A PROPER PLACE FOR EVERYTHING: THE CHARACTER AND CONTEXT OF BEAKER DEPOSITIONAL PRACTICE IN IRELAND

Volume 1 of 2

Neil Carlin

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School of Archaeology
Head of School: Professor Tadhg O’Keefe
Supervisor: Dr. Joanna Brück
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ABSTRACT

In the late third millennium BC, diverse groups of people throughout Europe adopted aspects of a suite of objects and practices known as the Beaker phenomenon including crouched inhumations with grave goods and early metallurgy. How and why this happened has traditionally defied interpretation, but these questions are of key significance to wider understandings of the adoption of novel material culture over millennia. This thesis aimed to create a better understanding of the Beaker phenomenon through a regionally-specific study of the character and context of Beaker-associated depositional practices in Ireland. By examining the depositional choices that were made, insights were gained into the social roles of Beaker objects that help us to understand how and why these were adopted on this island.

Evidence for Beaker activities in Ireland comes from a wide range of contexts with the potential to advance understandings of this phenomenon beyond the existing interpretations which are almost exclusively based upon findings from the funerary domain. However, no effort had been made to synthesise this information and hitherto, no in-depth study of the manifestation of the Beaker phenomenon in Ireland had ever been conducted, thereby resulting in much misunderstanding. To remedy this, details relating to chance discoveries of Beaker objects, as well as the results from old and new excavations were collated, reassessed, and synthesised. Then, the depositional treatment of Beaker-associated artefacts within each context including settlements, funerary monuments, ceremonial settings and natural places were examined. This revealed that the deposition of Beaker objects in Ireland was structured, selective, type specific, contextually specific and not the product of random acts. These deposits represent the residue of an interlinked system of social practices that were conducted in accordance with long standing traditions. In light of this, traditional interpretations linking the Beaker phenomenon and/or early metallurgy with either the emergence of social complexity or an increase in social stratification are critiqued.

This research shows that Beaker-associated material culture played a vital role in facilitating the expression and constraint of personal and group identities, as well as local and international social relations during an era when travel, trade and other forms of international interaction were greatly intensified. It is demonstrated that this international suite of new ideas and objects including metallurgy were adopted and adapted because they fulfilled the distinctive needs of local communities. It is argued that these developments form part of a long sequence of gradual alterations in strategies of identity formation occurring throughout the third millennium BC.
STATEMENT OF ORIGINAL AUTHORSHIP

I hereby certify that the submitted work is my own work, was completed while registered as a candidate for the degree stated on the Title Page, and I have not obtained a degree elsewhere on the basis of the research presented in this submitted work.
A PROPER PLACE FOR EVERYTHING

The Character and Context of Beaker Depositional Practice in Ireland
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THE CHARACTER & CONTEXT
OF BEAKER DEPOSITIONAL
PRACTICE IN IRELAND

An Introduction to the Study
CHAPTER ONE - THE CHARACTER AND CONTEXT OF BEAKER DEPOSITIONAL PRACTICE IN IRELAND: AN INTRODUCTION TO THE STUDY

1.1 BACKGROUND TO THE STUDY - UNDERSTANDING THE BEAKER PHENOMENON

The ‘Beaker phenomenon’, a complex of novel material culture (including ceramics, early metallurgy, stone wrist-guards, arrowheads, and V-perforated buttons), appeared across much of Western Europe in the latter half of the third millennium BC. Numerous theories have been developed to explain the spread of this assemblage and its relationship with contemporary, social and technological change (e.g. Clarke 1970, 271; Harrison 1980; Burgess and Shennan 1976), yet, the exact origins, methods of distribution and social significance of this phenomenon remain matters of debate. Presently, the occurrence of Beaker pottery and associated artefacts with the earliest single burials in many regions is widely considered to indicate the emergence of an ideological emphasis upon the individual and the development of Europe’s first hierarchical societies, whereby status was attained and represented by the competitive exchange and display of exotic goods, particularly metalwork (e.g. Renfrew 1974; Thorpe and Richards 1984; Clarke et al. 1985; Needham 2004; Heyd 2007; Sheridan 2008a).

The spread of the Beaker complex throughout Europe represents an extraordinary phenomenon that has traditionally defied interpretation. In the late third millennium BC diverse groups of people in widely separated regions adopted and adapted differing aspects of a suite of novel material culture and practices such as crouched inhumations with grave goods, early metallurgy and particular types of stone working. To-date, the mechanisms underlying the introduction of these innovations remain largely unexplained. How did this happen? Why did it happen? What was the allure of these objects and practices? What were their impacts on local communities? These are issues that are of great importance to scholars of the third millennium BC.

Moving beyond the Beaker phenomenon itself, these questions are also significant on a wider level, in terms of understanding how and why humans have continuously adopted novel material culture over millennia. In this regard, this dissertation offers insights into how humans have used objects to create meanings that negotiate social relationships and
processes of change. The present study helps us to understand the uniquely Irish response to the appearance of the Beaker phenomenon and the specific ways in which aspects of this transculture were rejected while others were accepted and adapted for use in local strategies for creating and expressing identity.

Traditional characterisations of the Beaker phenomenon in Ireland have regarded the Irish manifestation of this as being radically different from elsewhere in Europe, where Beaker vessels are typically found as part of funerary assemblages (e.g. Clarke 1976, 472–3; Burgess 1979, 213; Vander Linden 2006a and b; Needham 2007, 44). Ireland is generally depicted as being rich in Beaker-associated settlement evidence with a minor funerary component consisting primarily of collective burials in primary and secondary contexts in megalithic tombs. Most notably, the classic Beaker burial seems to be totally absent and crouched inhumations only appear in graves with Food Vessels and a range of other objects after 2200 BC (see O’Brien 2004, 565, Burgess 1979, Case 1995a, 19, Needham 1996, 128, Cooney and Grogan 1999, 87, Case 2004b). The majority of Beaker pottery occurs in what have been regarded as settlement or domestic contexts (Case 1995a, 19; Needham 1996, 128; Brindley 2007, 250; Bradley 2007, 147). The uniqueness of the manifestation of this phenomenon in Ireland has often been asserted by contrasting it with a characterisation of Britain as a place where Beakers were predominantly used in funerary practices, more specifically in single graves where they occur with metal artefacts such as blades, awls, or ornaments (Burgess 1979; Thomas 1999; Needham 1996, 126–8).

The currency of copper metallurgy broadly parallels that of Beaker pottery in Ireland and it has long been considered that the transmission of these were interconnected (Case 1966 and 1977; Madden 1968; Apsimon 1969; Scott 1977a and b; Herity and Eogan 1977; Sheridan 1983). The earliest copper artefacts in Western Europe represent a recurrent, but restricted selection of objects, some of which have been found alongside Beaker pottery (see Brodie 1997; 2001; Vander Linden 2006a; 2007b; Roberts 2009). These are made from highly distinctive compositions of metal thought to represent a technological package associated with the Beaker phenomenon (Needham 2002; Needham 2004, 233; Roberts 2008, 363; O’Brien 2004, 560).

The discovery of Beaker sherds during the excavation of an Early Bronze Age ore-processing camp at Ross Island copper mine, Co. Kerry, confirmed an association between the development of this technology and the use of Beaker objects in Ireland (O’Brien 2004, 559). This mine was probably the sole source of the low-arsenic A-metal used to produce what were predominantly ‘heavy objects’ including axes and halberds, that largely occur in
natural places in Ireland (Case 1995a, 19–23; O’Brien 2004). This copper was also widely exchanged across the Irish Sea, where it was used to create much of the earliest British metalwork and is known from some southern British Beaker burials (Northover 1999, 214; Northover et al. 2001, 28; Needham 2002, 105; Needham 2004, 235; O’Connor 2004, 211). However, the exact nature of the affiliation between the introduction of the Beaker Phenomenon and the advent of copper metallurgy in Ireland remains unresolved.

1.2 HIGHLIGHTING THE GAPS IN THE EXISTING SCHOLARSHIP

It is increasingly recognised that while widely shared aspects of the Beaker phenomenon occur across Europe, these have a distinctive manifestation in each region (Barrett 1994). This is indicated by the highly discontinuous distribution of varying components of this complex. For example, Beaker objects such as Palmella Points occur in some areas but not others, there is much variability in Beaker-associated burial practices and many of the artefacts forming the Beaker assemblage (e.g. pottery, flint, stone) were locally produced (Clarke 1976, 461; Vander Linden 2006a and b and 2007b). There is a growing consensus that different aspects of this internationally shared complex were adopted and adapted to fit within the pre-existing social practices of local communities to fulfil their distinctive needs (Vander Linden 2006a and 2007b; Fokkens 1997, 362; Garwood 1999, 281 Roberts 2008, 365–6).

1.2.1 Grand schemes vs. contextual studies

The pan-European, single-factor explanations that were traditionally employed to explain the spread of Beaker-associated objects and practices are no longer en vogue. Instead, awareness has developed that regional studies are needed to increase our understanding of the appearance of the Beaker phenomenon in each area (e.g. Barrett 1994; van der Beek and Fokkens 2001, 307; Scarre 2001, 447; Garwood 1999, 281; Fokkens 1997, 362). In the words of Chris Scarre: “It is clear that a better understanding of Beakers will only come from a closer study of the varying contexts of deposition……Grand schemes have their uses, but it is from close consideration of such local contexts that a better understanding of Beaker dynamics will most likely emerge.” (Scarre 2001, 447). However, no such in-depth synthesis of the manifestation of the Beaker phenomenon in Ireland has ever been conducted. Instead, Irish scholars have largely imposed British models of understanding upon the Irish evidence (e.g. Cooney and Grogan 1999, 78, see Chapter Two). The imposition of such interpretations rests upon the false assumption that the Beaker...
complex represents the same thing throughout Europe and more specifically, it ignores the perceived differences in the manifestation of the Beaker phenomenon in Ireland and Britain.

1.2.2 Get rich or die trying

It has become customary over the last 30 years to understand developments during the Late Neolithic and Early Bronze Age almost solely in terms of efforts by locals to display or increase their wealth and status through the acquisition of exotica (e.g. Thorpe and Richards 1984; Clarke et al. 1985; Needham 2004; Heyd 2007; Sheridan 2008a). This interpretative trend has continued in Ireland (e.g. Cooney and Grogan 1999, O’Brien 2004), despite the complete absence of the so-called ‘rich’ Beaker burials that such interpretations were originally based upon (see Chapter Five; Carlin and Brück forthcoming). Almost no account has been taken of the recent criticisms in Britain and Europe of the idea that the popularity of Early Bronze Age objects was merely due to attempts by wealthy individuals to keep up with the latest fashions (e.g. Fokkens et al. 2008; Fontijn 2002, Vander Linden 2006b; Brück 2004a and 2006b). Although there is an increasing emphasis upon examining the social roles played by Beaker artefacts in everyday life in terms of the expression and constraint of social identities and relationships in a European context (see Fokkens et al. 2008, see Chapter Six, Seven and Eight), no such alternative readings have been conducted here in Ireland (though see Carlin 2011; Carlin and Brück forthcoming).

1.2.3 Lots of data but no knowledge

During the Celtic Tiger phase of Irish archaeology from 1997 to 2007, the number of pre-construction archaeological investigations being conducted significantly grew in tandem with the boom in the Irish economy (see Chapter Two). As has been widely acknowledged elsewhere (Cooney et al. 2006; Anon 2006, 12; Anon 2007), archaeological resources during this period were predominantly invested in meeting the construction industries’ need for the mitigation of archaeological remains. As a result, the rate of publication of new findings did not keep pace with the increased levels of excavation.

In 1996, Beaker pottery had only been found at 65 sites in Ireland, many (57%) of which were excavated in the 1930s and 40s (see Chapter Two). By the end of the peak, developer-funded excavations had resulted in the discovery at least 150 new sites
producing this ceramic. Most of these newly discovered Beakers occurred on non-monumental sites in green field locations where no archaeological remains had previously been known. These indicated a much greater distribution and range of evidence for Beaker-related activities than hitherto suspected. Despite its potential to advance Beaker studies at a national and international level, almost all of the data from these investigations are contained solely within unpublished stratigraphic reports (see below). Thus, much of these recent discoveries remained unsynthesised and their implications for pre-existing understandings unexplored prior to the commencement of this thesis.

Prior to the significant amount of new discoveries resulting from ‘Celtic Tiger’ archaeology, numerous Beaker artefacts had already been uncovered in Ireland through a combination of activities including agriculture, peat-cutting, antiquarian investigations and archaeological excavations. Though the occurrence of artefacts from the European Beaker assemblage has featured in overviews of Irish prehistory (e.g. Waddell 1998; Cooney and Grogan 1999; O’Kelly 1989), there has not been any major reconsideration of the nature of their manifestation and no comprehensive synthesis of the objects has ever been conducted (see Chapter Two). Many of these excavations were conducted at a time when our knowledge of the past was very different to today, yet the results from such investigations have not been reassessed to bring them up to date with current understanding (please see Chapter Two for historiography and detailed exposition of the need for such a reappraisal).

1.2.4 A context for Beakers?

Numerous typological studies of the items forming the Beaker assemblage have been conducted in Ireland (e.g. Brindley 2004; Harbison 1976; Case 2004b); nevertheless, these have been examined as isolated objects in a manner that pays little or no attention to the contexts in which these were found (e.g. Harbison 1976; Harbison 1969b). The fact that the various different Beaker objects are rarely found together in Ireland has resulted in a fragmentary approach which considers Beaker pottery and various other types of Beaker artefacts in complete isolation from each other, thereby ignoring the possibility that the various treatments of these may be connected (see Chapter Two). No contextual study of these objects has ever been conducted, nor has there been any attempt to examine these in relation to each other as part of a study that interlinks data from settlement, funerary, ceremonial and natural contexts to achieve a better understanding of the Beaker phenomenon in Ireland.
This non-contextual approach was in no way uniquely Irish and was also commonly applied to Beaker objects elsewhere in Europe (e.g. Clarke 1970). At a European level, the occurrence of Beaker objects in contexts such as settlements or natural place has received very little attention. Many studies have focused almost exclusively on the evidence from the funerary sphere, particularly the pottery and/or the burials with which it is sometimes found (see Case 2004a, 201). However, our understanding of prehistoric society is heavily dependent upon the contexts that we examine (see Fontijn 2008, 86). Focusing attention on just one setting to the detriment of others has resulted in a biased understanding of the Beaker phenomenon in Europe. As a result, the meanings that Beaker objects held for their users are incompletely understood.

To gain a better understanding of the meanings of Beaker objects, it is important to consider their role in social practices (Jones 1999, 57; Hodder and Hutson 2003, 172). Although Jean Paul Sartre was thinking about humans when he conceived the aphorism that ‘existence precedes essence’, he could equally have been referring to objects. Artefacts do not possess a fundamental meaning; instead they gain their significance through the course of their use-life (see Hodder and Hutson 2003, 192; Barrett 1994, 88; Boast 1995, 70). Thus, the meaningfulness of material things varies according to context. In the words of Julian Thomas (1999, 124): “It is the set of relations in which an artefact is embedded that renders it intelligible. The materiality of things is revealed in practice: it does not pre-exist the attribution of significance”. So, to fully comprehend an object of material culture, we must locate it in relation to its functions, place and time, as well as its connections with other objects (Hodder and Hutson 2003, 204; Thomas 1999, 157; Garwood et al. 1991, vii). A contextual analysis of the objects forming the classic Beaker assemblage throughout Europe that considers the contexts in which these artefacts are present and absent, as well as the objects that they are found with and without, is certainly needed to develop a deeper appreciation of their social function in each region.

