across the Coolnatullagh Valley from the lower slope of Gortaclare Mountain at the western end of the study area. The hill of Dún Mór rises above Farm C1.

south-west portion of the survey area.[15] These soils are well suited to winter grazing. Several springs occur around the valley sides, which become swollen in wet weather and converge on the valley floor to form a substantial stream that feeds into a small turlough.

Besides a single wedge tomb recorded by the megalithic survey in 1961,[16] the prehistoric archaeology of Coolnatullagh really first came to light with the partial excavation of a cairn and a mound wall in the mid-1990s. Two further burial cairns and a field system (including an enclosure wall) were identified at that time (referred to here as Farm C1), and two *fulachtaí fia* were located on the valley floor nearby.[17] Recent survey has identified two further prehistoric farms as well as extensive mound-wall field systems and other prehistoric features.[18] The three

---

[15] Finch, *Soils of County Clare*.

[16] Ruaidhrí de Valera and Seán Ó Nualláin, *Survey of the Megalithic tombs of Ireland, Volume 1—County Clare* (Dublin, 1961), 15.

[17] Eogan, 'Excavations at a cairn in Coolnatullagh', 113–50.

[18] Olive Carey, 'Coolnatullagh: a Beaker Period/Early Bronze Age secular and ritual landscape in the eastern Burren', unpublished M.Litt. thesis, National University of Ireland, Galway, 2009.

farms, which are spaced ½km–1km apart, are set within individual field systems that do not overlap. Although all three are characterised by enclosures, ritual monuments and mound wall field boundaries, there are differences in the size and layout of the farms (Fig. 3).

Farm C1 is located at the south-western end of the valley and consists of a C-shaped enclosure set within small fields defined by mound walls (Fig. 3). Three cairns are also closely associated with this farm. Three lines of evidence confirm the farm as a Beaker Period/Early Bronze Age settlement. First are two radiocarbon dates from the small burial cairn (Cairn C1) embedded in the farm's fields, approximately 15m west of the C-shaped enclosure. These are a Beaker Period date (*c.* 2460–2140 BC) from what was probably a central cist and an Early Bronze Age date (*c.* 1880–1610 BC) from a secondary inhumation in the cairn (there is also further activity at the cairn evidenced by sherds of a probable Later Bronze Age pot found against the external revetment, possibly inverted).[19] Second is the similarity in morphology between the enclosure wall and Beaker Period and Early Bronze Age farm enclosures on Roughan Hill. Finally, the height of the bed-rock pedestal (21cm), preserved beneath the mound wall adjacent to the excavated cairn, falls within the range for the Beaker Period/Early Bronze Age mound walls on Roughan Hill.[20]

Farm C2 is located at the eastern end of the valley and consists of an enclosure, three cairns and a possible cist (Fig. 3). Mound walls are found in the vicinity of the enclosure but they are too fragmentary to enable the identification of a coherent field system. A probable burial mound within the enclosure may cover an abandoned house and may, therefore, date to the cessation of habitation at this site. This may be comparable to the practice of outlining abandoned houses with rubble banks that has been recorded elsewhere.[21]

Farm C3 is found on the lower slope of Gortaclare Mountain (Fig. 3). Its main enclosure is the largest prehistoric enclosure in the valley. A separate, smaller enclosure is located to the east. A large field defined by mound walls is attached to the southern side of the large enclosure and the mound wall fields in the vicinity of Farm C3 are part of the system of large fields that covers Gortaclare Mountain. Small cairns, probably burial monuments, are located to the north, east and south of the farm. Some appear to be fairly closely associated, others are more distant. South of the farm are two additional mounds that do not appear to be burial monuments.

Scattered throughout the valley are several possible hut/house sites (typically circular). Three of these are situated so close to springs or seeps that they probably did not function as habitations if the present water courses were in the same position in prehistory. If so, it is more likely that the sites were special use sites,

[19] Eogan, 'Excavations at a cairn in Coolnatullagh', 113–50. Anna Brindley, 'Report on the coarse ware pottery', in James Eogan, 'Excavations at a cairn in Coolnatullagh townland, Co. Clare', *North Munster Antiquarian Journal* 42 (2002), 147.

[20] Carey, *Coolnatullagh*, 127–8; Jones, 'Discovery and dating of the prehistoric landscape of Roughan Hill', 27–44.

[21] John Barnatt, Bill Bevan and Mark Edmonds, 'Gardom's Edge: a landscape through time', *Antiquity* 76 (2002), 51–6.
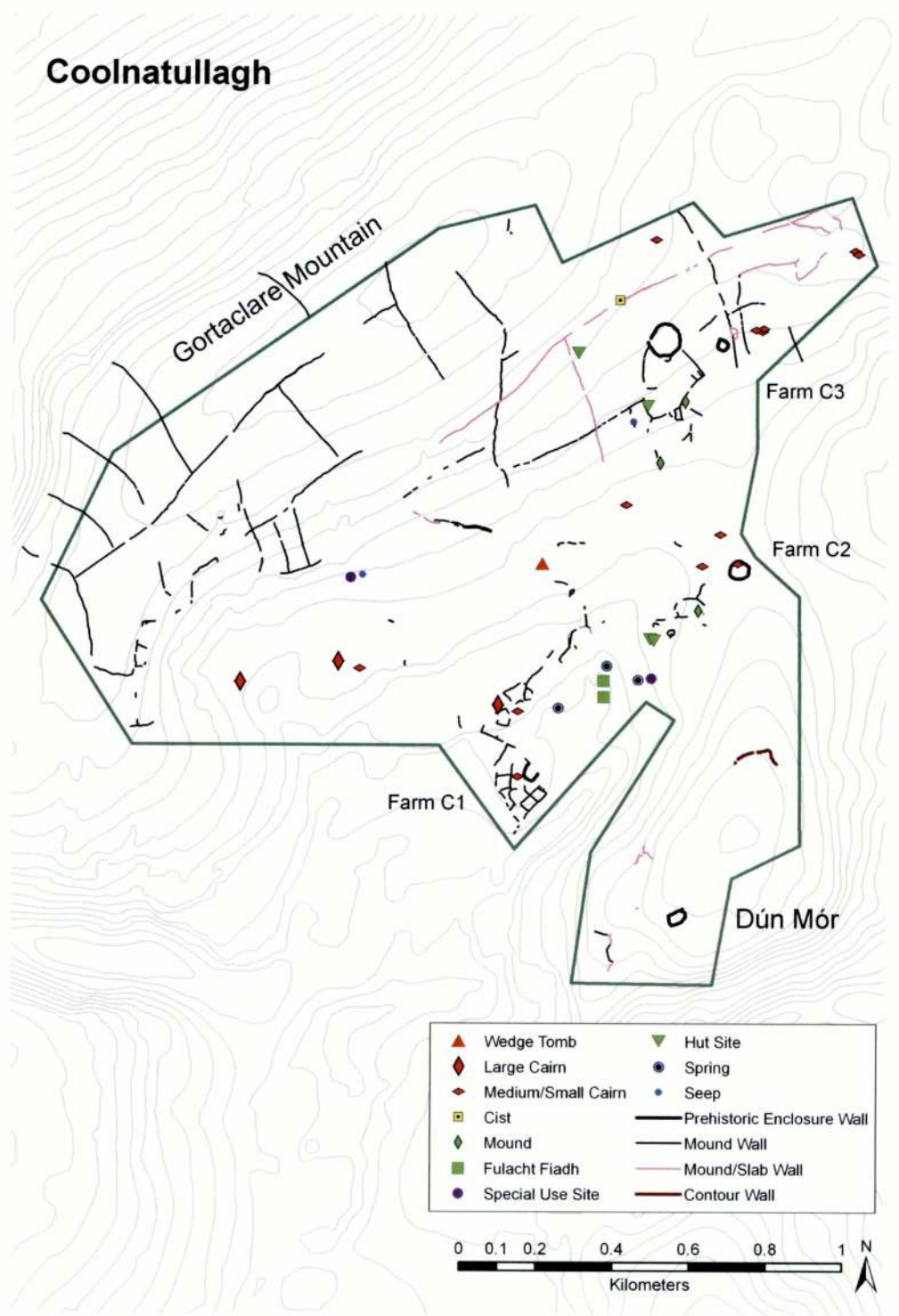
Fig. 3—Coolnatullagh—prehistoric features.

either for the collection of water or for an activity requiring a ready supply of water. The two *fulachtaí fia* on the valley floor are further markers of special-use areas.[22]

An orderly system of large rectangular and square fields bounded mainly by mound walls is located on the upper slopes and summit of Gortaclare Mountain (Fig. 3). A long, axial mound wall runs along the summit of the mountain orienting the entire field system on the same axis as Gortaclare. This field system also appears to extend into the neighbouring valley north of the mountain, beyond the current survey. Interestingly, some of the walls of this system are best described as mound/slab walls. In all three study areas, wherever the distinction between mound walls and slab walls is clearer, slab walls always post-date mound walls. This suggests that the Gortaclare field system (bounded by both mound walls and mound/slab walls) may post-date the smaller fields bounded solely by mound walls in the bottom of the valley.

The hill of Dún Mór, which forms the southern side of the valley, is relatively free of prehistoric features. The most interesting feature is a large wall, which follows the contour of the hill on its gentle northern slope. The function and date of this wall are uncertain but it may have been designed to control access to the summit of Dún Mór along the easiest access route.

The ritual/burial monuments in Coolnatullagh are mainly cairns and these are generally closely associated with the farms as detailed above. Two of the largest cairns, however, are located on the sloping summits of two glacial hillocks, which are located apart from the farms at the western end of the survey area, where interestingly, there are no mound walls. All of the cairns are situated to take advantage of extensive views over the surrounding countryside. They are particularly sited to overlook the access routes into and through the valley. A single wedge tomb is located centrally in the valley, roughly equidistant from the three farms. Approximately 1.7km north-east of the survey area is a massive cairn on top of Slievecarran, but the scale and siting of this mega-cairn indicate that it was connected to a much larger social group than that associated solely with Coolnatullagh Valley.

When viewed in totality, the focal elements of the domestic landscape at Coolnatullagh are the three farms set in their individual field systems and evenly spaced within the valley. Other features are the two *fulachtaí fia* on the valley floor and the large field system on the upper slopes and summit of Gortaclare Mountain. The large contour wall on Dún Mór combined with the general paucity of other features on this hill indicates that it was used differently. The smaller cairns are integrated into the environs of the farms while the wedge tomb, the two large cairns on glacial hillocks and the Slievecarran cairn are sited according to different criteria.

---

[22] The wider date range for *fulachtaí fia*, which has been revealed by recent excavations, makes it possible that the Coolnatullagh examples are contemporary with the farms and fields: Eoin Grogan et al. (eds), *The Bronze Age landscapes of the pipeline to the west. An integrated archaeological and environmental assessment* (Bray, 2007), 81–101. Graham Hull and Kate Taylor, 'N18 Ennis Bypass and N85 Western Relief Road—summary of the final archaeological results', *The Other Clare* 31 (2007), 23–9.

Carran Plateau

The Carran Plateau is located immediately west of the village of Carran (Pl. III). The present study area is focused on the western half of the central plateau, but the plateau continues beyond the study area on slightly higher ground to the north and on slightly lower ground to the south. The prehistoric enclosures that have been the focus of this study, however, appear to be confined to the survey area. At present, the plateau is used mainly for livestock winterage. Its surface alternates between open limestone pavement and areas of thin rendzina soil cover. There is also a narrow strip of glacial till that stretches from the south-west corner of the plateau to its centre.[23] Today, there is a pond at the north-east tip of the glacial till, near the centre of the plateau that has been obviously modified in modern times. This pond may, however, be a spring-fed natural feature, possibly present in prehistory. If so, this would be a very important feature and its central position may well have influenced the pattern of life on the plateau in prehistory.

A pollen core from the Carran Depression immediately east of the plateau shows that the area had forest cover in post-glacial times, which was subsequently cleared. Although no dates are available from the core, the study did suggest that the clearance may well have been associated with a widespread soil loss event in the Burren that has been tentatively dated to the Bronze Age.[24]

The most significant archaeological features on the plateau are five large enclosures, which are arranged around its edge, positioned to have views over the surrounding, lower lands (Fig. 4). The first of these was recorded by Gibson as site C-9 in his Cahercommaun survey.[25] This site is referred to as Enclosure 1 in the present study to co-ordinate with the labelling of Enclosures 2 to 5, which were recorded in the course of recent research.[26] In 1985 Gibson carried out limited excavations on the enclosing wall of Enclosure 1 (his C-9), which produced two Later Bronze Age radiocarbon dates (*c.* 1210–931 BC and *c.* 1022–836 BC) from the foundation level of the wall and an Iron Age date (*c.* 406–280 BC) from directly under the sod.[27]

The four other more recently identified enclosures on the plateau are all similar to Enclosure 1 in terms of wall morphology and overall diameters, which range from 120m to 140m. Enclosures 2 and 5 have internal circular hut/house sites that appear to be contemporary with the enclosures. This suggests that the

[23] Finch, *Soils of County Clare*.

[24] Keith Crabtree, 'Evidence for the Burren's forest cover', in Martin Bell and Susan Limbrey (eds), *Archaeological aspects of woodland ecology*, British Archaeological Reports, International Series 146 (Oxford, 1982), 105–13. David Drew, 'Environmental archaeology and karstic terrains: the example of the Burren, Co. Clare, Ireland', in Bell and Limbrey, *Archaeological aspects of woodland ecology*, 115–27.
David Drew, 'Accelerated soil erosion in a karst area: the Burren, western Ireland', *Journal of Hydrology* 61 (1983), 113–24.