1.2.5 Recognising the intention in deposition

In recent times, there has been a growing awareness of the extent to which the archaeological record exists because of cultural intent (Bradley 2003, 6–12; Bradley 2005a, 208–9). The available evidence of past human activity is often a product of selective and intentional acts of deposition which involved choices in terms of material and context (see Pollard 2002; Hill 1995; Thomas 1999). In other words, a significant percentage of the archaeological record is a direct reflection of people’s depositional activities. Deposition was a conscious practice used by people as a strategy for making
sense of their lives and the world in which they lived. These activities provided a scheme for the negotiation and reproduction of cultural values and social relations (see Needham 1988; Pollard 2002, 22; Fontijn 2002).

As such, deposition can be seen as a reflection of the ideological values of the time and a good understanding of these practices is required to enable a fuller appreciation of the ways in which people constructed meaning. Better understandings of the role of depositional activities have been achieved through the examination of multiple components of contemporary depositional practices as part of an inter-related framework (see Bradley 1982; Vandkilde 1996; Fontijn 2002). Of particular relevance to this study is the manner in which David Fontijn (2002) has demonstrated in a Dutch context that the Bronze Age deposition of metalwork, grave goods and settlement materials can be viewed as interconnected exchanges between people, ancestors and the supernatural that were related to various different stages in human life-cycles (see Fokkens and Arnoldussen 2008, 9).

Traditionally in Ireland, the study of the depositional treatment of Bronze Age objects has been largely neglected, with attention focusing almost exclusively on hoards (e.g. Eogan 1983; O’ Flaherty 1993 and 1995) and burials (Waddell 1990; Mount 1997; Brindley 2007). However, building on the approach of Cooney and Grogan (1999), an integrated synthesis of the deposition of hoards, single finds and grave goods by Katharina Becker (2007) advanced understandings of Bronze Age depositional practices, particularly through her elucidation of the processes involved in the deposition of single finds. Although a contextual approach to deposition was employed by Cooney and Grogan (1999) as well as Becker (2007), this was predominantly targeted towards the analysis of metalwork and their studies did not integrate data from settlements. As a result, no fully integrative contextual study of prehistoric depositional practices has ever been conducted in Ireland.

No attention has been given to the depositional treatment of the artefacts forming the Beaker assemblage in Ireland. Nobody has ever asked how or why so many of the Beaker objects occur in the Irish archaeological record in the manner that they do and what can this tell us about contemporary social practices. The full range of available evidence has never been interlinked to gain a fuller understanding of the Beaker phenomenon in Ireland. For example, even though contextual studies of the deposition of prehistoric pottery have been conducted in Britain (e.g. Pollard 2002; Hill 1995; Thomas 1999; Brück 1999b), to-date this approach has not been utilised here.
1.3 A new study of the Beaker phenomenon

Clearly, the Beaker phenomenon has fallen victim to the various different interpretative approaches that have been taken towards it (Clarke 1976, 460). Many of the existing interpretations have been shown to be problematic (Vander Linden 2006b, 2007a) and there is still much debate as to how to interpret the Beaker phenomenon. Consensus is lacking regarding why these objects were adopted in so many different parts of Europe or what these meant to the people who used them.

This study aims to tackle this deficit in understanding by undertaking an evidence-based examination of the manifestation of the Beaker phenomenon in Ireland. The information gained from this serves to achieve greater insight into the nature of the wider European Beaker phenomenon. This study explores the function of Beaker artefacts in Ireland and the meanings that people attached to them. The social role played by artefacts in the creation of identity in both life and death receives particular attention.

1.3.1 What has Ireland ever done for Beakers?

The manifestation of the Beaker assemblage in Ireland is particularly worthy of study. Even though this island represents the most westerly outpost of the Beaker phenomenon, an especially large number and range of Beaker objects have been found here. Beaker pottery and other such objects were widely accepted in Ireland and the Beaker phenomenon in Ireland cannot be seen as a set of bizarre practices engaged in by peripheral communities. The production of Grooved Ware was rapidly replaced by Beakers and there is nothing to suggest the level of overlap between these two ceramics that is argued for southern Britain (e.g. Needham 2005; 2007, 44; Garwood 1999). Indeed, Beakers were the only pottery used in Ireland from 2450 BC until 2160 BC, when Food Vessels also began to be used (Brindley 2007, 328).

The ubiquity of Beaker ceramics outside of ceremonial and mortuary contexts suggests that these were not restricted to an elite group, even from its earliest appearance. On this island, Beakers were being used in everyday activities and did not merely represent a special-purpose assemblage. The Beaker phenomenon in Europe is mainly known through its graves and so, particularly little is understood about the role of Beaker objects in any aspects of life in Europe. In Ireland, these artefacts predominantly occur in a variety of non-funerary settings. This scenario presents a rare opportunity to gain insights into the
use of these objects in a range of other contexts that have traditionally received far less attention such as the settlement and ceremonial spheres.

The discovery of the Beaker-associated copper mine of early date at Ross Island indicates that c. 2500 BC, there was certainly movement of people, know-how and ideas into as well as out of Ireland. At this time, we see an unprecedented level of interaction between Ireland and Europe, the like of which had probably not been seen since the introduction of agriculture (Carlin and Brück forthcoming). As part of this, Beaker-style artefacts seem to have been eagerly accepted throughout the island, yet there also appears to have been a rejection of some of the apparently stereotypical practices such as the classic crouched inhumation or the deposition of these objects as grave goods in sepulchral contexts. It is this peculiarly mixed reaction to the Beaker phenomenon that makes its Irish manifestation especially interesting.

### 1.3.2 The overarching research questions

This study addresses what the Irish version of the Beaker phenomenon actually consisted of by examining the many different ways that these objects were used in social practices on this island. The information gained from this evidence-based study of the Beaker phenomenon in Ireland is used to gain a better understanding of the wider European Beaker complex. The depositional treatment of these objects serves as the main proxy to understand how the population of Ireland responded to the arrival of these cultural innovations. By examining the depositional choices that were made, insights are gained into the social roles of Beaker objects that may help us to understand how and why these were adopted here.

This thesis investigates the true extent of contemporary social change by assessing any evidence for transformations in social practices that may have occurred in tandem with the appearance of these novelties, particularly in terms of depositional treatments. Developing such an understanding of Beaker practices in Ireland should significantly advance our grasp of what the Beaker phenomenon constituted as a whole, including on Continental Europe. The thesis also adds to our understanding of the context in which metallurgy was adopted and the mechanisms by which this spread to northwest Europe. Ultimately, this research contributes new insights to critique longstanding interpretations linking either the Beaker phenomenon or early metallurgy with either the emergence of social complexity or an increase in social stratification.
1.3.3 Aims and Objectives

This thesis aims to achieve a better understanding of the Beaker phenomenon through a regionally specific study of the character, context and dating of Beaker-associated deposits in Ireland. This delivers new insights into the meaning of Beaker objects and their role in contemporary social practices on this island. The study aspires to propose an alternative to current prestige-based interpretations by moving beyond the perception of Beaker objects as passive by-products of a prehistoric fashion industry. Indeed, given the large volume of evidence for Beaker activities from non-mortuary contexts in Ireland, this research offers a considerable opportunity to gain a better understanding of the role of these items in other forms of social practice that have traditionally received less attention within Beaker studies.

Both new and old information of relevance to the study are collated. Relevant existing information from older excavations is reassessed in light of new findings and theoretical developments. The large amount of new data relating to Beakers in Ireland that has been generated by developer-funded archaeology is synthesised and converted into knowledge using a contextual approach. In so doing, this study contributes towards the challenge of overcoming the acknowledged disconnection between commercial and research driven archaeological activity in Ireland (see Anon. 2007).

The thesis combines data from settlement research, burial analysis and deposition studies to construct a context-rich interpretation of the significance of Beaker objects. It involves an integrative examination of the depositional treatment of Beaker objects within a general framework of depositional practice including their occurrence as single finds and in hoards, burials, ceremonial settings, settlement features as well as natural places. Particular attention is paid to the treatment of Beaker pottery within this depositional system. While typological aspects of the various artefacts are used to provide a secure chronological platform for the project, detailed stylistic examinations are not conducted. The depositional context and condition of the objects are used as a heuristic tool to inform us about the role played by these in contemporary social practices.

This study tries to identify patterning in terms of similarities and differences among as many relevant strands of the data as is possible within the parameters of a doctoral thesis. A core objective of this research is to identify the characteristic ways of treating various Beaker artefact types. I aim to show that the deposition of Beaker objects in Ireland was structured, selective, type specific, contextually specific and that it all formed part of a complex interlinked system. The ways in which these depositional practices reflected and related to the social historical contexts in which they took place are also examined.
Through the identification of patterning in the depositional record, it is demonstrated that these repeated actions are the residue of social traditions that are representative of wider societal beliefs (Needham 1988; 2007; 2008b). This information is then used to infer the meanings that these objects and their deposition may have held for people.

1.3.4 Defining the parameters of this study

This thesis encompasses information from the whole of Ireland. As a discrete land mass, the island provides an opportunity to examine the manifestation of the Beaker phenomenon within a naturally defined geographic area. The study entails an examination of the Beaker phenomenon in its widest possible sense to achieve a more integrated understanding of the social role of the items forming the European Beaker assemblage. It incorporates many of the objects routinely found with Beaker pottery either in Ireland or elsewhere in Europe, as well as those that can be linked to Beaker pottery on stylistic grounds: wooden and ceramic polypod bowls, tanged copper daggers (Needham 1996; 1998; 2005), wrist-guards (Woodward et al. 2006; Fokkens et al. 2008), V-perforated buttons (Shepherd 2009), gold sun-discs, lunulae, basket-shaped and other sheet gold head ornaments (Needham 2005; O’Connor 2004; Taylor 1994; Case 1977; 1995a; Clarke 1970), as well as barbed and tanged arrowheads of Conygar Hill, Green Low and Sutton type (Woodman et al. 2006, 138; Green 1980; O’Hare 2005) and hollow-based arrowheads (Green 1980, 141–2; Woodman et al. 2006, 134; O’Hare 2005). Though lunulae have never been found with Beakers, they were certainly contemporary in Ireland (Cahill 2005, 277). It has been argued that lunulae and Beaker pottery share motifs as well as similarities in terms of their compositional symmetry (Taylor 1970, 59-64; Taylor 1994, 42) and that these collars represent Beaker-associated goldwork (Needham 1996, 130; 2000, 30).

Other contemporary objects such as copper axes and halberds that were probably made by people who used Beakers were excluded from this research because they have never been found with this pottery and are not regarded as forming part of the Beaker assemblage. However, the depositional treatments of copper axes and halberds have previously been elucidated (see Becker 2006; O’Flaherty 1995 and 2002) and these patterns are referred to for comparative purposes.

The presence of debitage and all stone tool types occurring alongside Beaker pottery in a range of contexts has been recorded as part of this study. This analysis is not very comprehensive and focuses primarily on the deposition of stone tools such as scrapers and arrowheads in terms of the numbers of these found with Beakers in any context.
Although numerous tools, particularly barbed and tanged, as well as hollow-based arrowheads have been found in Ireland, most of these discoveries remain unpublished and a large amount of work would have been needed to catalogue them. As a result, stone tools that have been found as single finds or that lack contextual associations with Beaker pottery were excluded from the study. The examination of the lithic debitage is very basic and no detailed analysis has been conducted such as the recording of the quantities of specific types of debitage in particular contexts. This decision was made because the various worked stone assemblages have been examined by a number of different lithic specialists, each of whom employed different methods of analysis and terminology, which meant that their reports lacked the requisite level of uniformity necessary for more in-depth comparison of the depositional treatment of debitage.

The term “Beaker objects” will be used throughout the thesis to refer to the panoply of artefacts detailed above. The phrase “Beaker feature” will occasionally be used in reference to those features such as pits or postholes that contain Beaker pottery. For the purposes of this study, a distinction is maintained between single finds, hoards and multiple finds. The latter category is considered to comprise a set of objects which have been found together but (unlike most hoards) may not have been the product of a single depositional act.

1.4 Methodology

This thesis characterises the deposition of Beaker objects and Beaker-associated artefacts within a range of different contexts including settlements, funerary monuments, ceremonial settings and natural places. This analysis comprises the examination and integration of two different components of the archaeological record. One part of this is the examination of the depositional treatment of Beaker pottery and any contextually associated objects which have mainly been found through archaeological excavations. The other part is concerned with the analysis of the depositional treatment of Beaker objects, most of which represent chance discoveries and have no associations with Beaker pottery.

The frequency and manner of occurrence of Beaker objects in these various contexts are examined. The artefactual content of Beaker-associated deposits is assessed in terms of type, quantity and condition of the objects. The range, quantity and manner of deposition of Beaker objects and Beaker-associated artefacts, as well as ecofacts in each type of place are examined and contrasted with each other to detect patterning. As part of this analysis, attempts are also made to detect evidence for the special arrangement of materials within
deposits. The occurrence of pottery in each context is studied in greater detail including an assessment of the total number of Beaker pots and sherds in each context to detect patterning in the depositional treatment of ceramics. The number of sherds per vessel and their condition are assessed where possible to achieve insight into the treatment of this pottery prior to deposition and the formation of these deposits (see below). The identification of repetitive aspects in the deposition of pottery provides a way to recognize contemporary social practices and gain a better understanding of the role of Beaker ceramics and the meanings that were attached to them.

1.4.1 Data collection

As no systematic study of Beakers and Beaker objects in Ireland has ever been conducted, the first stage of this research project involved the collection of data. Information was gathered relating to chance discoveries of Beaker objects, older excavations of Beaker pottery, many of which were published in journals and more recent excavations of Beaker pottery, most of which are unpublished. All publications including books and journals containing information pertaining to this study were searched through to acquire any relevant data.

This study uses relevant information from the pre-existing studies and catalogues of Beaker objects that have been conducted by others such as Harbison (1969 and 1976), Taylor (1980), O'Flaherty (1995), Eogan (1994) and Becker (2006). However several of these previous studies were either purely typological, or were conducted as part of investigations into the deposition and hoarding of metalwork. Thus, it was necessary in many cases, to supplement these records with further information about depositional context and to update these to take account of subsequent discoveries. Unsystematic subjective observations on use-wear are made and relevant comments by other scholars are referenced, where it is informative to our understanding of the treatment and function of these objects.

1.4.2 Discovering the discoveries

By the end of the project, I had collected details of 219 archaeological excavations where Beaker pottery had been found. Most of these (75%) were recent discoveries that had been made during the boom years in Irish archaeology. Attempting to find out about all of the recently excavated sites with Beaker pottery proved to be problematic as publications
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detailing the results of excavation did not exist for most of these. Indeed, at least 153 (70%) of the 219 Beaker sites within the current study were unpublished and there were very few indicators that such discoveries had been made.

Numerous short articles heralding the discovery of more tangible features such as Neolithic or Bronze Age houses have regularly appeared in publications such as Archaeology Ireland, a quarterly publication which often carries short reports of recent excavations. However, there has been very little reporting of any finds of Beaker pottery in that publication. It seems that the recovery of some sherds of Beaker pottery from a few pits was rarely deemed worthy of this kind of dissemination. Indeed, many of the Beaker-associated features that did manage to achieve a mention at conferences or in journal articles only seemed to merit this privilege by virtue of being found alongside some more highly regarded features such as Early Neolithic structures (e.g. Corbally, Co. Kildare – Purcell 2002).

The annual excavations bulletin which contains summary accounts of every archaeological investigation conducted in a given year is perceived as a useful resource for researching the results of recent excavations. However, despite searching through the information contained within the bulletins, this resource proved to be of very little assistance in the identification of sites for inclusion within this study. Examination of the entire catalogue of bulletins from 1970–2007 revealed that only 49 excavation summaries made any mention of the discovery of Beaker pottery. Most excavators did not realise that they had found Beaker ceramics in the course of their excavation. Generally, excavators only became aware of this fact after the pottery had been analysed by a ceramic specialist as part of the post-excavation analysis of the site archive. Due to a myriad of different factors including the large number of excavations that were conducted during the boom years and the very small number of ceramicists operating in Ireland, there was often a time delay of as many as two to three years between pottery being removed from the ground and its subsequent identification. However, Irish legislation requires that summary accounts of each excavation be submitted a few months after being dug. Thus, excavators were generally not in a position to include accurate details of their artefactual discoveries within their excavation summaries.

I contacted a number of the archaeologists working for the National Roads Authority – then representing the biggest client of archaeological services in Ireland – inquiring if they could inform me about any Beaker discoveries made on the road construction schemes that they were overseeing. I also attended many seminars and conferences in the hope of hearing mention of the discovery of Beaker pottery. At some of these conferences, I gave
presentations about my work and also displayed posters to increase awareness of the project and to encourage people to share their Beaker discoveries with me. I contacted (in person and by email) various different excavators and consultancies to inquire if Beaker pottery had been found in the course of their recent excavations. I quickly learnt that to achieve a successful outcome to my requests, I generally needed to remind excavators that they had found Beaker pottery on particular sites; however, I did not have such information.

To discover which of the many recently excavated sites had actually produced Beaker pottery, assistance was sought from those specialists who were analysing these ceramic assemblages to see if they could inform me of this. Both Helen Roche and Eoin Grogan proved to be exceptionally helpful in this regard. They provided lists of all the sites with Beaker assemblages that they had identified, they informed me whenever such new sites were identified and freely shared their pottery reports with me. As a result, a total of 90 site directors and 17 companies were contacted with specific requests for information about their excavations. The following consultancies were particularly receptive to my requests: Headland, Aegis, MGL, IAC, ACS, TVAS and CRDS. While some individuals were very responsive, often times several requests were necessary to obtain the desired report and in a few cases, no response was obtained.

1.4.3 Extracting data from recent excavations

Once the information had been obtained from the various sources, the next task was to extract the relevant details from these. The level to which reports were completed varied. Some represented preliminary findings that had been generally been written in advance of much of the post-excavation analysis such as pottery analysis or radiocarbon dating, while others were final reports complete with all the relevant specialists’ reports. Of the 149 unpublished sites, final reports were obtained from 40. For 50 sites, interim or preliminary reports were made available to me along with some specialists’ reports that had not yet been integrated into the text. For 30 sites, only the preliminary and the pottery reports were available and no report was obtained/obtainable for at least 28 sites. In a few cases, where reports had not yet been finished, it was necessary to obtain the site drawings and context sheets to extract as much information as possible.

The extraction of information from the unpublished excavations required a particular methodology. For the early-stage preliminary reports, it was necessary to obtain as many of the missing specialist reports as possible and to integrate the relevant aspects of these
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According to its context, authors had not fully integrated the results of the various different specialist analyses into the main text and it was rare to find information being presented contextually. Instead, much of this information tended to be presented separately, often only appearing within appendices at the rear of the report. In many reports, artefacts and ecofacts were rarely or barely mentioned in relation to the contexts in which they had been found. It was common for a final report to state that charcoal, worked flint and prehistoric pottery were retrieved from a pit but without giving further details about these artefacts and ecofacts within the main text of the report. As a result, the available documents had to be excavated to find all the various different pieces of information contained within them that pertained to features containing Beaker artefacts. These details then needed to be integrated together in relation to the feature in which they had originally been found (see inset).

**Extract from a technical report without detailed information:** “The pit [192] is one of the largest on the site and is filled with (16) a charcoal flecked context, from which tiny fragments of burnt bone and one sherd of pottery were recovered”.

**Rewritten to integrate relevant details as:** “A very large but shallow suboval pit (5.06m x 3.95m x 0.35m) filled with a dark coloured charcoal-rich soil. It contained a large quantity of small stones, tiny fragments of burnt bone (species unidentifiable) and five sherds from two Beaker vessels (Vessel 3 & 4). The charcoal was identified by O’Carroll as Alder (*Alnus glutinosa*) and Blackthorn (*Prunus spinosa*) which was riddled with insect holes suggesting that the wood was lying on the ground for some time before its collection and

Inset showing an example of the degree to which the required information was not presented within a report.

Often, it required considerable effort to deduce exactly what Beaker materials were present on each site and what their context and associations were. Most of the Beaker pottery was found on multi-period sites and so it was generally necessary to interrogate the information within the available reports to create a chronological sequence of activity and to identify which features were contemporary with the use of Beakers. The reports for each site needed to be examined for any indications that the Beaker pottery had been found within a residual or disturbed location. Particular emphasis was also placed upon the detection of evidence that could indicate whether the Beaker materials had been found
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within a primary or secondary location. For example, the presence of a few sherds from multiple pots, the identification of a high level of edge damage on sherds, or of differential levels of wear on sherds derived from the same vessel, may indicate that the materials found within a feature were derived from a secondary location (see Chapter Three).

1.4.4 Extracting data from older excavations

Most of the published excavations had been conducted in the 1930s and 40's and the extraction of contextual data from these presented a particular set of difficulties. Unfortunately, the methods of excavation and recording of these sites as well as the presentation of findings differ from current standards (see below). Information about the exact contexts and associations of artefacts was generally lacking. The same type of difficulties impeded the extraction of necessary details from more recent excavations such as those at Newgrange (O’Kelly et al. 1983) or Knowth (Eogan 1984), where the Beaker finds had been treated at a site level rather than at feature level. Attempts were made to overcome these problems by interrogating the information present within these publications. Examination of the primary archive for these older excavations might have yielded better results, but unfortunately, this was beyond the parameters of the present study due to time restrictions.

All the findings from older excavations had to be reassessed to variable levels in light of more recent developments in understanding regarding the date range of various artefact and site types. Any studies that had subsequently revised the dating, identification or context of the artefacts or deposits from these older excavations were taken into account and integrated into the original findings of the excavation to bring these up-to-date. In this regard, studies such as Humphrey Case’s (1961) corpus of Irish Neolithic Pottery, Michael Herity’s (1987) examination of the finds from Irish court tombs, as well as Brindley and Lanting’s (1987 and 1991) radiocarbon dating of some wedge tombs proved particularly useful. In some cases, drawings of the pottery were shown to Eoin Grogan and Helen Roche to ascertain the type of pottery present on these sites.

Sometimes, the presence of Beaker pottery had not been recognised at the time of publication or later Bronze Age pottery had been considered as contemporary with Beakers, most notably at Lough Gur, Co. Limerick (see Chapters Two and Three). In those cases, it was necessary to determine what each vessel is currently considered to be and then to determine their context through an examination of the text, plans, photographs and section drawings. For some articles, such as those authored by Herring, Davies or
Evans, it was generally possible to utilise their illustrations such as section drawings to discover the contextual origin of each vessel that was numbered. In this manner, it was often possible to determine the location of Beaker pottery and what artefacts were associated with these. All of this information was then used to make an assessment of the chronological integrity of these deposits.

I was able to work out the context of most of the Beakers at Knowth and also to calculate the total number of vessels and sherds present within these. In relation to Newgrange, this meant looking at Rose Cleary's (1980) M.A thesis on the pottery from Newgrange, particularly her drawings displaying the spatial location of various pot types and then working out what her types corresponded to in contemporary parlance. Unfortunately, the assemblage from Monknewtown needs to be assessed, but given the lack of contextual detail available for these sherds, this would not prove easy (see below and Chapter Three). Where possible, I used the catalogue of the finds contained within these publications to calculate the sherd: vessel ratios for each feature from these sites.

1.4.5 Examining the depositional treatment of Beaker pottery

The form, condition and context in which we find Beaker pottery is (to a large extent) a direct reflection of the depositional activities of people in the past even if this is affected by taphonomy or issues of preservation. The depositional treatment of Beaker pottery has not been examined in detail in Ireland and so, I have paid particular attention to this. The analysis conducted herein includes an examination of the number of sherds and vessels occurring in each feature as well as the sherd: vessel ratio of each pot within any feature. Information about the condition of the pottery, including the degree of fragmentation, surface and edge-wear as well as other forms of abrasion is noted, where such observations had been made by the ceramicist.

Examination of these aspects of the pottery can reveal much information about the use-life of the ceramics, particularly its treatment, prior to and during deposition. This includes whether the pottery was specially selected for deposition or if the sherds represents a partial assemblage obtained from a greater accumulation of material, whether the pot was used prior to deposition or made especially for this purpose, whether or not this pottery was deposited as soon as it was broken or if it had been in another context after breakage but prior to its eventual deposition. This analysis results in a deeper understanding of the formation of the deposits in which the pottery was found and serves to elucidate the functions of these deposits and of the features in which they occurred.
Efforts were made to use the ceramics to detect evidence for material connections between different features such as the occurrence of sherds from the same pot in different contexts, which might suggest that the deposits had been obtained from the same aggregation of materials. Attention was also paid to the specific depositional treatment of both 'fine' and 'domestic' Beakers to investigate whether or not any differences in this could be detected. While analysis of sherd sizes might have yielded good results, (e.g. Bradley and Fulford 1980), this was not used as a diagnostic tool because the information was not readily available and undertaking such detailed primary analysis was not feasible within the constraints of this study.

The pottery reports of Eoin Grogan and Helen Roche were of strategic importance to this project. They conducted the examination of the pottery for over 95 of the 149 unpublished sites included in the study. The uniformity of their approach as well as the high level of detailed analysis that they conducted on each assemblage greatly facilitated my own analysis. Grogan and Roche generally examined the number of sherds per vessel and also documented the context of sherds from each vessel. Their approach enabled me to more easily conduct my own analysis of the pottery. By extracting details from their reports, I was readily able to calculate the number of sherds from each Beaker within each feature and the total sherd: vessel ratios per feature. Grogan and Roche recorded details about the condition of these sherds in terms of wear and edge-damage and this proved very useful in terms of deducing information about the character of the deposition of these pots (see Chapter Three, Four and Five). When pottery reports had been conducted by other ceramicists, this information was generally present within the report but at a much more implicit level and it usually took a lot more work to extract the relevant information regarding the number of sherds per vessel at a site level and then also at a feature level. In a few cases, it was not possible to conduct this form of analysis as the requisite information was not present within the report.

1.4.6 The design of the relational database.

I created a relational database utilising Microsoft Access to record and query a range of different information including contextual and typological details relating to the discovery of Beaker pottery and Beaker objects as well as other items found in association with these. The main function of this database was to enable comparative analysis of the depositional treatment of these various artefacts. However, these had been found through a variety of different means including archaeological excavation, peat-cutting, and antiquarian investigations. Many of the Beaker objects lack contextual details, while most of the Beaker pottery was discovered within archaeological features during scientific
excavations. To include such a range of artefacts with diverging levels of contextual information within the one database, it was necessary to adopt a universal approach to their recording.

The database was designed to facilitate the recording and interlinked contextual analysis of artefacts at three different levels: site, feature and find. The database comprised four interlinked tables: three of these recorded attributes about each of the aspects mentioned above and the fourth table recording detail of radiocarbon dates. All Beaker objects including Beaker pottery and anything contextually associated with these, including fauna, flora and human bone were regarded as a find. Every find was considered to have been found within a feature and on a site.

The site table recorded general information about the provenance, method of discovery, context of discovery, and other details about the character of each artefact's find-place. The feature table recorded details such as shape and size of each feature that a Beaker find had been found in. The relationship of these features to other features containing Beaker material on-site was also recorded in this table. The finds table recorded different aspects of each find including typological details and information about their condition. The unique identification number assigned to each Beaker vessel was also recorded in this table to record the occurrence of sherds from particular pots occurring in a range of different features on any site. Where human bone occurred with Beaker artefacts, relevant details of its burial were recorded in the finds and feature tables. If any find had been radiocarbon dated, the details of this radiocarbon date were entered in a connected table. This meant that radiocarbon dates could be related back to features and artefacts.

Artefacts that had not been found within a feature were entered into the feature table as coming from a non-feature. Likewise, artefacts found in a non-archaeological setting were recorded as such within the site table.

Data relating to each of the Beaker object or Beaker-associated object was entered into the database. Queries were then formulated to analyse the information from the various different tables. The results of these queries are represented in a range of different tables throughout the thesis. These tables present the evidential basis for all of the findings made in the course of this research.

1.5 Problems with and Limitations of the Data or the Approach of the Study
The approach taken in this study was to collate as much existing data as possible and utilise this to create a better understanding of the depositional treatment of Beaker objects in Ireland. However, this strategy is not without its problems and limitations. As a contextual study, this thesis was less concerned with examining the physical characteristics of objects than it was with extracting information about their depositional context. As a result, no firsthand examinations of any Beaker artefacts were conducted as part of this research. Instead, I collated as much pre-existing data as possible pertaining to these objects as well as their context.

The information that this research is based on was generated by a wide range of different people over a long course of time during which the approaches taken to the discovery, recording, excavation and examination of the artefacts featured in the current study have changed greatly. The employment of such divergent methodologies has resulted in much variability in the quality and quantity of the data used in this study. Most of the non-ceramic objects featured in this study were found during 19th century agricultural activities rather than by archaeologists during recent excavations. Consequently, many of these are lacking reliable information on their provenance, context or find circumstances, particularly those that were discovered as single finds rather than in hoards. As a result, we only have a partial picture of the depositional treatment of these objects and it is difficult to ascertain quite how representative this is.

1.5.1 Problems with older excavations

Many of the excavations featured in this study were conducted prior to 1950 and many of these (including some more recent examples) suffer from problems associated with their age. There is a limit to the level of information that can be extracted from some of these older excavations. These were conducted in an era when approaches to the past were radically different. In Ireland, radiocarbon dating was not commonly conducted until the 1980s and understandings of chronologies have radically altered since then (see Chapter Two).

The objectives underlying older investigations and the techniques employed contrast greatly with those of today. The quality of recording was highly variable and detailed contextual data was rarely recorded. Thus, contextual information for artefacts and the degree of association between these objects is often ambiguous. For example, at quite a number of sites such as those at Newgrange, Dalkey and Lough Gur, it was not fully
recognised at the time of excavation that the deposits containing Beakers were actually the product of multi-period activity (see Chapter Two and Three).

The approaches taken to the analysis of the artefacts from these excavations, particularly the pottery was radically different to today. For example, very few examinations attempt to recognise individual vessels or the number of sherds representing each of these and the condition of the pottery is rarely noted. Certainly, some of these artefactual assemblages remain in need of (re)assessment by relevant specialists. Unfortunately, due to limits of time, expertise and resources, it has not been possible to conduct that as part of this project. Overall, in many cases, the level of information recorded in the original reports was not detailed enough to permit the types of analysis that I conducted on the more recently generated data.

1.5.2 Problems with recent excavations

There were also some problems with the data from excavations conducted over the last 20 years or so, such as the availability of completed reports, as discussed above. In some cases, the quality of the information within the excavation report and/or the various specialist reports was not suitably detailed to meet the needs of this study. Also, while most of these investigations have been carried out in accord with a uniformly high standard, divergences in excavation, recording and sampling strategies have certainly affected the character of the insights that these explorations have achieved (see McCarthy 2000). The same is true of the various different specialist examinations of pottery, lithics, charcoal and bone that have been utilised in the course of this research. While this project has strived to overcome the non-uniformity of the results produced by the various approaches taken by others, it is likely that these will have had some effect upon the outcomes of this study.