[25] D. Blair Gibson, 'The hillslope enclosures of the Burren, Co. Clare', *Proceedings of the Royal Irish Academy* 107C (2007), 1–29.

[26] Clare Hennigar, 'The Carran Plateau and the later prehistoric landscape of the Burren', unpublished MLitt thesis, National University of Ireland, Galway, 2009.

[27] Gibson, 'The hillslope enclosures of the Burren', 1–29.
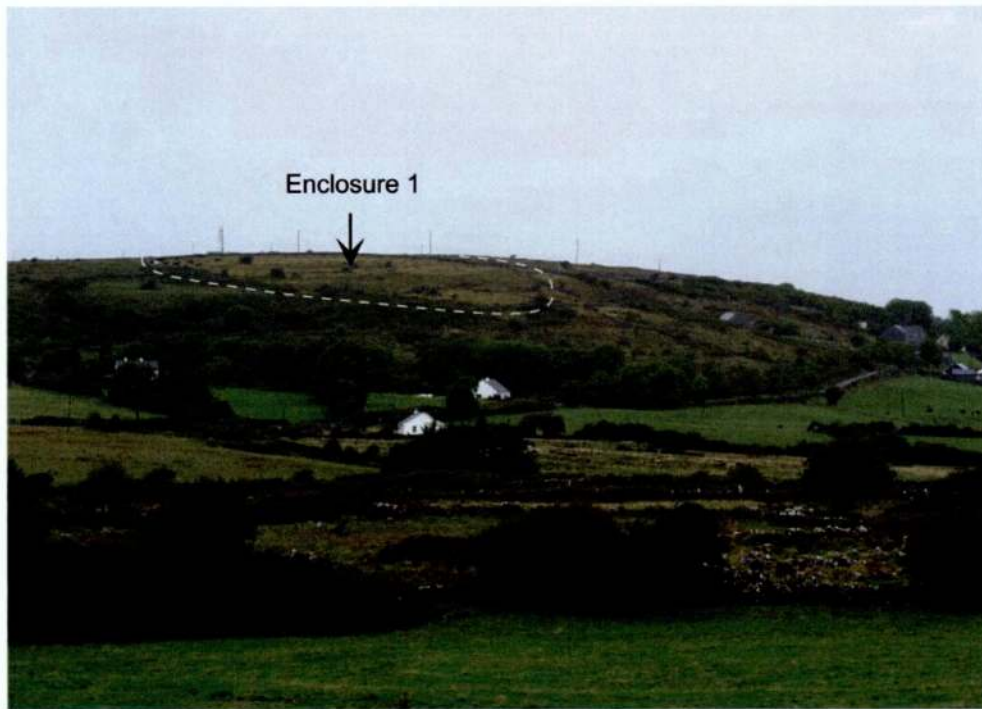
PL. III—View of Enclosure 1 on the Carran Plateau from the south-east (Gibson's site C-9).

Carran enclosures, although generally larger than those on Roughan Hill and in Coolnatullagh, may also have been habitation sites.

All the enclosures except Enclosure 1 have associated mound walls radiating off them. Some of the mound walls form other enclosures attached to the main enclosures, others seem to outline fields. Enclosure 3 has two trackways/droveways leading off it, but later activity on the site makes it unclear whether they are original features. Enclosure 2 is associated with a complex of field walls of varying morphologies. Some are mound walls, others are similar to the wall of the enclosure itself with large facing slabs, and others are composed of large slabs placed on edge, but stacked against each other.

In addition to the enclosures and their associated mound walls, there is another area on the north-east corner of the plateau where limited survey by Plunkett-Dillon recorded an area roughly 300m by 300m characterised by a compact layout of mound walls forming small sub-rectangular fields with associated circular hut/house sites (Fig. 4).[28] Plunkett-Dillon measured two pedestal heights under mound walls in this area which were subsequently remeasured by Jones using the same method

---

[28] Emma Plunkett-Dillon, 'The field boundaries of the Burren, Co. Clare', unpublished PhD thesis, Trinity College Dublin, 1985.
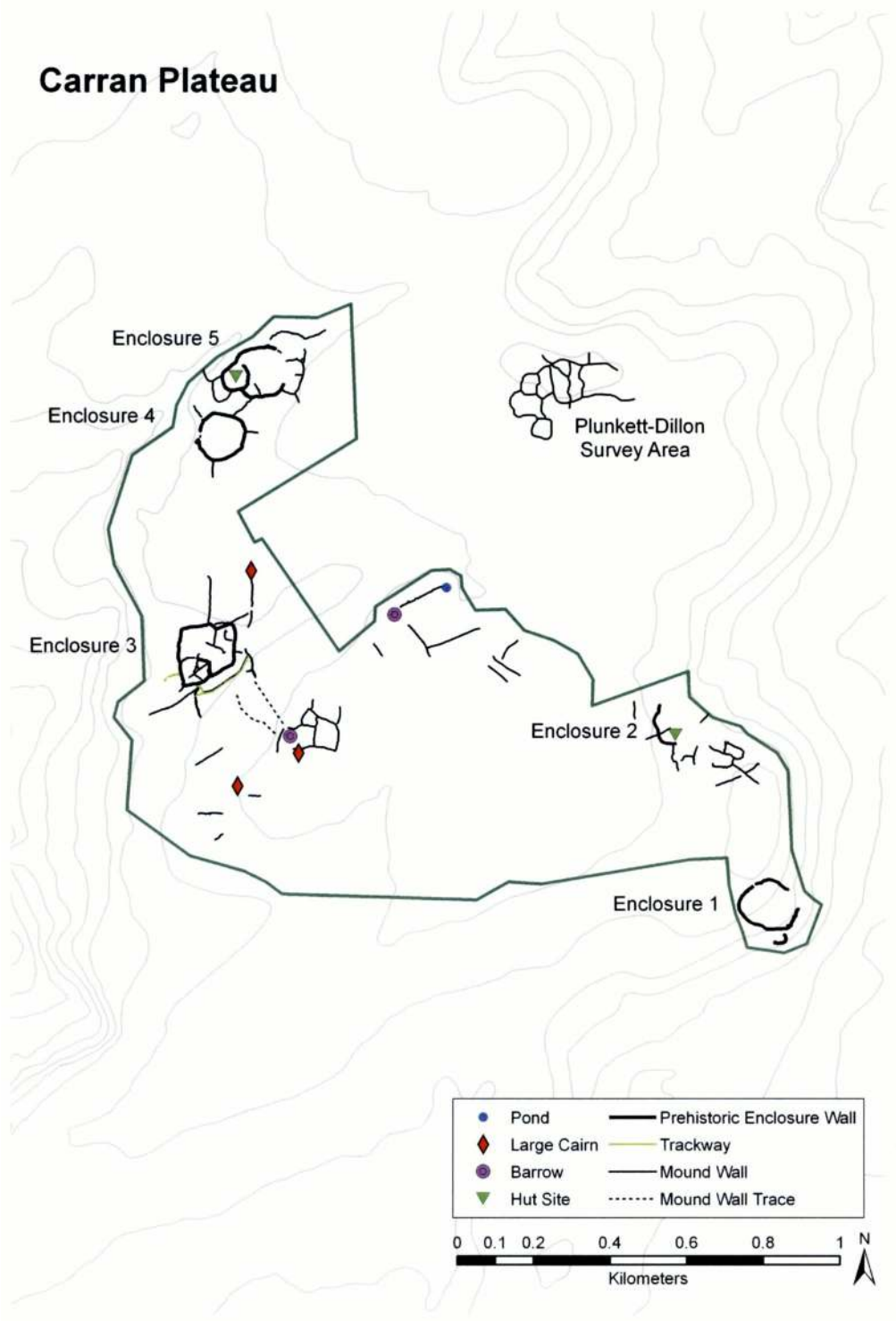
45