While I endeavoured to include all relevant existing data relating to the Beaker phenomenon in Ireland, this study is ultimately based upon the information that I was able to obtain. However, the scope of my coverage of the island has been heavily influenced by recent construction activity as well as the history of the development of archaeology in this country (see Chapters two and seven). The present-day distribution of sites with Beaker pottery in Ireland is largely a reflection of the location of development activity and thus, this study merely reflects where Beakers are known to have been found rather than all the places where they were deposited.
I aspired to include all the Beaker pottery that had ever been discovered on the entire island of Ireland. However, the network of archaeological contacts that I made, profoundly influenced the extent of my coverage. Prior to commencing my PhD, I worked in developer funded archaeology in Leinster for a few years, during which time, I came to know many of the archaeologists and the consultancies who had found Beakers in this region. This social network made it far easier to discover new excavations and to get information about the results of these. The upshot of this was that I was far more likely to find out about the excavation of Beaker pottery in Leinster than any other region.

As mentioned above, the success of this project was highly dependent upon the assistance of those pottery experts — Eoin Grogan or Helen Roche — who informed me of the sites from which they had identified Beaker pottery. Thus, the choice of excavators or consultancies to have their ceramics analysed by either Eoin Grogan or Helen Roche or by an alternative ceramicist had a large influence upon the extent of my coverage. If a different specialist analysed the pottery and if there was no dissemination of the fact that Beakers had been identified, then it was much less likely that I would find out about that discovery. Equally there were certain consultancies who took a particular interest in my work such as Headland, Aegis, IAC, ACS and MGL and there was a far better chance of me finding out about their discovery of Beakers than if a different company had conducted the excavation.

The limitations of my coverage of the island are particularly well illustrated by the lack of information on recent excavations of Beaker material from Northern Ireland in this study. The number of these is minuscule compared to the corresponding number of Beaker sites from elsewhere in Ireland that are discussed in this dissertation (see Chapter Seven). I suspect that many Beakers must have been found in Northern Ireland during the ‘boom’, particularly in Counties Antrim and Down, but that these discoveries have not been disseminated in any way and I simply don’t know about them. Compared to those in the Republic of Ireland, I know far fewer northern-based archaeologists, consultancies or pottery specialists and this seems to have affected my ability to obtain information regarding the excavation of new Beaker sites in Ulster. Equally, it seems that northern-based archaeologists rarely had their ceramics examined by Eoin Grogan and Helen Roche and this would also have had a noticeable effect upon my study.

Despite attempting to utilise a contextual approach to understanding the social role of the Beaker assemblage in Ireland, this thesis somewhat neglects the historical background to the adoption and the demise of this package. An assessment of changes in both the ‘domestic’ and ritual practices associated with the immediately preceding and succeeding
cultural packages (Grooved Ware and Food Vessels) would have served to locate Beaker-associated activities within their historical context. Unfortunately, these aspects of Irish prehistory are both in need of revision and much work would have been required to situate the development of Beaker practices within a longer trajectory of social developments. This was beyond the limits of this thesis but is a subject that is highly deserving of future study (see Chapter Ten).

Ultimately, for all the reasons stated above, the data examined within this study is of a rather fuzzy nature. It is inevitable that the limitations of available evidence are replicated in the current research. No attempt has been made to demonstrate the statistical significance of any of the patterning identified in this thesis because the data is simply not robust enough. These limitations have to be accepted and taken into account when interpreting the data. So, while I have calculated totals and percentages, these numbers should not be seen as definitive results. I have tried to be as forthright as possible about the limits of my findings. Notably, the proportion of each object type from an unknown context is always stated. The exclusion of the high number of uncontexted objects would have created a false impression of the strength of the evidence for patterning. Thus, all calculations are based on the total number of each object type including those without any contextual information. Therefore, these should always be read as minimum percentages or proportions and will generally be stated in this thesis as “at least” or “a minimum number”.

I have outlined the many limitations of this thesis, but I am not despondent about these, nor am I worried that these detract from the trends in Irish Early Bronze Age social practices that I identify. After all, the degree to which we can ever aspire to accurately reconstruct the past is restricted (see Hall and Brück 2010, 85). This thesis is primarily a reaction to the approaches taken to Beakers in Ireland to date, particularly the lack of reappraisal of extant understandings despite the availability of large volumes of new and old data that readily facilitate such revisions. Ultimately, I hope to have demonstrated that there is enough old and new evidence to allow for alternative ways of thinking about the Beaker phenomenon in Ireland. I do not claim that this is the right or the best reading of this evidence or that it is without fault. I have merely endeavoured to set out the evidence that supports my particular interpretation and to consider this in light of any indicators to the contrary. While it is hoped that this thesis will influence how people think about this period of the distant past, it seems more important that these findings might inform our understanding of how we make sense of our lives in the present. As argued by certain 20th century philosophers such as Sartre, Camus and Heidegger, existence is the creation of meaning.
1.6 **THE STRUCTURE OF THE THESIS**

The main aim of this thesis is to explore the depositional treatment of Beaker objects in Ireland to gain a better understanding of their social roles. Before outlining and examining the results of this analysis, it is necessary to consider the history of research of the Beaker phenomenon in Ireland. In Chapter Two, I review and highlight the gaps in previous scholarship that this thesis attempts to fill. It is shown that some of the problems in our understanding of this period are closely connected to the particular approaches that have been taken to prehistoric studies in this country. Details are given of recent developments that necessitate a reconsideration of our readings of the third millennium BC.

The various different contextual categories in which Beaker objects occur are used as a straightforward means of dividing up this data to facilitate its analysis. These include settlements (Chapter Three and Four), funerary and megalithic contexts (Chapter Five), and ceremonial settings, particularly timber circles (Chapter Six), as well as natural places (Chapter Seven). This classification of the contexts in which this material has been found is quite reductive and masks the true complexity of the evidence. This study does not assume that the archaeological labels assigned to various different contexts represent categorisations which reflect the worldview of those originally involved in their creation.

The unsuitability of projecting boundaries between various activities such as ritual and 'domestic' into the past has been highlighted elsewhere (see Brück 1999a, 325–7; Bradley 2005a). The sacred and profane were inextricably interlinked, civil ceremonies, secular rites and religious rituals were probably part of everyday life and thus it is not possible to draw a clear division between the ceremonial and the mundane in past societies (Bell 1992, 38). It seems that activities were conducted as part of a spectrum of practices ranging between the ceremonial and the 'domestic' and occurring across a range of different contexts. While acknowledging the problematic aspects of imposing divisions on past activities, it is necessary to attempt to make this distinction to facilitate the recognition of contextual patterning. It also provides a straightforward means of presenting the analysis and discussion of the various results within manageable sections.

Chapter Three examines the very well-known occurrence of Beaker artefacts in what have generally been interpreted as settlement contexts such as that from Newgrange (O’Kelly et al. 1983). It also investigates the deposition of Beaker-associated materials in 'domestic' structural contexts including postholes, stakeholes, and slot trenches. The evidence for Beaker houses is also reviewed.
Chapter Four analyses the deposition of Beaker pottery in non-structural settlement contexts including pits, spreads, middens, as well as the burnt stone mounds also known as fulachtai fiadh. The very large numbers of pits that have been found to contain Beaker pottery in Ireland dictates that these features are examined in particular detail to understand the relationship of these features to settlement activity. Beaker deposition in pits and spreads occasionally display evidence for occupational activity, but sometimes ceremonial qualities are also exhibited. These features defy simplistic categorisations but it was decided to treat these within this chapter because they have traditionally been considered to represent settlements and seem to represent the best evidence available for occupational activity at this time.

Chapter Five examines the deposition of Beaker artefacts in a megalithic or funerary context in Ireland including earlier Neolithic megalithic tombs, contemporary megalithic monuments known as wedge tombs, as well as cists, cairns and pits. The frequency and manner of occurrence of Beaker materials in these various contexts will be analysed. Special attention will be given to identifying Beaker-associated deposits of human remains. Aspects of the depositional activities in megalithic contexts may be more directly related to ceremonial rather than sepulchral practices. These are examined in this chapter because it seems to be the most suitable place in which to establish whether or not these depositions have a funerary character.

Chapter Six involves an assessment of the nature of the occurrence of Beaker pottery and other typical Beaker objects in ceremonial contexts, particularly timber circles and earthen enclosures. Efforts will be made to determine at what stages in the use-life of these monuments were Beaker materials deposited. This will improve our knowledge of the role of Beaker objects in contemporary ceremonial practices in Ireland.

The deposition of Beaker-associated artefacts in natural places such as bogs, mountains, caves and rivers almost certainly had a ceremonial aspect. This is considered to represent a slightly different phenomenon to the ceremonial deposition of Beaker objects in manmade contexts and so is treated solely within Chapter Seven. This chapter characterises the depositional treatment of each Beaker artefact found within natural places to gain better understanding of the function of these deposits.

In Chapter Eight, I review the radiocarbon dating of the Beaker phenomenon in Ireland and propose a new understanding of its chronology and duration. Particular attention is paid to the dating of Beaker pottery, though an attempt is also made to chronologise certain Beaker-associated practices. All radiocarbon dates quoted in the thesis are presented at two sigma (95% confidence levels).
In Chapter Nine, the deposition of Beaker artefacts is characterised through an exploration of the range of contexts in which each object-type occurs in Ireland. The highly selective depositional treatment of each item is highlighted and the spatial distribution of each artefact type is also explored. Towards the end of this chapter, the various aspects of Beaker depositional practices within settlement, ceremonial or funerary settings and natural places will be compared within an overarching framework.

In the final Chapter, the broader implications of the findings contained within the whole thesis are discussed. The social significance of Beaker-associated practices in Ireland is considered. A new understanding of how and why the Beaker phenomenon was adopted in Ireland is proposed. The wider implications of this study for understanding of the nature of the wider European Beaker phenomenon are also examined.
2 A HISTORIOGRAPHY OF THE BEAKER PHENOMENON IN IRELAND
CHAPTER TWO – A HISTORIOGRAPHY OF THE BEAKER PHENOMENON IN IRELAND

2.1 INTRODUCTION

This chapter briefly reviews the history of research on Beakers in Ireland. It provides a context for the present study of the deposition of Beaker pottery and other objects from the Beaker assemblage on this island. In looking back at the scholarship in this area to date, I highlight the need for a reappraisal such as that contained in this thesis. As Clarke (1976, 460) previously observed, it is the past approaches to the Beaker phenomenon that are responsible for the many problems in our understandings of the Beaker phenomenon. This is certainly the case in Ireland, where our present-day view of this assemblage remains heavily biased by the trajectory of archaeological research on this island.

This review mainly follows a chronological sequence but relevant, thematic commentaries are conducted in relation to the period of time to which they seem most applicable. Recent developments in our knowledge have had a large effect on our understandings of the third millennium BC. These include the discovery of large quantities of Beaker materials in the course of rescue excavations conducted in the last 10 years, the identification of a Grooved Ware Late Neolithic and the recognition that the creation of wedge tombs occurred after a major break in the use and construction of megalithic tombs (Sections 2.9, 11 and 2.22). Clearly, if previous scholars had known what we now know, the history of Beaker studies in Ireland would be rather different. Of course, archaeological interpretations are not only contingent upon what was known at the time, but also upon the contemporary prevailing paradigms (see Hodder 1991). Thus, in the course of glancing backwards at previous interpretations of the Beaker phenomenon, it is essential to situate previous works and ideas within the contexts in which they were formed and to consider the influence of various past political and social events upon these.

2.2 EARLY DAYS IN BEAKER-FREE IRELAND

At the start of the twentieth century, common consensus held that the ‘Beaker culture’ had not extended as far westward as Ireland because Beaker pottery remained virtually unknown on this island until the 1930s (e.g. Abercromby 1912; Mahr 1937, 372). In 1885, an antiquarian investigation of a wedge tomb at Moytirra, Co. Sligo (Cremin Madden 1968), revealed what may have been the first Beaker ceramics to be found in Ireland,
though these were not recognised as such at this time. This pottery was later listed in Abercromby’s (1912) catalogue of British and Irish Bell Beakers as the only discovery of this ceramic in Ireland. R A S. Macalister (1928, 52) observed in one of the earliest syntheses of Irish prehistory — ‘The Archaeology of Ireland’ — that the only Beaker known in Ireland had been found at Mount Stewart, Co. Down. Ironically, unidentified Beaker sherds had already been recovered, along with a bracer, during the excavation of a cist grave at Longstone Furness, Co. Kildare, by Macalister, Praeger and Armstrong in 1913 (Macalister et al. 1913, see Chapter Five). However, the pot from Mount Stewart which had been published as a Beaker in the *Dublin Penny Journal* of 1832 was subsequently identified as a Vase of the Food Vessel tradition (Evans and Megaw 1937).

### 2.3 Ireland says no to Romans and Beaker invaders

Meanwhile, in Britain and Europe, the frequent discovery of Beaker artefacts as part of grave assemblages had created the impression of a distinct and cohesive culture (see Brodie 1994, 1). The seemingly rapid and widespread dispersal of this culture comprising a highly distinctive burial rite including weapons such as daggers and arrowheads but apparently lacking any associated settlement evidence was generally interpreted as the spread of an exceptionally mobile ethnic race (see Harrison 1980, 11). In the words of Hawkes and Hawkes (1947, 54): “once arrived, these several waves of energetic conquerors soon occupied the greater part of Britain, ruthlessly dispossessing the Neolithic communities of their best pastures, and also no doubt of their herds, and sometimes their women”. One of the most prominent advocates of the migration paradigm was Childe, who at various times envisaged these people as warriors, beer drinkers, itinerant metallurgists, traders and gypsies (Childe 1949, 119; 1950, 130; 1957; 1958, 213–28). Most European and British studies of Beaker culture focused almost exclusively on the identity and origins of these putative Beaker “folk” until the late 1970s (e.g. Clarke 1970, 277; Case 1977, 71). This approach was very much a product of the prevalent contemporary paradigms, for it was during this time that two world wars occurred and that fascism with its associated emphasis upon ethnicity and race rose to prominence.

The perceived absence of Beakers in Ireland was contrasted with Britain, where Beakers were much better known and this difference was hailed as further evidence for the existence of fundamental dissimilarities between Irish and British people (e.g. Macalister 1928, 52; Bremer 1928). Beakers could be added to the list of ‘races’ including the Romans and the Anglo-Saxons that were considered to have stayed clear of Irish shores. Such assertions of national distinctiveness were to become an ongoing theme, not just in the interpretation of Beakers in Ireland, but of Irish prehistory in general (see Section 2.7).
2.4 The 1930s – The First Irish Beaker Boom

In 1933, a landmark paper by LF Chitty (1933) in the Antiquaries Journal drew attention to a number of previously unpublished Beakers found in Northern Ireland. This publication marks the beginning of a sudden increase in awareness of the presence of Beakers in Ireland, though it does seem to have been widely ignored (perhaps because the author was a woman, see below for further evidence). The 1930s was a time of intense archaeological investigation on the island of Ireland (Cooney 1995 and 1996). Excavations were encouraged and financed by the newly independent political entities of Northern Ireland and the Irish Free State, both of which were eager to use archaeology to forge and complement their own national identities (Cooney 1995, 267 and 1996, 158). Thus, Adolf Mahr (1937, 262) was able to boast in his presidential address to the Prehistoric Society of the “enormous amount of fresh evidence” that had been uncovered through large-scale systematic excavations undertaken during the previous five years.