FIG. 4—Carran Plateau—prehistoric features.

as that used on Roughan Hill so that they could be compared.[29] These measurements showed one of the mound walls to have a pedestal height of 25cm, which is within the range of pedestals under Beaker/Early Bronze Age walls on Roughan Hill, while the other mound wall had a pedestal 16cm high, which would place it at the younger end of the same range.

Ritual/burial monuments on the Carran Plateau consist of three cairns and two ring barrows.[30] All these monuments are located in the south-west quadrant of the plateau in the general vicinity of Enclosure 3. It may be that these monuments are associated exclusively with Enclosure 3 but they do have wider views as well. The ring barrow near the centre of the plateau is positioned in an area of glacial till and is a fairly impressive monument, measuring approximately 23m across. Its near-central position may be significant, indicating a relationship with all the surrounding enclosures. It also may be significant that it is located near to the pond at the centre of the plateau.

Although not on the plateau, another site, probably associated with those previously mentioned, has been excavated and dated just 1.5km to the east. This is the *fulacht fia* at Fahee South, which produced a Later Bronze Age radiocarbon date (*c.* 1413–1213 BC).[31] This excavation also produced butchered animal bone, which suggests that at least one of the activities at this site was food preparation and consumption.

The dominant features on the Carran Plateau are the five enclosures arranged along the edge of the plateau. All but one is set within small fields defined by mound walls, while areas farther from the enclosures appear to have been more open in prehistory. Another area of small fields and associated huts/houses is located in the north-eastern corner of the plateau. Radiocarbon dates from Enclosure 1 have provided a likely construction date in the Later Bronze Age and possibly continued use into the Iron Age. Pedestal heights from under mound walls in the north-eastern area suggest a date in the Bronze Age. The three cairns and two ring barrows on the plateau, although not tightly dated, are likely to be late prehistoric. The ring barrows in particular, are likely to be Late Bronze Age or even Iron Age. The date from the nearby *fulacht fia* at Fahee South is further testament to Later Bronze Age activity in the area, probably associated with that on the plateau.

Discussion

The dating evidence indicates that on Roughan Hill, activity began in the Neolithic (radiocarbon-dated atypical court tomb) but seems to have peaked in the Beaker and Early Bronze Age periods (radiocarbon-dated farms with diagnostic pottery; wall morphology and pedestal heights; and numerous wedge tombs and

---

[29] Carleton Jones, 'Perceived and constructed landscapes in Neolithic Ireland', unpublished PhD thesis, University of Cambridge, 1997.

[30] Hennigar, 'The Carran Plateau'.

[31] Diarmuid O'Drisceoil, 'Burnt mounds: cooking or bathing?', *Antiquity* 62 (1988), 671–80. A.L. Brindley, J. Lanting and W.G. Mook, 'Radiocarbon dates from Irish *fulachta fiadh* and other burnt mounds', *Journal of Irish Archaeology* 5 (1989/90), 23–33.

cairns). At Coolnatullagh, there are no obvious Neolithic monuments and the first evidence for activity is in the Beaker Period and the Early Bronze Age (radiocarbon-dated burials; wall morphology and pedestal height; a single wedge tomb; and cairns). Coarse ware pottery sherds, found against the external revetment of the excavated cairn at Coolnatullagh, indicate probable Later Bronze Age activity as well.

On the Carran Plateau, there are no obvious Neolithic monuments and no wedge tombs. At present, the earliest evidence for activity comes from a mound-wall pedestal that falls comfortably within the Beaker/Early Bronze Age range from Roughan Hill and another mound-wall pedestal that falls at the younger end of the range. Two radiocarbon dates from Enclosure 1 suggest that this enclosure and the other large enclosures around the edge of the plateau date to the Later Bronze Age. The features on the Carran Plateau are, however, less firmly dated than the features in the other two areas.

Along with these temporal aspects of the activities in the three areas, there is also the important spatial dimension, which was detailed above and which is displayed on the accompanying maps (Figs 2–4). However, in order to understand the dynamics of the societies that created these patterns and how the patterns might be linked to aspects of domestic production and the political economy, it is necessary to put the Burren evidence in its wider Irish and British context.

In recent years, studies of prehistoric landscapes have been increasingly carried out in what is emerging as a post-processual interpretive orthodoxy, which places particular emphasis on phenomenological interpretations. A limited interpretive viewpoint, however, is never conducive to the advancement of a discipline and the post-processual stance has at least two significant aspects that make it particularly unsuited as a stand-alone explanatory tool. The first is a tendency to conflate data and interpretation[32] and the second is the post-processual argument that archaeologists should 'change' the past to suit the needs of the present.[33]

The following interpretation is focused on elucidating what happened in the past, not on the repercussions that the interpretation may have in the present.[34] This paper is also concerned with providing an interpretation that can be distinguished

---

[32] For example, Christopher Tilley, *A phenomenology of landscape* (Oxford, 1994). Vicky Cummings and Alasdair Whittle, *Places of special virtue: megaliths in the Neolithic landscapes of Wales* (Oxford, 2004). For critiques see: Andrew Fleming, 'Post-processual landscape archaeology: a critique', *Cambridge Archaeological Journal* 16(3) (2006), 267–80. Andrew Fleming, 'Megaliths and post-modernism: the case of Wales', *Antiquity* 79 (2005), 921–32.

[33] For example, Christopher Tilley, 'Archaeology as socio-political action in the present', in Valerie Pinsky and Alison Wylie (eds), *Critical traditions in contemporary archaeology* (Cambridge, 1989), 104–16. Robert Preucel and Stephen Mrozowski, 'The new pragmatism', in Robert Preucel and Stephen Mrozowski (eds), *Contemporary archaeology in theory, the new pragmatism* (Oxford, 2010, second edition), 3–49.

[34] This is a distinguishing feature of non-post-processual approaches and stands in contrast to post-processualist arguments that the past should serve the needs of the present.

from the data, even if we cannot draw a definitive line between the interpretation and the data.[35] The stance taken here is, therefore, non-post-processual.[36]

What follows is a condensed summary of some wider trends in the prehistory of Ireland and Britain as some researchers see them and the relationship between those trends and the evidence from the Burren. Following that, an explanation for the trends as they manifest on the Burren is offered. This explanation relies heavily on ethnographically observed modes of human behaviour.

The Neolithic

In the Early and Middle Neolithic (i.e. the fourth millennium BC) in Ireland and Britain, households appear to have been grouped into larger corporate kin groups along the lines of what have been described as segmentary tribal societies or simple chiefdoms.[37] There is regional variation, but in many areas, mortuary monuments were in use with both external and internal features seemingly designed to mimic houses.[38] This has led to interpretations of these monuments as symbolic ancestral houses that were used by the living as focal points in territories and as monuments that reinforced intercommunity bonds. The Burren appears to follow this pattern at this time.[39]

In the Late Neolithic (from *c.* 3000 BC to the final quarter of the third millennium), there appear to be changes in economic, social and ritual patterns in Ireland and Britain, and in many parts of Ireland, including the Burren, pollen evidence suggests a significant decrease in farming.[40] As was the case earlier, however, there

---

[35] A commitment to distinguishing between the interpretation and the data does not deny that the division between the interpretation and the data can be blurred, as has been argued by post-processualists, instead it asserts that however blurred the boundary may be, there is a distinction.

[36] The label 'post-processual' is generally accepted as an umbrella term covering a variety of theoretical positions, which are unified at least by their opposition to processualism. What is not as commonly recognised, however, is that non-post-processual archaeologies cover a diverse spread of theoretical positions as well and are also continually developing.

[37] Colin Renfrew, 'Monuments, mobilization and social organization in Neolithic Wessex', in Colin Renfrew (ed.), *The explanation of culture change: models in prehistory* (London, 1973), 539–58. Timothy Earle, 'Property rights and the evolution of chiefdoms', in Timothy Earle (ed.), *Chiefdoms: power, economy, and ideology* (Cambridge, 1991), 71–99. Kristiansen, 'The formation of tribal systems in later European prehistory', 241–80.

[38] Hodder, 'Burials, houses, women and men', 51–68. Colin Richards (ed.), *Dwelling among the monuments: the Neolithic village of Barnhouse, Maeshowe passage grave and surrounding monuments at Stenness, Orkney* (Cambridge, 2005). Colin Richards, 'Doorways into another world: the Orkney-Cromarty chambered tombs', in Niall Sharples and Alison Sheridan (eds), *Vessels for the ancestors: essays on the Neolithic of Britain and Ireland in honour of Audrey Henshall* (Edinburgh, 1992), 62–76.

[39] Jones, 'Neolithic beginnings on Roughan Hill and the Burren', 188–94. Jones, *The Burren and the Aran Islands: exploring the archaeology*, 27–54.

[40] Michael O'Connell and Karen Molloy, 'Farming and woodland dynamics in Ireland during the Neolithic', *Proceedings of the Royal Irish Academy* 101B (2001), 99–128.

is regional variation.[41] Some areas with passage tombs, for instance, show a trend of increasing monumentality culminating in massive passage tombs such as those built in the Boyne Valley and on the Orkney Islands around 3000 BC.[42] The appearance of massive passage tombs at the beginning of the Late Neolithic, and then the subsequent appearance of henges, certainly opens up the possibility that larger and perhaps more hierarchical polities were emerging in the regions where these monuments were constructed, although this model is not universally accepted.[43] In other areas, contemporary societies may have been smaller and less hierarchical, or at least less able or less motivated to organise large regional-scale construction projects.

In the Burren, the most relevant evidence for discerning the nature of society at this time is the dating evidence from the atypical court tomb at Parknabinnia on Roughan Hill. Here, a series of twelve radiocarbon dates has shown that unlike most court tombs where the use is restricted to the first half of the fourth millennium BC, the use of Parknabinnia stretched from the first half of the fourth millennium BC up into the first half of the third millennium BC.[44] This suggests that a small-scale, segmentary society continued in the Burren at least into the early third millennium.

Over the course of the Neolithic in Ireland and Britain, therefore, there is evidence for both small-scale, segmentary societies and more complex societies. In areas with less complex societies (including the Burren), there is at present no evidence that domestic production or labour was mobilised on a scale beyond the extended kin group or residential group.[45] In the more complex societies of the Late Neolithic, labour was certainly mobilised for the political economy in the form of pooled labour to construct large ceremonial monuments and sites,

---

[41] Richard Bradley, 'The pattern of change in British prehistory', in Timothy Earle (ed.) *Chiefdoms: power, economy, and ideology* (Cambridge, 1991), 44–70. Richard Bradley, *The prehistory of Britain and Ireland* (Cambridge, 2007), 88–177. Gabriel Cooney and Eoin Grogan, *Irish prehistory—a social perspective* (Dublin, 1994), 35–94.

[42] J.L. Davidson and A.S. Henshall, *The chambered cairns of Orkney* (Edinburgh, 1989). Alison Sheridan, 'Megaliths and megalomania: an account and interpretation of the development of passage tombs in Ireland', *Journal of Irish Archaeology* 3 (1986), 17–30.

[43] Renfrew, 'Monuments, mobilization and social organization in Neolithic Wessex', 539–58. Mike Parker Pearson, 'Chieftains and pastoralists in Neolithic and Bronze Age Wessex: a review', in Paul Rainbird (ed.), *Monuments in the landscape* (Chalford, 2008), 34–53. Andrew Fleming, 'Hail to the chiefdom? The quest for social archaeology', in John Cherry, Christopher Scarre and Stephen Shennan (eds), *Explaining social change: studies in honour of Colin Renfrew* (Cambridge, 2004), 141–7.

[44] Carleton Jones and Jane Kenney, 'The excavation of the Cl. 153 atypical court tomb on Roughan Hill (Parknabinnia), Co. Clare' (forthcoming). Rick Schulting, Eileen Murphy and Carleton Jones, 'New dates from the north and a proposed chronology for Irish court tombs', (forthcoming).