1932 saw the establishment of the Harvard Archaeological Expedition which would conduct Ireland’s first comprehensive scientific excavations (see Waddell 2005, 217–20) and the setting up of the special employment scheme to create jobs in the Irish Free State, both of which led to new discoveries of Beaker pottery. The employment scheme provided much needed financial support for excavations that enabled the conducting of many significant investigations including those at Lough Gur, Co. Limerick (see Waddell 2005, 214 and Cooney 1995, 267). As part of the Harvard Expedition, Hencken unknowingly found Beaker pottery in 1934 and 1935 during excavations of the cairn at Poulawack, Co. Clare (Hencken 1935), and the court tomb at Creevykeel, Co. Sligo (Hencken 1936). In 1934, the first scientific excavation of a wedge tomb was conducted by Harold Leask — the then inspector of National Monuments — at Labbacallee (Leask and Price 1934). The sherds from this dig were shown to none other than Vere Gordon Childe, who went on to exert a considerable influence upon the development of Beaker studies in Ireland (see Section 2.6). Though Childe didn’t recognize any of these as Beaker, one vessel was subsequently identified as such by Case (1966).

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1 Chitty (1933, 264) records the presence of Beaker pottery at Bushmills, Murlogh Bay and Whitepark Bay, Co. Antrim, and Mount Stewart, Co. Down.

2 This is without a doubt the least referenced paper on Beakers in Ireland.
2.4.1 Beaker pioneers: Ó Ríordáin, Evans, Herring and Davies

By 1936, Seán P. Ó Ríordáin had begun his intensive excavations of a wide area around Lough Gur, Co. Limerick which continued until 1954 (see Cooney 2007, 215) and in doing so, totally transformed understandings of Beakers in Ireland. Beginning in 1938 with his discovery of Beakers in a wedge tomb at Lough Gur (Ó Ríordáin and Ó hIceadha, 1955), his activities in Limerick resulted in the discovery of at least 6000 sherds of Beaker pottery from as many as fourteen different sites including the large stone circle at Grange (Ó Ríordáin 1951) and what were thought to have been to be settlements (see Section 3.2) at Lough Gur Sites C and D (Ó Ríordáin 1954), Rathjordan (Ó Riordáin 1947b, 1948), Rockbarton (Mitchell and Ó Ríordáin 1942), Ballingoola (Ó Riordáin 1950b) and the enclosed occupations on Knockadoon such as Circles J, K, L and Sites 10 and 12 (Grogan and Eogan 1987). Given the aforementioned paucity of these vessels known in Ireland in the early 1930s, these represented highly significant discoveries.

Between 1936 and 1938, Estyn Evans, Ivor Herring and Oliver Davies discovered a considerable quantity of Beaker pottery during the excavation of a number of wedge tombs in Ulster including Largantea (Herring 1938), Kilhoyle (Herring, and May 1937) and Boviel, Co. Derry (Herring and May 1940), as well as Loughash (Davies 1939) and Cashelbane, Co. Tyrone (Davies and Mullin 1940). Despite Chitty’s (1933) publication of several Beaker discoveries from Counties Antrim and Down, the pots from Largantea which were positively identified by Childe were heralded as “the first definite beakers to be found in Northern Ireland” (Herring 1938, 171). Initially wedge tombs had been targeted for excavation because they were highly visible monuments that were thought to indicate links with northern France (see Waddell 2005, 201–203). However, after the fortuitous discovery of Beakers at the Largantea tomb, Davies (1939, 254) deliberately set about excavating other wedge tombs with the specific aim of finding more Beakers. In 1938, Evans (1953) unwittingly excavated some Beakers — subsequently identified by Humphrey Case (1961, 224) — at the Lyles Hill kerb cairn, Co. Antrim. Though state sponsored archaeology continued in the north, the 1930s was to be the golden age of Beaker discoveries in Ulster.

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3 Beakers at Kilhoyle were not recognised as such at the time of excavation in 1937.
2.5 The 1940s and 50s

Though state-funding for archaeology decreased in the 1940s and 50s (see Waddell 2005, 220 and 288), Beaker pottery continued to be discovered, albeit at a much lesser rate than in the previous decade. Ó Ríordáin continued his programme of excavations at Lough Gur and under his influence others conducted concurrent investigations in the locality that also yielded Beakers, for example, at the Caherguillamore rock shelter (Hunt 1967) and the settlement at Ballingoola (MacDermott 1949). In 1948, M.J O’Kelly — a student of Ó Riordáin’s, who would go on to strongly influence understandings of Beakers through his excavations at Newgrange — excavated the cist and cairn at Moneen, Co. Cork, his first investigation to yield Beaker pottery (O’Kelly 1952).

The excavation of Ballyedmonduff wedge tomb, Co. Dublin in 1945 by Ó Ríordáin and Ruaidhrí de Valéra (financed by UCD) revealed the first Beaker pottery to be found in the east of Ireland (Ó Ríordáin and de Valéra 1952). This was soon followed by the discovery of Beakers nearby at Dalkey Island, Co. Dublin. From 1956 to 1959, excavations were conducted on the island by G. D Liversage with the assistance of George Eogan. A large quantity of Beaker ceramics were recorded within a midden at Site V, in what would then have been an unusual context to find Beakers (Liversage 1968).

Meanwhile, in Co. Down, "the first probable Beaker sherds from an Irish horned cairn" were recorded within Ballynichol court tomb (Collins 1956, 118). However, the occurrence of Beakers in court tombs was almost totally unrecognised until Michael Herity conducted a review of the finds from these megaliths (1987). Elsewhere around this time, Beakers were found at a few other sites including a possible cemetery at Gortnacargy, Co. Cavan (B. Ó Ríordáin 1967), and at Baurnadomeeny wedge tomb, Co. Cork (O’Kelly 1959). It was due to these discoveries, particularly those in the east, that Máire de Paor could (perhaps proudly) declare to a European audience in 1958 that Beaker pottery was widespread in Ireland (de Paor 1961, 653).

2.6 Cultural Historical Approaches and the Arrival of Invaders

As has been highlighted by Gabriel Cooney (1995; 1996) and John Waddell (1978; 1991; 1998, 5; 2005), the assumption that evidence for the development of new traits or the introduction of novelties during prehistory reflected the arrival of new immigrants was highly prevalent among Irish archaeologists from the 1930s until at least the 1970s (e.g. Herity and Eogan 1977). Correspondingly, these scholars were more interested in identifying the origins of these various cultural phenomena than actually understanding
the reasons behind these or their social role (see Waddell 2005; 206). Thus, studies of Irish prehistory have tended towards a descriptive recounting of a cultural-historical sequence of events (e.g. Herity and Eogan 1977; Harbison 1988; O’Kelly 1989), rather than interpretative or critical accounts of social and political developments (see Cooney 1996, 147 for further critique, also see Cooney and Grogan 1999, 1). This is certainly evident in the case of Irish approaches to the introduction of Beaker pottery.

Upon the realisation that Beaker pottery was definitely present in Ireland; Irish archaeologists rapidly fell into step with their European counterparts by attributing the spread of this material to an intrusive element. This shift in approach is most clearly illustrated by Macalister’s (1949, 87–8) explicit description of the arrival of Beaker invaders who “exterminated the men, or at least reduced them to slavery” which appeared in the revised edition of his synthesis – ‘The Archaeology of Ireland’. Henceforth, there was considerable acceptance that the introduction of Beakers to Ireland was due to an influx of a new race representing one of the more significant waves of invasion in Irish prehistory (Herring 1938, 185; Ó Riordáin 1954, 452; Apsimon 1969, 28–33; Apsimon 1976, 27; Harbison 1973, 93–7; Harbison 1975, 113; Sweetman 1976, 71; Herity and Eogan 1977, 111–7 and 131; Eogan 1984, 320; Grogan and Eogan 1987, 485–9; Eogan 1991, 117; Eogan and Roche 1997, 25; Taylor 1994, 54). Such was the belief in the existence of a large-scale Beaker-associated intrusion into Ireland that several Irish archaeologists echoed Abercromby’s (1912, XI, 99) suggestion that the migration of Beaker people was responsible for the spread of an Indo-European language to Ireland, as well as Britain (e.g. McAlister 1949, 87–88; Harbison 1975, 115).

Childe’s theories about the spread of archaeological cultures including the westward migration ethnic Beaker folk were clearly very influential and these migrants were soon credited with introducing a wide range of novelties to Ireland. These new people were seen as megalith builders who brought the wedge tomb to Ireland from northern France, where its supposed proto-types — Alleés Couvertes — were located (De Valera 1951, 180; De Valera and Ó Nualláin 1961, 115; Herity 1970, 13). This hypothesis was taken one step further by Michael Herity and George Eogan (1977, 117–122) who suggested that these Beaker immigrants were an Atlantic group who first landed in south-western Munster, bringing metallurgy and a new type of society with them to Ireland (see Section 2.9.7).

2.7 IRISH CULTURAL NATIONALISM
The insularity of Ireland — the most westerly island off the coast of Europe — meant that it was comparatively untouched by the major European political events of the 20th century such as the two world wars or the rise of totalitarian ideologies. Instead, Irish politics during the 20th century have been strongly concerned with the question of Ireland’s relationship to Britain, as well as with developments in Northern Ireland. Perhaps as a result of this, nationalism has continued to be of thematic importance in the work of Irish scholars.

It is certainly evident from the approaches taken to the Beaker phenomenon in Ireland, that archaeological interpretations are highly reflective of the contemporary social and political context (see Hodder 1991; Cooney 1996). With the foundation of the Irish Free State in 1922, many archaeologists were eager to express an Irish Identity that accentuated the newfound status of this political entity as a nation separate from, yet equal to its former colonial master (see Cooney 1996, 158). As observed by John Waddell (1991, 29–30), the Irish Sea was ignored, while the significance of the Atlantic seaways were emphasised, perhaps to accentuate links with Europe (see Cooney 1995, 271; Waddell 2005, 205). Macalister (1928, 52) argued that “for all that the two islands are so near together, Britain is essentially an island of the North Sea, Ireland of the Atlantic Ocean; and this difference is fundamental throughout the whole history of their mutual relations”.

From an early stage, Beaker material culture was utilised as a vehicle to serve the needs of cultural nationalism. For example, Walther Bremer, the then Keeper of Antiquities in the National Museum, was keen to demonstrate Ireland’s illustrious history as a sovereign nation by accentuating links between Ireland and Europe, while downplaying those with Britain. He argued that the Moytirra Beakers were most closely related to Breton Beakers and that “only two Beakers of the English type have been found in this country” (Bremer 1928, 27–28). After the discovery of considerable numbers of Beaker pots in the 1930s, the case for Irish exceptionalism was advanced by arguing that the manifestation of Beakers in Ireland was very distinct from Britain. A European origin was sought for Irish Beaker pottery and Europe was hailed as the point of departure for those putative people who had brought this pottery to Ireland’s shores (McAlister 1949, 87–88; Ó Ríordáin 1954, 452; Harbison 1973, 93–7; Harbison 1975, 113; Herity and Eogan 1977). Similarly, French origins were sought for wedge tombs (e.g. Herity and Eogan 1977, 122; De Valera and Ó Nualláin 1961).

Reacting to the hunt for European connections and origins in Irish archaeology, Estyn Evans (1968, 7) slammed this as a “kind of Sinn Fein movement in prehistoric studies” and
expressed his frustration at the unwillingness of Irish archaeologists to accept the reality of a British influence upon Ireland's past (see Evans 1981, 112). However, at the same time and in a very similar fashion, archaeologists based in the newly founded Northern Ireland who wished to affirm a unionist identity (see Cooney 1995, 271) were busy emphasising the ways in which their discoveries of Beaker pottery provided evidence for strong links with northern Britain. Rather than looking west, they sought eastern origins for Beaker phenomena. Hence, they looked almost exclusively to Britain to find parallels for Ulster Beakers (e.g. Davies 1940, 154) and argued that this pottery had been introduced from Britain to Ireland via a northern Irish point of entry (Chitty 1933, 26; Davies 1939, 261; 1940, 148; Herring 1938, 186).

2.8 **The Legacy of Lough Gur on Beaker Studies**

Ó Ríordáin undoubtedly made a massive contribution to Irish Beaker studies through the large number of Beaker discoveries that he made in the Lough Gur area as well as his influence on others who went on to find Beakers in this locale and beyond. However, his interpretation of the sites at Lough Gur and particularly his sequencing of the ceramics created a legacy that cast a long shadow over Irish Beaker studies. Most of Ó Ríordáin's work pre-dated the invention of radiocarbon dating, and so like all other Irish archaeologists of the time, he envisaged a very short chronology for the Neolithic (see Waddell 2005, 211, 227). Based on the (vertical) stratigraphic relationships of the various ceramics at Lough Gur, Ó Ríordáin considered a particular coarse flat-based form of pottery — “Lough Gur Class II” — to date to the end of the Neolithic (Ó Ríordáin 1954, 451–4, fig. 55). This resulted in the conclusion that Beakers represented the latest pottery present at Knockadoon (e.g. de Paor 1961, 659; Cremin Madden 1968, 15) and that the Class II ware was the product of the Neolithic indigenous population's reaction to flat based Beakers (e.g. Harbison 1973, 95).

Although Eamon Kelly had argued in 1978 that Class II could not be Neolithic and must be of Late Bronze Age date, it was not until much more recently that a wider appreciation developed that this was indeed Middle or Late Bronze Age pottery (Cleary 1993, 1995; Roche 2004; Grogan 2005b, 318). As a result, it has subsequently been recognised that many of the structures thought to be of Neolithic or Beaker date at Lough Gur (e.g. Simpson 1971, Gibson 1987) are in fact later Bronze Age constructions (Grogan 2005a, 52–62; Cooney 2007, 220; Cleary 2003). This also includes embanked stone circles such as that at Grange which were also previously thought to be Beaker-associated creations (see Chapter Five, see Roche 2004). The failure to realise that most of the Beaker pottery at
Lough Gur was discovered in residual or disturbed contexts and the associated interpretation of Class II and Beaker as contemporary ceramics had enduring consequences for subsequent interpretations of Beakers in Ireland.

Indeed such was the prevalence of Ó Ríordáin's Class II hypothesis, that when Beaker pottery was discovered in various admixtures of material of different dates at sites like Dalkey Island (Liversage 1968), Monknewtown (Sweetman 1976) and Newgrange (O’Kelly et al. 1983), which included much older Early Neolithic as well as much younger flat based pottery, it was not recognised that the Beaker sherds were in a disturbed context. Instead these layers were regarded as chronologically secure deposits that matched the ceramic sequence from Lough Gur in which Beaker pottery represented the latest stage in a short phase of activity. In retrospect, the Beaker activity at these sites formed only one aspect of a much longer sequence of occupation (see Section 3.2). However, this was not appreciated at the time and as a consequence, many aspects of these sites were incorrectly considered to be Beaker-associated constructions such as the embanked enclosure at Monknewtown (Sweetman 1976) (see Chapters Three, Five and Six for more information on the misinterpretation of these excavations).

The perpetuation of Ó Ríordáin's misreading of the ceramic sequence at Lough Gur seems to have been largely due to an over-emphasis upon the Lough Gur sequence in approaches to Irish ceramics. Indeed this tendency to display an overly strong reliance on the findings from just one or two landmark excavations such as Lough Gur or Newgrange seems to be one of the hallmarks, not just of Irish approaches to Beakers, but of Irish archaeology in general. As observed by Peter Woodman (1992, 295) in a review of Irish prehistory: “we rely too much on a small selection of sites and excavations whose information is limited by the standard of the time when they were excavated”. Woodman (ibid) also pointed out the reluctance of Irish archaeologists to re-evaluate older excavations that were a product of their time. This is certainly true of approaches to Beakers (see Chapter Three).