[45] Even if future research dates the Turlough Hill enclosure and some of the mega-cairns in the Burren to the Neolithic (as seems likely), these monuments are not on a scale beyond the capabilities of multiple kin groups working together.

and domestic production may have been drawn upon to provide surplus animals for feasting.[46]

The Beaker Period and Early Bronze Age

Although we have evidence that some domestic production was being diverted into emerging political economies in some regions in the Late Neolithic, at present widespread evidence is not apparent for the intensification of production at that time. It seems, therefore, that emerging complex polities in the Late Neolithic were generally financing themselves with the existing productivity of their territories without yet having to engage in intensification practices.[47]

From the late third millennium to the mid-second millennium, however, a pattern of agricultural expansion into marginal (often upland) areas is evidenced throughout Britain and Ireland by the appearance of small and irregular fields, often associated with scattered farmsteads and local burial and ritual monuments.[48] Ethnographic studies have shown that similar patterns of dispersed farmsteads appear when farmers attempt to intensify their production because the labour involved tends to pull farmers towards their fields.[49] It has been suggested that this expansion of settlement may be indicative of a weakening in the lineage ties of earlier times.[50] It has also been argued, however, that in various regions including Wessex, Derbyshire and Yorkshire, the additional wealth created by the expansion appears to have been funnelled back into the old core areas where burials show evidence for social stratification and an explicit concern with genealogy.[51]

Many researchers have argued that the appearance of prestige goods fashioned from copper and gold as well as the appearance of Beaker pottery in Ireland and Britain in the late third millennium is related to transformations in societies at this time.[52] As detailed above for Roughan Hill and Coolnatullagh, it was during the

---

[46] Renfrew, 'Monuments, mobilization and social organization in Neolithic Wessex', 539–58. Bruce Trigger, 'Monumental architecture: a thermodynamic explanation of symbolic behaviour', *World Archaeology* 22(2) (1990), 119–32.

[47] Bradley, 'The pattern of change in British prehistory', 44–70. Bradley, *The prehistory of Britain and Ireland*, 88–177.

[48] Richard Bradley, *The social foundations of prehistoric Britain* (Harlow, 1984), 68–95. Bradley, *The prehistory of Britain and Ireland*, 88–177.

[49] Stone, 'Agrarian settlement and the spatial disposition of labor', 25–38.

[50] Joanna Brück, 'Settlement, landscape and social identity: the Early-Middle Bronze Age transition in Wessex, Sussex and the Thames Valley', *Oxford Journal of Archaeology* 19(3) (2000), 271–300.

[51] Bradley, *The social foundations of prehistoric Britain*, 68–95. Paul Garwood, 'Before the hills in order stood: chronology, time and history in the interpretation of Early Bronze Age round barrows', in Jonathan Last (ed.), *Beyond the grave: new perspectives on barrows* (Oxford, 2005), 30–52.

[52] Cooney and Grogan, *Irish prehistory*, 95–121. O'Brien, *Sacred ground*, 231–88. Colin Renfrew, 'Varna and the emergence of wealth in prehistoric Europe', in Arjun Appadurai (ed.), *The social life of things: commodities in cultural perspective* (Cambridge, 1986), 141–68. Waddell, *The prehistoric archaeology of Ireland*, 107–65.

Beaker Period and subsequent Early Bronze Age that the Burren was divided into numerous small fields interspersed with farms and local mortuary monuments. This pattern, together with the proliferation of wedge tombs, suggests that the Burren, like other upland areas in Ireland and Britain at this time, witnessed a period of agricultural intensification based on an expansion of domestic production.[53]

Intensification efforts in the Beaker/Early Bronze Age Period seem to have led to a particularly subdivided and enclosed landscape on Roughan Hill as well as an expansion of domestic production into other parts of the Burren such as Coolnatullagh. If, as in England, this expansion of domestic production was used to finance a developing political economy, the English examples would suggest that the emerging 'core' area was on an adjoining area of more robust soils.[54] For the Burren, the most likely candidate is the area extending south along the River Fergus towards the River Shannon.

In the context of efforts to intensify agricultural production, an ethnographic analogy with the Kofyar farmers of central Nigeria might be relevant.[55] Various researchers have suggested that the Beakers of prehistoric Europe may have had an important role as drinking vessels for alcoholic beverages.[56] As we have seen, one of the important and widespread features of the Beaker/Early Bronze Age Period evident in the Burren and farther afield is the intensification of agriculture through the expansion of domestic production. This may have worked, but expanding domestic production across the landscape while trying to harness the extra production to fund a developing political economy may well have been a difficult task. The Kofyar face a similar problem in that their settlement pattern (which resulted from a recent expansion) consists of dispersed residential compounds, and yet their agricultural cycle demands communal labour at particular times of year. They have managed to meet the demands of producing a surplus while living in dispersed farms by engaging in what they call 'beer farming'. This is a simple yet effective system whereby a household pays for temporary group labour on their farm by hosting a beer-fuelled party when the work is done (the traditional Irish *meithel*, or reaping party, is similar).[57] It is quite possible that Beakers were associated with a similar system of hosting periodic group labour parties in a variety of settings. This might go part of the way to explaining why Beakers have been found in a range of contexts including a modest farm on Roughan Hill, within and in front of family/lineage scale monuments such as wedge tombs, and also in front of an ancient important focal monument like Newgrange.

---

[53] It must be noted, however, that Roughan Hill, and the southern Burren in general, appears to have been an important area of settlement throughout most of the Neolithic and may not, therefore, have been as 'marginal' as other upland areas.

[54] Bradley, *The social foundations of prehistoric Britain*, 68–95.

[55] Stone, 'Agrarian settlement and the spatial disposition of labor', 25–38.

[56] Andrew Sherratt, 'Cups that cheered', in William Waldren and Rex Kennard (eds), *Bell Beakers of the western Mediterranean*, British Archaeological Reports International Series 331(i) (Oxford, 1987), 81–114.

[57] Fergus Kelly, *Early Irish farming: a study based mainly on the law-texts of the 7th and 8th centuries AD*, Early Irish Law Series IV (Dublin, 1997).

The Beaker Period and Early Bronze Age, therefore, are characterised by a pattern of agricultural intensification achieved through the expansion of domestic production into areas with marginal soils. Where the evidence exists in areas such as Wessex and Yorkshire, the surpluses produced by these expansions of domestic production seem to have been used to help fuel the development of polities with some degree of social stratification on adjoining areas of more robust soils. Some of the demands the resultant pattern of dispersed settlement created may have been met by communal labour organised through a system of 'beer farming' and this explanation might help us to understand how Beakers may have been instrumental tools in the reorientation of disparate economies towards a focus on creating surpluses to be used for the acquisition and display of prestige goods without being strictly prestige goods themselves.

The Later Bronze Age

In the Later Bronze Age (from the mid-second millennium BC to the mid-first millennium BC), there are major changes apparent in the spatial organisation of landscapes and of settlements throughout Ireland and Britain.[58] In general, the trend of expansion onto more marginal soils seen in the Earlier Bronze Age is reversed and instead there is a concentration of settlement on more stable and productive soils with the more marginal areas being used only on a seasonal basis. In some regions, this is accompanied by the reorganisation of areas of more productive soils with large-scale field systems. Various contrasting reasons have been put forward for the reorganisation of the landscape including intensification of production, a shift from a long fallow to a short fallow system in areas of arable production, social fragmentation and local communities defining their collectively held land in response to threats against the collective ideal.[59]

Various types of sites have been interpreted as high-status sites in the Later Bronze Age and there is also a wider variety of settlement sites in many regions, a pattern that suggests hierarchical societies.[60] In the area of more productive and stable soils south of the Burren, hill-forts and smaller hill-top enclosures have been interpreted as high-status residences set amongst sites of lesser status in a hierarchical pattern reflective of a hierarchical society.[61] Of these, the Later Bronze Age trivallate hill-fort of Mooghaun, located 25km south of the Burren, is the most

---

[58] Richard Bradley and Michael Fulford, 'The chronology of co-axial field systems', in Paul Rainbird (ed.), *Monuments in the landscape* (Chalford, 2008), 114–22. Bradley, *The prehistory of Britain and Ireland*, 178–225. Barry Cunliffe, 'Wessex cowboys?', *Oxford Journal of Archaeology* 23(1) (2004), 61–81.