2.9 THE 1960S, 70S AND 80S: THE BEGINNING OF NEW BEGINNINGS.

The 1960s was an important decade in the development of Beaker studies in Ireland. The first in-depth examination of Irish Beaker pottery and its contexts was undertaken by Aideen Cremin Madden for an MA thesis in 1964, and published in 1968. This was shortly followed by an important overview and reappraisal of the Beaker finds from Northern Ireland by Arthur Apsimon (1969). Although only a small number of new Beaker sites were found in the course of the sixties, two major excavations were started. In 1962,
George Eogan and M.J O’Kelly both began their respective campaigns at Knowth and Newgrange at Brú na Bóinne, Co. Meath. The results of these major excavations as well as those conducted by Sweetman at Monknewtown revealed evidence for intense Beaker activity in the Boyne Valley that radically impacted upon the perception of Beakers in Ireland (O’Kelly et al. 1983; Eogan 1984; Eogan and Roche 1997; Sweetman 1971, 1976; 1985 and 1987).

Most of the Beaker-associated features uncovered at Brú na Bóinne were interpreted as the remains of Beaker occupations. Hitherto, the general perception of Beakers in Ireland was that these pots were mainly found in a funerary setting, particularly collective tombs (e.g. de Paor 1961, 659; Cremin Madden 1968, 12). Strangely, this view that Beakers in Ireland were mainly used for funerary purposes had continued even though supposed Beaker settlements containing large quantities of this pottery had already been discovered at Lough Gur and at Dalkey Island (see Sections 2.4 and 2.5). The original reluctance to accept the extent of the non-sepulchral evidence in Ireland was probably due to the pervasiveness of the contemporary European belief that Beakers were a funerary-ware. However, the findings from the Boyne complex combined with those from other concurrent excavations of Beaker habitations at Ballynagilly, Co. Tyrone, by Arthur Apsimon (1969, 1976), and at Tullywiggan, Co. Tyrone, by Helen Bamford (1971) ensured a change of narrative.

Henceforth Ireland was seen as a place where Beakers were mainly found in settlements (e.g. Case 1977, 77; Burgess 1979, 213; Mercer 1977). The discoveries from Brú na Bóinne, especially Newgrange, went on to dominate most accounts of Beakers in Ireland (e.g. Harbison 1988, 88). The interpretation of the features at Newgrange as the vestiges of Beaker-associated ‘domestic’ structures gained much traction (e.g. Cooney and Grogan 1999; 79–81; Roche and Eogan 2001; Grogan 2004a; 111–2; Carlin 2005a and b). Rather than being considered an exceptional site (see Section 3.2), the Beaker activity at Newgrange was widely perceived as the most typical example of its kind in Ireland. It became de rigueur to compare new discoveries of Beaker-associated features to those at Newgrange and to follow O’Kelly’s lead by interpreting these as the remains of settlements (e.g. O’Brien 2004, 475; Johnston et al. 2008).

### 2.9.1 The rejection of migratory models

The 1970s heralded a new era in European prehistoric studies when a backlash began against the view that cultural change could only be explained by the large-scale movement
of new peoples (Clarke 1976). The leading proponents of this view in relation to Beakers were Burgess and Shennan (1976, 310) who convincingly highlighted the absence of the evidence necessary to support the existence of a foreign Beaker culture spread by invaders, by pointing to the lack of any of the typically recurrent aspects of archaeological cultures such as a burial type, a house type or subsistence economy. Instead they proposed that Beaker pottery and its associated artefacts represented an assemblage of objects that was spread through exchange and interaction.

2.9.2 Drink and drugs - Taking the piss

One of the earliest and most enduring non-migrationary theories — the Cult Package model — attempted to explain the popularity of Beakers throughout Europe by proposing that Beakers were desirable because of their function and/or contents (e.g. Sherratt 1997, 376, 1991). Perhaps following on from much earlier interpretations of Beakers as drinking vessels (e.g. Abercromby 1912), Burgess and Shennan (1976, 311) proposed that Beakers were spread by inter tribal contact as part of a male beer-drinking cult similar to the North American peyote cult of the 19th century.

Back in Ireland, Brian Scott (1977) did not delay in adapting the cult package model. Arguing that evidence to support the assertion of a drinking rite was missing, he proposed instead that a European Beaker sect had been based on the use of plant-derived hallucinogens such as \( A. \text{muscaria} \) (a variety of mushroom) or \( \text{Cannabis sativa} \) that could have “provided visionary ecstasy in prehistory” (Scott 1977, 29–30). In a novel twist on Burgess and Shennan’s original hypothesis, Scott proposed that the Beaker pot had an important function across Europe as a hallucinogenic urinal. Unfazed by the lack of supporting evidence for this, he suggested that a mushroom-based infusion could be drunk and then through the medium of a Beaker pot could be “offered in solution in urine from persons who had previously ingested it”.

2.9.3 Excavations at Brú na Bóinne continued

In the early 1980s, Eogan’s excavations at Knowth continued to uncover Beaker features and new discoveries of this ceramic were made at Newgrange by David Sweetman. Sweetman (1985) excavated a large pit circle that he considered to have been a Beaker-associated construction. Within this monument, Beaker pottery was found in a spread which he interpreted as a habitation. Sweetman (1987) went on to find more Beakers at Newgrange during his partial excavation of a probable timber circle. Despite relating these features to Beaker settlement activity, he did seem to be aware that these represented
what was then a rare discovery of Beakers in a clearly ceremonial context in Ireland. Sweetman (1985, 216) stated that "the excavation of the pit circle at Newgrange adds a new dimension to our knowledge of the Late Neolithic/Beaker settlement in the Boyne Valley, ... it gives an insight into the technological skills and the rituals of the people who, up to relatively recently, have been associated in Irish archaeology only with the wedge-shaped gallery graves.". While Sweetman compared his findings to a number of well known Final Neolithic monuments in Britain such as Stonehenge and Durrington Walls, he consistently emphasised the uniqueness of the Newgrange discoveries (e.g. Sweetman 1987, 294).

Apart from the excavations at Brú na Bóinne, there were very few Beaker discoveries made in Ireland in the 1980s. However, this decade did see the widespread rejection of culture-historical approaches to understanding the spread of Beakers to Ireland. With a few notable exceptions, it became generally accepted that the arrival of Beakers in Ireland signalled a social rather than an ethnic change (Case 1977; Waddell 1978; 125; O’Kelly et al. 1983; and O’Kelly 1989; Sheridan 1983; Cooney and Grogan 1999, 78, Waddell 1998, 123, O’Brien 1999 and 2004). This new approach fitted well with the developing recognition of the strong evidence for continuity in the Irish prehistoric record (Cooney 1987; Grogan 1989).

### 2.9.4 Prestige – Greed is good

From the late 70s and early 80s onwards, a new orthodoxy emerged in Anglophone Beaker studies based around the idea that these pots were highly desirable objects that played an important role in the development of social ranking (Clarke 1976; Harrison 1980; Whittle 1981; Burgess 1980; Gibson 1982; Bradley 1984). The appearance of so-called "rich" or "high-status" Beaker burials was/is thought to indicate the emergence of a hierarchical society in which individual status was attained by the competitive exchange and display of exotic goods (e.g. Renfew 1974; Thorpe and Richards 1984; Clarke et al. 1985; Needham 2004; Heyd 2007; Sheridan 2008a). It was argued that Beaker objects were obtained to confer and symbolise power as part of a prestige goods economy that developed in the Final Neolithic (Clarke 1976). According to this model, competition for control of exchange systems and the achievement of status led to attempts by both the existing elite and their challengers to find ever more novel types of prestige goods to exchange (Thorpe and Richards 1984, 70; Brodie 1994, 12). Ultimately, this resulted in the entry of these elites into the European Beaker exchange network to avail of a wider range...
of exotic objects and new technologies in the form of potting and metallurgy (Needham 2004, 218).

2.9.5 Gordon Gekko’s greed, Beakers and the upward surge of mankind.

In reality, this new interpretative framework represents the projection into the past of modern western liberal capitalist economics with its associated emphasis on bounded competitive individuals who freely pursue their own self-interest (see Thomas 2004; Fontijn 2003, 19; Brück 2006b, 75 and 93). This resulted in Beaker objects being reductively interpreted as alienable economic resources as if they were simple commodities from our present-day world. It is unsurprising that these prestige-based interpretations rose to prominence in the Anglophone parts of the world during an era characterised by the “greed is good” political agenda of Thatcherite Reganomics. Echoes of Margaret Thatcher’s statement from 1987 that “there is no such thing as society, there are only individual men and women” can be seen rippling through most contemporary British archaeologists accounts of the Earliest Bronze Age.

2.9.6 The application of prestige models to Irish Beakers - Irish elites

By the 1990s most Irish archaeologists had adopted the by-now mainstream (in Britain at least) social interpretations of Beakers and early metals as prestigious or exotic objects that became popular with elites at the beginning of the Early Bronze Age due to an increase in social ranking and a greater emphasis upon the individual (e.g. Cooney and Grogan 1999, 83–93; Waddell 1998, 121; O’Kelly 1989, 71–72). Unfortunately, the actual evidence for emerging elites in Ireland was largely drawn from Ó Riordáin’s excavations at Lough Gur. The evidence from those investigations seemed to indicate a very high level of continuity in population and material culture between the end of the Neolithic and the advent of Beaker pottery, as well as indicators of increased social ranking (see Section 2.8).

The construction and inhabitation of what were thought to be Beaker-associated enclosed settlements at Lough Gur combined with the presence of larger quantities of Beaker pottery and personal ornaments within these compared to the nearby unenclosed occupations was thought to indicate the emergence of a new social hierarchy (Cooney and Grogan 1998, 471; 1999, 78; Grogan and Eogan 1987; 467–89). However, it was not
known at this time that these enclosures are actually of Late Bronze Age date or that most of the Beaker objects found at Lough Gur were either in a residual or disturbed context (see Grogan 2005a, 52–62). With hindsight, it can be seen that the presence of larger quantities of these within Late Bronze Age enclosures was merely a reflection of the added protection afforded to earlier deposits from modern-day plough-damage (see Section 3.2).

2.9.7 Beakers, metallurgy, wedge tombs and the 'Lunula lords

The arrival of Beakers in Ireland has long been seen as synonymous with the introduction of copper metallurgy (Cremin Madden 1968; Harbison 1973; Scott 1977a and b; Sheridan 1983; Case 1966; Apsimon 1969), but it was Humphrey Case (1966) who wrote the most influential paper on this topic entitled: 'Were the Beaker people the first metallurgists in Ireland?' in which he suggested that Beaker people introduced copper working to Britain and Ireland. This followed on from his previous analysis of early metallurgy in Ireland and Britain, in which it was argued that the earliest copper working was most likely to have started in the Cork/Kerry area (Coghlan and Case 1957, 99). Interestingly, it was Childe who recommended to Case while studying at the Institute of Archaeology in London that he should tackle the question of Beaker metallurgists. Case’s Childean hypothesis was to be echoed by many other scholars (Case 1966 and 1977; Cremin Madden 1968; Apsimon 1969; Herity and Eogan 1977).

One notable objector to this hypothesis was Peter Harbison (1973, 102; 1979) who saw no such connection between Beakers and early metallurgy because this ceramic was almost totally absent from the southwest of Ireland at this time. However, Beaker pottery has subsequently been found in a number of sites in that region (see Chapter Nine). Most notably during investigations at Ross Island copper mine, Co. Kerry led by William O’Brien (1995, 2004) in the early 1990s which confirmed the existence of Ireland’s long-suspected Beaker-associated copper industry. This mine seems to be the sole source of the low-arsenic metal used to produce early copper objects in Ireland (O’Brien 2004) and the Beaker ceramics were found at an ore-processing camp associated with the mine (see Chapter Three).

Another important advancement for Irish Beaker studies at this time was the radiocarbon dating project conducted by Anna Brindley and Jan Lanting (Brindley et al. 1987, Brindley and Lanting 1991) which confirmed that some human remains from wedge tombs were broadly contemporary with the deposition of Beaker pottery and that these monuments were almost certainly constructed by users of this ceramic. Prior to this, the only
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Published radiocarbon dates for wedge tombs were from Island, Co. Cork, and dated to the Middle Bronze Age (O’Kelly 1958).

Based on these two breakthroughs in knowledge, O’Brien (1999; 2004, 570–2) argued that the advent of copper metallurgy in the southwest of Ireland resulted in a Beaker-associated increase in social complexity, whereby powerful elites controlled the production and supply of copper to others. According to his argument, these so-called ‘lunula lords’ who used gold lunulae as badges of wealth and status lived within “fixed social territories” recognisable today by the presence in north Kerry of Beaker pottery, lunulae and copper production as well as the construction of henges and the absence of wedge tombs. Indeed O’Brien (2004, 572) went so far as to postulate a social division between these Beaker users and another group based in the southwest of Counties Kerry and Cork who continued Neolithic practices such as reciprocal exchange and the construction of megaliths in the form of wedge tombs.

Among other things, O’Brien’s hypothesis typifies the tendency in Irish archaeology towards the conflation of technological changes with social developments (see Cooney and Grogan 1999, 1), whereby the introduction of copper metallurgy by Beaker users is considered to cause major changes in social practices. These technologically-deterministic views have recently been critiqued by Carlin and Brück (forthcoming) who advocate that the adoption of copper metallurgy merely represents one of many contemporary changes in material culture, none of which result in major social transformations (see Chapter Ten).

2.10 Post-colonial approaches: Beaker Ireland different to Britain

To this day, the manifestation of Beaker pottery in Ireland is heralded as being fundamentally different to that in Britain. This component of the Irish archaeological record is often presented as being rich in settlement evidence yet lacking in a funerary component — most notably the classic Beaker burial — and to have had a prolific copper industry mainly producing so-called “heavy” objects including axes, halberds, and daggers that largely occur in hoards (Case 1995a, 19–23; O’Brien 2004). This situation has often been contrasted with a characterisation of Britain as a place where the earliest copper items predominantly consisted of ‘light objects’ such as blades, awls, or ornaments and where Beakers were predominantly used in funerary practice, more specifically in single graves where they occur with the aforementioned metal artefacts (Burgess 1979; Thomas 1999; Needham 1996, 126–8). Thus, the Irish Beaker tradition is argued to be more
similar to that of the Atlantic region, while the British Beaker complex is considered to fall within the north western European tradition (see O'Brien 2004, 565; Burgess 1979; Case 1995a, 19; Thomas 1991; Needham 1996, 128; Cooney and Grogan 1999, 87; Case 2004b).

There has traditionally been a tendency in Britain to adopt a unilateral Anglocentric, and particularly a Wessex-orientated approach to the prehistory of England, Ireland, Scotland and Wales (e.g. Parker Pearson 1993; Pollard 1997). The characterisations — outlined above — reflect the long-established denial of the extent of regional diversity during the Neolithic and Early Bronze of Ireland and Britain (see Brophy and Barclay 2009; Barclay 2001; Cooney 1995, 272; 1997a, 29; 2000b; 2003). Conversely, the enduring accentuation of the exceptional nature of the Irish evidence seems to represent a direct reaction to such Anglocentric treatments, but also reflects the continuing influence of Irish cultural nationalism (see Section 2.7).