[59] Bradley, *The prehistory of Britain and Ireland*, 178–225. John Barrett, *Fragments from antiquity* (Oxford, 1994), 132–54. Brück, 'Settlement, landscape and social identity', 271–300. Andrew Fleming, 'Land tenure, productivity, and field systems', 129–46.

[60] Bradley, *The prehistory of Britain and Ireland*, 178–225.

[61] Eoin Grogan, *The North Munster Project, Volume 2: the prehistoric landscape of north Munster* (Dublin, 2005), 178–225.

significant. Many elements of this landscape, however, are not well dated and it is difficult to argue that we are looking at a cohesive pattern reflecting a particular type of society. In addition, the view that hill-forts are a unified phenomenon, which were always associated with hierarchical, chiefdom-type societies has been questioned[62] and we should be cautious with sites such as Mooghaun where excavation did not reveal extensive settlement remains or storage facilities.[63]

On the other hand, there are indications that lend support to the idea that hill-forts in the vicinity of the Burren were associated with more hierarchical societies. The massive gold hoard found adjacent to the Mooghaun hill-fort, for instance, and the evidence for metal production at the Dún Aonghasa hill-fort to the west of the Burren on the Aran Islands, do suggest that the centralised control of metal production and distribution (activities typically associated with more stratified societies) were linked to hill-forts in the region.[64] Additionally, this region in prehistory was probably more focused on animal production than grain production and the lack of evidence for large-scale storage in the hill-forts of the region may be more a reflection of the regional economy rather than the role of the hill-forts. The 'storage facilities' might have been the ramparts of the hill-forts themselves, which could have been used to temporarily contain large herds brought together for community rituals, displays or disbursement.[65]

The location of the hill-fort at Mooghaun, centred in an area of stable and productive soils south of the Burren, fits with the widespread Later Bronze Age pattern of a shift away from marginal areas accompanied by a reorganisation of areas with more robust soils. This shift in emphasis towards south-eastern Clare, however, does not mean that the Burren was abandoned. Instead, the evidence from the Carran Plateau suggests continued exploitation. Exactly how this continued use of the Burren was organised is unclear, but its spatial expression is certainly distinct from the Beaker/Early Bronze Age patterns revealed at Roughan Hill and Coolnatullagh. If the pattern at Carran reflects a more seasonal use of the Burren (such as winter-age), this may have placed the Burren in the role of a specialised, satellite producer engaged with a developing political economy with focal points at the hill-forts in the region. This is a pattern that has been suggested for other regions.[66]

---

[62] J.D. Hill, 'How should we understand Iron Age societies and hillforts? A contextual study from southern Britain', in J.D. Hill and C.G. Cumberpatch (eds), *Different Iron Ages, studies on the Iron Age in temperate Europe*, British Archaeological Reports International Series 602 (Oxford, 1995), 45–66.

[63] Eoin Grogan, *The North Munster Project, Volume 1: the later prehistoric landscape of south-east Clare* (Dublin, 2005), 131–246.

[64] E.C.R. Armstrong, 'The Great Clare Find of 1854', *Journal of the Royal Society of Antiquaries of Ireland* 47 (1917), 21–36. Claire Cotter, *Western Stone Fort Project interim report: excavations at Dún Aonghasa 1993*, Discovery Programme Reports 2 (Dublin, 1995), 1–11.

[65] High phosphorous levels in the soil of at least one pre-hill-fort hill-top enclosure in Wessex have led to a similar interpretation (Cunliffe, 'Wessex cowboys?', 61–81).

[66] Gloria Greis, *Relations of production: social networks, social change and the organization of agriculture in late prehistoric southern Britain*, British Archaeological Reports 330 (Oxford, 2002).

Metal was, of course, a major element in the Bronze-Age economy and the larger amounts of metal in circulation in the Later Bronze Age (weapons, tools and prestige goods) have led archaeologists to suggest that where more complex societies were developing in this period, this was aided by the conversion of economic success into prestige goods.[67] In other words, societies were, where possible, converting surplus domestic production into metalwork (a compact and easily transferable form of wealth), which was used mainly in the political economy (as a means to display and confer status).

The general pattern in the Later Bronze Age, therefore, is a retraction of the expansion into marginal areas that characterised the preceding centuries and a reorganisation and probably an intensification of food production in areas with more robust soils. This is accompanied in many areas by indicators of more hierarchical societies including settlement hierarchies topped by high-status sites (although their role as residences should not be taken for granted), and evidence for the control of the production and distribution of high-status metalwork. These societies are often characterised as chiefdoms and as such, domestic production was probably being channelled into the political economy in higher volumes and in a much more formalised way than in the less complex societies of preceding periods.

Explaining the patterns

Overall, the pattern that has been suggested is of a decrease in the autonomy of households accompanied by an expanding political economy. This pattern seems to be widespread in Ireland and Britain and is evidenced on the Burren. This still leaves the questions of how and why these changes may have come about. To answer these questions, a first step is to look at kinship structures and ethnographic studies have shown that societies with wider definitions of kinship have a much greater potential for economic intensification because more potential producers can be drawn together.[68]

As mentioned at the start of this paper, the construction and use of communal/ancestral megalithic tombs in the Neolithic is good evidence for societies with a wide definition of kinship. As far back as the Neolithic, therefore, the evidence suggests that the inhabitants of the Burren probably employed a wide definition of kinship, which would have enabled them to exploit their territory at a level of efficiency above that of the individual household. In the Burren, the longevity of use of the Parknabinnia tomb suggests that this system was very stable, possibly lasting nearly 1,000 years, during which time there is presently no evidence that production was intensified. A wide definition of kinship, therefore, may help to explain the potential

---

[67] Bradley, 'The pattern of change in British prehistory', 44–70. Bradley, *The prehistory of Britain and Ireland*, 178–225. Barry Cunliffe, *Facing the ocean: the Atlantic and its peoples 8000 BC–AD 1500* (Oxford, 2001), 261–310. Earle, 'The evolution of chiefdoms', 1–15. Earle, *How chiefs come to power*.

[68] Sahlins, *Stone Age economics*, 101–48.

for intensification inherent in a particular society, but as the apparent stasis of the Burren economy in the Neolithic demonstrates, it does not explain why production comes to be intensified, if and when it does.