While these traditional characterisations of the differences between Ireland and Britain may be partially true, the findings contained within this thesis demonstrate that these dissimilarities have been overstated. Such simplistic comparisons reduce the manifestation of the Beaker phenomenon in Britain to a homogenised level that ignores contemporary regional differences including pottery styles (see Case 2004b) and burial practices (see Gibson 2004, 183; Case 2004a, 195). In effect, these represent caricatures which fail to be suitably cognisant of the complexity or range of evidence for the use of Beaker materials in both Ireland and Britain. These views have certainly impaired our understanding of the nature of the Beaker phenomenon by resulting in the exaggeration of the level of differences between both countries and a denial of the many similarities that exist, particularly in terms of the treatment of Beaker objects in Ireland and western parts of Britain such as Cornwall and Scotland (see Chapters Five and Ten).

2.10.1 The influence of British models of interpretation

There is some irony in the fact that despite the strong assertion by Irish archaeologists of the distinctively regional character of Beakers in Ireland, no original models of explanation or interpretation based on the Irish evidence for this period have ever been proposed. Instead, models of understanding from other countries, especially Britain, have been abstracted from their context and projected onto the Irish archaeological record. As observed by Woodman (1993, 640): “In spite of the effort and interests of individuals, traditionally we have been users of the theory of others rather than the innovators of our own.” This is particularly well-illustrated by the Irish adoption of the prestige goods
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theory which continues to dominate British interpretations of the Beaker phenomenon (e.g. Cooney and Grogan 1999, 78; O’Brien 2004; see above).

This theory was originally based almost exclusively on funerary evidence and rested heavily upon a simplistic reading of the so-called high status Beaker burials, some of which occur in Britain (see Brodie 1997, 300). Given the well-known absence of stereotypical “rich” Beaker burials as well as the common discovery of Beaker pottery in what were deemed to be settlements in Ireland (Cooney and Grogan 1999, 90–93), it is very curious that the idea of a Beaker-associated institutionalised elite was ever adopted here (ibid, 90–93; Waddell 1998, 132). This is an inherently problematic approach which ignores the much vaunted differences between the manifestations of the Beaker tradition in Ireland and Britain.

Perhaps, the eagerness of a new generation of Irish archaeologists in the late 1980s and early 1990s to transcend traditional cultural-historical approaches to archaeology by bringing it up-to-date with modern social perspectives resulted in the adoption of such unsuitable interpretative models. These scholars advanced Irish archaeology beyond its default position of inquiring “who, what, where and when” and began a new era of scholarship that included the question ‘why?’. Irish archaeologists were probably not yet ready to use exclusively Irish data to argue against the predominant Anglophone interpretative paradigms or to construct completely new readings of such a European phenomenon.

2.11 RECENT DEVELOPMENTS AND THE CURRENT STATE OF KNOWLEDGE

In more recent times, a large array of new data relating to Beakers in Ireland has been produced through development-led excavations, but the full significance of these remains unknown. Instead, understandings of the Irish Beaker phenomenon remain reliant on poorly understood data from excavations dating from the 1930s to the 1970s, all of which pre-date recent breakthroughs in our knowledge of Irish prehistory.

2.11.1 The recognition of a distinct Irish Late Neolithic

Although Grooved Ware pottery dating from the Late Neolithic had long been known in Ireland (e.g. Ó Riordáin 1951; Liversage 1968), it was only in the 1990s that it started to be widely identified (Cleary 1983; Roche 1995 and 1999; Sheridan 1995; Brindley 1999a) and that an appreciation of the existence of an Irish Grooved Ware-Late Neolithic
developed (Eogan and Roche 1997, 256; Cooney and Grogan 1999, 75–94; Cooney 2000a; Roche and Eogan 2001; Sheridan 2004a, Bradley 2007; Carlin and Brück forthcoming; Carlin et al. forthcoming; Smyth 2010).

Prior to this, the arrival of Beakers were thought to immediately follow on from the zenith of the passage tomb complex (then thought to be Late Neolithic but now considered to represent the Middle Neolithic). For example, O’Kelly (1989) argued for a considerable degree of continuity between passage tombs and Early Bronze Age monuments such as wedge tombs, and he employs the phrase ‘Late Neolithic/Beaker’ to describe this putative period of transition. The persistence of the perception that the time gap between the Middle Neolithic and the arrival of Beakers was very short partially reflects the legacy of previous scholars who operated in a pre-radiocarbon age and whose chronological schemes seem to have strongly influenced subsequent scholarship (see Section 2.8).

The long delay in recognising the existence of a distinct pre-Beaker but post-passage tomb Late Neolithic associated with the use of Grooved Ware certainly had a negative impact upon Irish understandings of the Beaker phenomenon. Many dramatic changes in social practices and material culture such as the demise of the passage tomb complex (e.g. Herity and Eogan 1977; Eogan 1991; O’Kelly 1989), the construction of open-air enclosures and a shift in emphasis away from burial activity (e.g. Cooney and Grogan 1999, 78 and 92) that actually occurred in association with the adoption of Grooved Ware (see Roche and Eogan 2001, 139) at the beginning of the third millennium BC were attributed to the arrival of Beakers.

2.11.2 Attributing all Bronze Age material culture to the Beakers

Historically in Ireland, there has not only been a strong inclination to attribute a large range of Late Neolithic activities to the users of Beaker pottery, but also to see most earlier and later Bronze Age developments — in short almost any major development that post-dated the building of passage tombs and pre-dated iron metallurgy — as Beaker-associated innovations (Woodman 1992, 308). To a large degree, this relates to the only recently ceased practice of treating Later Bronze Age ceramics as Late Neolithic pottery

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4 This is exemplified by the ongoing tendency towards verbatim readings of Van Wijngaarden’s (1975, 1986) reports on the faunal assemblage from so-called Beaker layers at Newgrange which represent an admixture of materials formed over at least one millennium (see Section 3.2), in particular the assertion that the domestic horse found at Newgrange was Beaker associated (e.g. McCormick 2007).
The history of Beaker research in Ireland (see Section 2.8). As a result, stone circles such as the Great Stone Circle at Newgrange, ceremonial enclosures such as Monknewtown or Grange, as well as copper mines and boulder burials have all been lumped in with wedge tombs as part of a Final Neolithic Beaker floruit (e.g. Herity and Eogan 1977, 132; de Paor 1961, 655; Waddell 1998, 112–113; Cooney and Grogan 1999, 86–9). These misunderstandings are reflective of the failure to appropriately comprehend the complex character of the Irish Bronze Age. Studies in this area have focused almost exclusively on Early Bronze Age burial practices and ceramics (e.g. Waddell 1990; Mount 1997a; Brindley 2007) as well as metalwork deposition (Becker 2006; Eogan 1983; O’Flaherty 1993 and 1995), though thankfully, this is beginning to change (e.g. K. Cleary 2007, Grogan 2005a and b).

2.11.3 The excavation boom – lots of new discoveries but very little knowledge

Irish archaeology underwent fundamental changes from the early 1990s onwards when pre-development archaeology began to grow in tandem with the economy. Between 1980 and 1999, a dramatic 20-fold increase occurred in the number of excavations conducted per annum (see Doyle et al. 2002, 13; Cooney et al. 2006, 15). In 1997, our understanding of the character of Beaker activity in Ireland was suddenly altered when a surge in commercial archaeological activity resulted in the discovery of seven previously unknown Beaker sites at Templerainey, Kilbride, and Rathdown, all in Co. Wicklow (B. Ó Ríordáin 1997; Breen 1997, J. Eogan and R. O’Brien 2005) Ballybriest, Co. Derry (Hurl 2001); Corbally, Co. Kildare (Purcell 2002); Coolnatullagh, Co. Clare (J. Eogan 2002), and Lisheen, Co. Tipperary (Roche 2005, 325). This was more than the total number of Beaker sites found during the entire 1980s (see Chart 2.1).

As Irish development-led archaeology grew exponentially, so too did the number of Beaker discoveries and a peak was reached in 2003 with the excavation of 18 new Beaker sites (see Chart 2.1). All of these were subsurface discoveries found on green-field sites with no above-ground indication of the archaeological features that lay below. Thus, these new findings indicated a much greater distribution and range of evidence for Beaker activities than hitherto suspected (see Chapter Nine). The main Beaker component of the archaeological record was now formed by non-monumental sites, most of which appeared to be — and (perhaps reflecting the legacy of the Newgrange narrative) were almost exclusively interpreted as — the remnants of settlements (see Chapter Four).
However, it was not all good news. One obvious downside to all this was what John Waddell (2007) described as “the fetishization of excavation”. There was a complete shift in the focus of Irish archaeology away from museum or university-led research (Cooney et al 2006). As part of the scramble to ensure that archaeological remains were recorded in advance of construction, Irish archaeology became predominantly concerned with rescue excavation. Like a voice from the grave, the former director — Adolf Mahr — of the National Museum’s declaration to the Prehistoric Society (Mahr 1937, 262) that “the basis for future archaeological research must be saved before it is destroyed” seemed to form a mantra for a later generation of Irish archaeologists. Emphasis was almost wholly placed upon the collection of data through excavation with the aspiration that this information could then be analysed or interpreted at a later stage, after the archaeology had been saved (sic). Of course, this obsession with data was not a new development and, to a large extent, Irish archaeologists were simply doing what had always been done in Ireland (see Cooney 1995, 268; Cooney and Grogan 1999, 1; Woodman 1992a, 295; 1992b, 38).

Such a mountain of new archaeological data – and not just concerning Beaker-related activities – was being constantly generated through pre-development excavations, that it became impossible to to stay abreast of new findings, let alone conduct any synthesis of these (Wilkins 2010; Anon 2007 – Heritage Council). Furthermore, most of this data was contained solely within the so-called grey literature formed by unpublished stratigraphic reports, leaving most of the archaeological community oblivious to these results and making it extremely difficult to create any research benefit from this material (Cooney et al. 2006; Anon 2006a, 12; Anon 2006b and 2007; Bradley 2006). A large amount of new archaeological information concerning Beaker-related activities in Ireland with great research potential was generated between 1997 and 2007 but this remained unsynthesised and its implications for pre-existing understandings have been unexplored, with the exception of the work of the author (Carlin 2005a; 2005b; 2011; Carlin and Brück forthcoming).

2.11.4 A lot done, a lot more to do

Prior to the tumult of new Beaker discoveries in the last decade, large quantities of Beaker artefacts had already been uncovered as a consequence of antiquarian investigations and pre-Celtic Tiger archaeology. However, no detailed synthesis of the results from older excavations has ever been undertaken and the various Beaker discoveries have only been
studied in a very fragmented and non-integrated manner. While some aspects of the Beaker phenomenon in Ireland have featured in various syntheses of Irish prehistory (e.g. Harbison 1988; O’Kelly 1989; Waddell 1998; Cooney and Grogan 1999; O’Kelly 1989) — all of which are now outdated due to the large number of recent discoveries — each of these overviews treats Beaker pottery in complete isolation from all the other aspects of the Beaker assemblage: metal objects like copper daggers as well as golden ornaments are generally discussed together in a separate section on metallurgy with little or no reference being made to Beakers, while wedge tombs tend to feature in sections alongside other earlier Neolithic megalithic tombs.

Indeed, very little attention has been paid specifically to Beakers in Ireland in recent times with the exception of some typological studies of Irish Beaker objects (e.g. Brindley 2004). However, these have been based almost solely on (now) published sites, which represent a tiny proportion of the existing body of data. Many of the aceramic Beaker objects such as metal daggers or bracers (e.g. Harbison 1969b and 1976) have been the subject of detailed typo-chronological studies that consider the various types of Beaker artefacts in isolation from each other and from the contexts in which they have been found. While these surveys resulted in the creation of extensive catalogues, they rarely examined the depositional treatment of these objects. This predisposition towards treating objects and data by type or period divorced from their wider context has long been characteristic of archaeology in Ireland (see Cooney and Grogan 1999, 229; see Woodman 1992a, 295; 1992b, 38 for critique of Irish obsession with sorting data rather than understanding it). However, in recent times, a more contextual approach has been applied to many aspects of Irish prehistory with much attention being paid to depositional patterning (e.g. Cooney and Grogan 1999; Cooney 2000a; Bradley 2006, Becker 2006). Unfortunately, this has not included the Beaker phenomenon.

This criticism of the absence of an integrative approach in Irish Beaker studies is not intended to diminish the immense contribution of the existing scholarship, in particular the work of Humphrey Case (1993, 1995a, 2001 and 2004) who conducted a number of highly important short synopses of the Beaker pottery from older excavations in Ireland. While the most notable aspect of which must surely be his straightforward typological

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5 The Beaker-associated discoveries from the Knowth passage tomb cemetery represent an interesting example of the non-integrative treatment of Beaker objects in Ireland. The locations of the various Beaker deposits have never been discussed in relation to each other or to their site location (Eogan 1984; Roche & Eogan 1997). Puzzlingly, on the few occasions that the find-spots of Beaker pottery has been indicated on site plans, the location of the pre-existing features such as passage tombs have been removed from these illustrations.
schemes for the characterisation of Irish Beaker pots, some of his papers also included rare considerations of the contexts and associations of these objects (Case 1977; 1995a; 2001). As well as Case, our understanding of Irish Beaker ceramics has benefited greatly from the work of Anna Brindley whose succinct and up-to-date overview of Beaker ceramics from older excavations appeared in O’Brien’s (2004) publication of the investigations at the Beaker-associated copper mine at Ross Island. Brindley’s exclusion of the large number of recently discovered vessels left a lacuna that has been partially filled by Eoin Grogan and Helen Roche’s (2010) important consideration of Irish prehistoric pottery in light of newer excavations.

While our current understanding of Beakers in Ireland have certainly suffered from the approaches that have been taken to the study of Irish prehistory (see Cooney 1996, 159), the nature of the existing research has also been shaped by the character of the Irish archaeological record. The highly fragmented nature of Beaker scholarship in Ireland may be partially understood as a direct reflection of the disassociated manner in which the various objects have been discovered on this island, whereby Beaker artefacts are rarely found with each other or even in the same types of contexts (see Chapters Seven and Nine). Many of the typical Beaker objects such as V-perforated buttons, tanged copper daggers and wrist-guards were discovered long before Beaker pottery was thought to be present (in any significant quantity) on this island. The perceived lack of this ceramic seems to have created a situation in which it was most appropriate to treat each of these artefacts separately. In the absence of the pottery to provide a unifying link between these discoveries, there was little impetus to examine these in relation to each other or as part of a wider phenomenon. Unfortunately, the legacy of this fragmentary approach seems to have persisted long after Beakers began to be recognised in large numbers and no consideration has ever been given to the possibility that the various objects found with Beakers in other countries might have formed an assemblage that was deposited in different ways as part of an interrelated depositional system.

Despite all of the recent developments in our understanding of Irish prehistory brought about by recent excavations, radiocarbon dating as well as reconsiderations of older investigations, no major reconsideration of the manifestation of Beakers in Ireland has been undertaken. Nor has there ever been any attempt to conduct an overarching study of the Irish Beaker complex that interlink the material culture from settlement, funerary, ceremonial and natural contexts to understand the social practices associated with the use of Beaker artefacts in Ireland. Furthermore, the only non-invasionist interpretative model to have been applied to the Irish material has been prestige-based. Despite the complete lack of supporting evidence for these in Ireland and the recent critiques of such
interpretations in Britain and Europe (e.g. Fokkens et al. 2008; Fontijn 2002, Vander Linden 2006b; Brück 2004b and 2006a and b), no new accounts of the role of Beaker objects in Ireland have been proposed (though see Carlin forthcoming; Carlin and Brück forthcoming).