At this point, it is useful to introduce the concepts of gift exchange and debt relationships and how they can be related to incentives to increase productivity and to the emergence of more formalised leadership roles. In many non-market economies, gift exchanges and relationships of debt are the keys to the economy. In these economies, the purpose of accumulating a surplus is so that it can be given away, thereby accruing status to the giver and placing the receiver in a relationship of debt. This unbalanced relationship can provide the incentive needed to spur the receiver on to a greater level of productivity as they attempt to repay the giver. If, however, the giver has some means of assuring that the gift cannot be repaid, at least not fully, the giver may achieve a lasting dominance. If this unbalanced relationship can be sustained, then importantly, there can be an accompanying ideological shift so that the relationship of giver to receiver becomes a relationship of leader to follower.[69]

In the Neolithic society of the Burren, there were probably not many products other than food in circulation. As food was probably within the means of all to produce and all to give (at least most of the time), food gifts could be easily repaid and no relationships of debt and obligation would emerge, at least not over the longer term. There is some evidence that Doolin, on the western edge of the Burren may have had a specialised role as a production centre for stone axes,[70] but both the raw material (shale cobbles) and the production technique (chipping and grinding) although time-consuming, were probably easily within the reach of most households and so these stone axes could never have been excessively valuable or difficult to acquire. In this situation, it would be difficult to maintain lasting economic inequalities, and power, therefore, was not likely to have been closely tied to economics. Instead, as is seen in various ethnographically known segmentary societies, power and authority were probably more dependant on an individual's age or abilities.[71]

In the Beaker Period, however, we see the introduction of products of a radically different nature (metal ornaments and metal tools/weapons). The real significance of these new items seems to be that they were rare and access to them could be tightly controlled. Certainly the raw materials, and probably the metalworkers as well, were located far from the Burren. Ethnographic analogy suggests that as metal items began to circulate in existing exchange networks, leaders/chiefs would probably continue to redistribute these new valuables as gifts. What would change is that many who received a gift of metal would not be able to repay the giver, and would,

---

[69] Chris Gosden, 'Debt, production, and prehistory', *Journal of Anthropological Archaeology* 8 (1989), 355–87. Marcel Mauss, *The gift: forms and functions of exchange in archaic societies* (London, 1954). Sahlins, *Stone Age economics,* 149–230.

[70] Gabriel Cooney, *Landscapes of Neolithic Ireland* (London, 2000), 194–5. Jones, *The Burren and the Aran Islands,* 40–1.

[71] Sahlins, *Stone Age economics,* 101–48.

therefore, fall into a relationship of debt and obligation to the giver. This would be particularly true if, as is often the case, valuables were categorised as belonging to different spheres of exchange. This probably provides part of the explanation for why people might willingly enter into these relationships of debt as only particular items might be considered appropriate for particular transactions (such as marriages and rites of passage).[72]

In an economy based on gift exchanges, a consequence of metal valuables entering an exchange system based on short-distance, down-the-line exchanges might well be the rapid accumulation of debts by those farthest from the source of metal. In Beaker-Period Ireland, most and possibly all, the copper was produced in Killarney in Co. Kerry and most of the gold probably came from the Mourne Mountains in Co. Down.[73] The Burren is distant from both sources, a position that would put it far down the line in a long chain of exchanges. The households of the Burren would probably have experienced an adjustment from exchanges where they were dealt with as equals to one that favoured distant areas. An understandable response would be efforts to intensify domestic production to try and rebalance the exchange relationships. Such efforts may well have produced a pattern of expanding domestic production such as that seen in the Burren at this time.

There are at least three Beaker Period metal finds from the edge of the Burren, showing that valuable metal objects did reach this region in the early stages of metal exchange. These are two copper axes, one found just south of Roughan Hill and the other found near Lisdoonvarna, and a gold lunula found near the south-western corner of the Burren.[74] As the Bronze Age progressed, metal artefacts continued to make their way to the Burren, good evidence that the Burren's households continued to participate in wider exchange networks, probably still in the context of gift-giving and probably still in relationships where the Burren's inhabitants were at a disadvantage. The most spectacular prehistoric metalwork item found in the Burren so far is the gold gorget from Gleninsheen near the centre of the Burren.[75] This is a broad crescent-shaped collar or chest ornament made from extensively decorated sheet gold and it is exactly the sort of high-value object that we might expect to have been a gift from a paramount chief to a lesser chief.[76] Similar gorgets have been found mainly around the lower reaches of the River Shannon[77] and this might give a hint as

---

[72] Gosden, 'Debt, production, and prehistory', 355–87. Mauss, *The gift*.

[73] William O'Brien, *Ross Island: mining, metal and society in Early Ireland*, Bronze Age Studies 6 (Galway, 2004). Richard Warner, Robert Chapman, Mary Cahill and Norman Moles, 'The gold source found at last?', *Archaeology Ireland* 23(2) (2009), 22–5.

[74] Peter Harbison, *The axes of the Early Bronze Age in Ireland*, Prähistorische Bronzefunde IX (1) (München, 1969). Joan Taylor, 'Lunulae reconsidered', *Proceedings of the Prehistoric Society* 36 (1970), 38–81.

[75] Dermot Gleeson, 'Discovery of gold gorget at Burren, Co. Clare', *Journal of the Royal Society of Antiquaries of Ireland* 4(1) (1934), 138–9.

[76] Gosden, 'Debt, production, and prehistory', 355–87.

[77] George Eogan, 'The Late Bronze Age: customs, crafts and cults', in Elizabeth Shee Twohig and Margaret Ronayne (eds), *Past perceptions: the prehistoric archaeology of south-west Ireland* (Cork, 1993), 121–36. Waddell, *The prehistoric archaeology of Ireland*, 225–78.

to the geographical extent of a plausible network of political alliances within which the Burren may have been integrated in the Later Bronze Age.

The Gleninsheen gorget and other Later Bronze Age metal finds in the area provide evidence for the exchange systems, and therefore the systems of debt and obligation, within which we must view the evidence from the Carran Plateau. As discussed above, however, although the pattern at Carran differs from that on Roughan Hill and in Coolnatullagh, it is not certain at this time what these differences signify, although they might be the result of the Burren coming to be used as a subsidiary region specialising in winterage. What is clear is that the Burren continued to be exploited in the Later Bronze Age and this exploitation was quite likely to have been carried out within the context of debt/power relationships that tied the Burren and it's households into an unequal relationship with a greater power base in the Lower Shannon region.

Conclusion

This paper has been an attempt to provide a wider context and a plausible explanation for the prehistoric spatial patterns evident in the Burren. These patterns of field divisions, farms and ritual monuments are the product of particular arrangements of domestic production and therefore reflect the concerns of maintaining and perpetuating families but they were also produced within particular political circumstances. The picture that has been produced is of a very long (but not necessarily gradual) process of transformation of what are essentially domestic arrangements as families altered their practices to adapt to changing political circumstances.

Acknowledgements