Clearly there are many problems with our understandings of Beakers on this island that need to be updated or resolved. Beaker-associated activities in Ireland have never been subjected to an in-depth or over-arching study. Instead, most of what has been written about Beakers in Ireland has been based on poorly understood results from a small number of older excavations. A range of factors including the legacy of pre-radiocarbon archaeology, the Lough Gur Class II debacle, and the traditional penchant for migrationary explanations for all cultural changes combined with the failure to recognise a Grooved Ware associated Late Neolithic have all contributed towards a particularly impaired knowledge of the Irish version of the Beaker phenomenon. Furthermore, there has been a tendency to look at Beaker-associated activities and objects in Ireland in isolation rather than as part of a longer-term historical trajectory. This has resulted in the exaggeration of the significance and role of Beakers in Ireland (see Carlin and Brück forthcoming; Eogan and Roche 1997, 256). A comprehensive integrative study of the Irish Beaker complex that relates Beaker artefacts to contemporary social practices and considers their historical context is badly needed. This thesis aims to fill that gap.
BEAKER-ASSOCIATED
DEPOSITION IN SETTLEMENT
CONTEXTS - PART ONE

Revising Understandings of Well-Known
Beaker Settlements and Structures
CHAPTER THREE – BEAKER-ASSOCIATED DEPOSITION IN SETTLEMENT CONTEXTS - PART ONE: REVISING UNDERSTANDINGS OF WELL-KNOWN BEAKER SETTLEMENTS AND STRUCTURES

3.1 INTRODUCTION

In Ireland, Beaker pottery is thought to predominantly occur in what have been considered as settlement or ‘domestic’ contexts (Case 1995a, 19; Needham 1996, 128; Brindley 2007, 250). This contrasts with the rest of Europe, where this ceramic is mainly known from funerary contexts and only infrequently from settlements (Vander Linden 2006a). The view that Ireland is rich in Beaker-associated settlement evidence but lacking a funerary component (e.g. Clarke 1976, 472–3; Burgess 1979, 213) makes a number of overly simplistic assumptions about the deposition of Beakers and fails to appropriately consider the true complexity of the Irish evidence. In particular, it assumes the existence of a false dichotomy between settlement and ceremonial, as well as ritual and ‘domestic’ activities (see Brück 1999a, Bradley 2005a).

The best known Beaker-associated activity in Ireland has been found in what has usually been interpreted as a settlement context outside the passage tombs at Newgrange (O’Kelly et al. 1983) and Knowth, Co. Meath (Eogan 1984; Eogan and Roche 1997). These and other putative Beaker habitations from a few other landmark excavations have dominated discussions of the Irish Beaker phenomenon (see Chapter Two). However, this thesis shows that the evidence for Beaker-associated settlements at each of these locations is not as clear-cut as it originally seemed.

Our understanding of the date range of various prehistoric artefact and site types have been advanced through recent developments in approaches to archaeological excavation, recording and analysis that post-date most of these excavations (see Chapter One). For example, with the notable exception of the later investigations at Knowth (Eogan and Roche 1994, Roche 1995), there was little appreciation of the existence of an Irish Grooved Ware-Late Neolithic, when most of these investigations were being conducted (see Chapter Two). Consequentially, our understanding of the third millennium BC has changed radically since many of these excavations were published, yet interpretations of the extent and character of Beaker-associated activity have not been revised to reflect this.
Before I outline the results of my study of the deposition of Beaker materials in settlement settings, it is first necessary to update our understanding of the context of discovery of the Beaker artefacts from the aforementioned excavations. This is achieved by distinguishing between those features which genuinely date to the Beaker period and those that do not. Their relationship to Beaker-associated settlement activity is also considered.

There are a number of structures in Ireland which are claimed to represent Beaker houses, though in many cases, the actual evidence supporting these interpretations is quite problematic. In this chapter, these putative dwellings are reviewed in detail and the strength of the evidence for Beaker-associated houses in Ireland is assessed. This chapter also examines the character of the deposition of Beaker-associated artefacts in structural contexts, including postholes, stakeholes and slot trenches. This includes an appraisal of the essential qualities of each of these features such as their quantity, shape, size, and the relationship of these to other Beaker-associated features occurring on the same sites. The range, frequency and manner of deposition of Beaker materials in each of these are examined. Pits and spreads represent the main contexts in which Beakers occur in Ireland, therefore these are examined separately in a greater level of detail in Chapter Four.

The artefactual content of the Beaker-associated deposits in each type of structural context are assessed in terms of their form, quantity and condition. The deposition of pottery in these is studied in more detail including an assessment of the total number of Beaker pots and sherds in each context. Such investigations of these deposits assists in understanding the processes and activities associated with their creation and in elucidating what these can inform us about past settlement practices.

**3.2 SETTLING THE MATTER: REVISING UNDERSTANDINGS OF WELL-KNOWN BEAKER ‘SETTLEMENTS’ IN IRELAND**

The putative Beaker settlements found during investigations of the concentration of prehistoric sites at Knockadoon, Lough Gur, Co. Limerick (Ó Ríordáin 1954, Grogan and Eogan 1987) — conducted between 1936 and 1954 — have featured very strongly in discussions of the Beaker phenomenon in Ireland (see Chapter Two). Yet, the best-known Beaker-associated settlement activity in Ireland was discovered at the Brú na Bóinne monument complex in Co. Meath during excavations that were predominantly conducted in the 1970s (see Chapter Two). This activity is represented by features containing Beaker pottery that are located immediately outside the passage tombs at Newgrange (O’Kelly *et al.* 1983; Sweetman 1985, 1987) and Knowth (Eogan 1984; Eogan and Roche 1997; Roche
Beaker-associated deposition in settlement contexts - part one

and Eogan 2001), but inside an embanked enclosure at Monknewtown (Sweetman 1971, 1976). The Beaker-associated aspects of these sites and their relationship to settlement activity are now reconsidered.

3.2.1 Lough Gur

At Lough Gur, Seán P. Ó Riordáin discovered Beaker pottery from as many as fourteen different sites, some of which were thought to represent Beaker settlements. These include Sites C and D (Ó Riordáin 1954), and the enclosed occupations on the Knockadoon peninsula such as Circles J, K, L and Site 10 (Grogan and Eogan 1987). As detailed in Chapter Two, a coarse flat-based form of pottery discovered during excavations at Knockadoon — termed “Lough Gur Class II” — was considered by Ó Riordáin (1954, 451-4, fig. 55) to represent an indigenous response to Beaker pottery that was used alongside the European-styled ceramic at the end of the Neolithic, both of which were considered to represent the latest pottery present at Knockadoon (e.g. de Paor 1961, 659; Cremin Madden 1968, 15; Harbison 1973, 95). Over time, it has gradually been recognised that ‘Lough Gur Class II’ is a form of Middle or Late Bronze Age pottery (Kelly 1978; Cleary 1993, 1995; Roche 2004; Grogan 2005b, 318) and that many of the features thought to be of Neolithic or Beaker date at Lough Gur (e.g. Simpson 1971, Gibson 1987) actually represent Later Bronze Age activity (Grogan 2005a, 52-62; Cooney 2007, 220; Cleary 2003). A minor aspect of this assemblage has also been identified as Grooved Ware (Roche 1995; Grogan 2005a, 88).

At Site C, a small assemblage of Beaker pottery (Ó Riordáin 1954, 340) was found in a deposit along with two barbed and tanged arrowheads, as well as Early and Middle Neolithic ceramics, Food Vessels and Class II pottery (ibid, 321-341; Grogan and Eogan 1987, 336-462; Grogan 2005a, 50-53). This layer was thought to have formed during a series of continuous occupations dating from the Early Neolithic to the Beaker period (Ó Riordáin 1954, 342), the presence of the Late Bronze Age — Class II — pottery at the lowest levels of this deposit (ibid, 343) indicate that this represents chronologically mixed strata and very few conclusions can reasonably be drawn, other than that the Beakers are in a residual position. Three circular post-built structures were identified from a scatter of postholes, pits, hearths and other features found during the excavation (Ó Riordáin 1954). Two of the buildings (Houses I and III) were considered by Gibson (1987) to represent Beaker dwellings, but these have generally been ascribed a Neolithic date (Grogan 1989, 1996, 2002, 2005; Cooney 2007, 222; Smyth 2007). However, there is absolutely no evidence available from the excavation to confirm any of these hypotheses. Due to the thin
soil cover, the stratigraphic relationships between the deposit and the features discovered on this site are totally unclear (Kelly 1978).

At Site D, 2000 Beaker sherds were found mainly within a deposit of habitation debris containing an admixture of different pot types including Early Neolithic and Later Bronze Age ‘Class II’ ceramics, as well as a Lough Ravel copper axe and a small undecorated gold disc (Ó Riordáin 1954, 410–11; Eogan 1994, 19). This deposit which was considered as Beaker in date was sealed under a terrace wall, which Ó Riordáin (1954, 390) also dated to the Beaker period. This wall seems to represent a later Bronze Age construction and is readily paralleled by walls of that date which were excavated by Rose Cleary (2003, 141) at neighbouring Knockadoon. The presence of Beaker ceramics along with chronologically earlier and later pottery within the underlying deposit suggests that the Beaker materials are in a disturbed context. As such, it is not possible to ascertain the nature of the Beaker-associated activity in this location. Certainly, the accepted view that the copper axe and gold disc were deposited with habitation debris (e.g. Case 1993, 241) may need to be reconsidered. It has also been argued that structures I and II at Site D are Beaker houses (Simpson 1971; Gibson 1987, 7); however, there is little evidence to support the attribution of a Beaker date. These buildings have traditionally been regarded as earlier Neolithic constructions (Ó Riordáin 1954, 390); Grogan and Eogan 1987, 481; Grogan 2002, 2005; Smyth 2007) because of Ó Riordáin’s (1954, 390) observation that the deposit immediately overlying these structures were almost exclusively associated with Early and Middle Neolithic pottery.

At Site 10, 570 sherds from 29 Beakers, as well as an hollow-based and a barbed and tanged arrowhead, were discovered within an extensive ‘habitation layer’ containing Early Neolithic pottery, Vases of the Food Vessel tradition and Cordoned Urns (Grogan and Eogan 1987, 453–4; Grogan 2005a, 51). An enclosure wall overlay this chronologically mixed deposit, but based on morphological comparisons as well as the presence of Class II pottery, it was probably built during the later Bronze Age (Cleary 2003, 147). It is difficult to ascertain what artefacts on this site are residual and so very few conclusions can be drawn about the character of Beaker deposition there.

Excavation of the enclosed settlement site at Circle L resulted in the discovery of two distinct stratigraphic phases of activity and the recovery of 1110 Beaker sherds from 38 Beaker vessels, as well as Early Neolithic, Middle Neolithic and Class II (Later Bronze Age pottery). Unfortunately the contextual details for some of these artefacts are vague due to the poor preservation of the excavation archive (Grogan and Eogan 1987, 391). Two distinct stratigraphic phases were identified and considered to represent distinct periods
of Neolithic and Beaker activity (see below). The stratigraphically later activity comprised a double-kerbed wall enclosure with structural remains at its centre (see Fig. 3.1; Grogan and Eogan 1987, 418–20). This central building apparently displayed two phases of construction. The first consisted of a layer of habitation soil that was defined on one side by a line of postholes. The second construction stage comprised a stone-built oval structure that overlay this layer.

The later building is described as producing a predominantly Beaker assemblage (Grogan and Eogan 1987, 482), though smaller quantities of Earlier Neolithic and Later Bronze Age (Class II) pottery were also found with the Beakers. Unfortunately, the exact context of these finds remains unstated, though it seems that it may consist of an artefact-rich deposit found overlying or within the house (Grogan and Eogan 1987, 429). In this regard, Grogan and Eogan (1987, 437) clearly states that “it was impossible to establish any precise sequence for the pottery because of the disturbance caused by the prolonged and intensive occupation on the site”. Nevertheless, the stone-built oval structure was regarded as a Beaker house for a number of reasons (Grogan 1989, 79; Grogan and Eogan 1987, 413–5). Of all the pottery associated with this building, Beaker pottery was considered to represent the youngest type; there was also more of it than any other and it occurred at a higher level in the deposits associated with the house (Grogan and Eogan 1987, 437, 482).

It is difficult to maintain this interpretation now that we know that the pottery from the structure comprised an admixture from chronologically disparate periods rather than short-lived continuous activity. The apparent association of Late Bronze Age pottery with the house suggests that it was built at that time. Rose Cleary (2003, 146) has highlighted the very strong similarities between this oval structure and the stone-built oval example (House I) from Site D (Ó Riordáin 1954, pl. XLII) to which Ó Riordáin (1954, 146) ascribed a Middle Bronze Age date due to its association with clay and stone moulds. In light of this similarity Cleary (2003, 146) suggests that the Later house and enclosing wall are Later Bronze Age constructions that disturbed a previously unenclosed habitation site dating to the Neolithic and Beaker periods.

The earliest phase of activity at Circle L was thought to comprise a large number of postholes, hearths and pits that were interpreted as defining at least three circular structures (Grogan and Eogan 1987, 437). These features were overlain by an occupational layer that the wall of the enclosure had been constructed over (Grogan and Eogan 1987, 413). Ceramic finds from this deposit and the features associated with it included Early Neolithic, Middle Neolithic, Beaker and Later Bronze Age pottery, then known as Lough
Gur Class II (Grogan and Eogan 1987, 437). Although the exact contextual relationships are unknown, the structural remains were deemed to be at the same horizon as the Earlier Neolithic material and have been widely regarded as Neolithic houses (Smyth 2007; Cooney 2007, 222; Grogan 2005a, 50; 2002, 521). The deposit was considered to be contemporary with the layer representing the first phase of the central structure, mentioned above (Grogan and Eogan 1987, 415).

The Beaker pottery was interpreted as intrusive because it was thought to post-date the other ceramics (Grogan and Eogan 1987, 437). An assumption seems to have been made that if the stratigraphically later phase of activity on the site was Beaker-associated, then logically, these earlier features must represent pre-Beaker e.g. Neolithic settlement. However, the presence of pottery dating from various different periods between 4000 and 1000 BC suggests that the older artefacts are unlikely to be in their original context. Indeed, it may be speculated that the earlier Neolithic and Beaker materials are in a residual context because of Later Bronze Age activity. Many different sherds from the same Beaker vessels were found in each of the different layers on this site (see Grogan and Eogan 1987, 407–8, 415, 423, 429). This strongly suggests that these have been disturbed from their original context by later activity. In conclusion then, apart from the discovery of sherds of Beaker pottery in chronologically mixed deposits, there is no credible or discernible evidence for Beaker settlement activity on this site.

Outside the enclosure at Circle K, an earlier Neolithic structure (House 1) was found to be sealed by a layer of habitation debris containing most of the Beaker pottery — 394 sherds — from that site (see Grogan and Eogan 1987, 336–462). This deposit was disturbed by the construction of the enclosure, which was almost certainly occurred in the later Bronze Age rather than the Beaker period as indicated by the exclusive presence of Class II pottery within the infill of the enclosing wall (see Cleary 2003, 146). The Beaker deposit at Circle K may represent one of the few discoveries of Beaker pottery in a chronologically secure context; however, there are few details available to clarify its relationship to settlement activity.

Overall, most of the Beaker objects found at Lough Gur were either in a residual or disturbed position and very few conclusions can be reached about their original context. However, these artefacts predominantly occurred in quite large quantities within above-ground deposits, thereby suggesting that they had originally been deposited in midden-like surface-accumulations that were subsequently disturbed by later Bronze Age activity. Ironically, the construction of the Later Bronze Age buildings and enclosures that disturbed so many Beaker artefacts was also responsible for their survival in these
locations. These upstanding remains fortuitously provided protection from the threats posed by the natural elements and modern-day agricultural activities such as plough-damage.

3.2.2 Newgrange

Excavation of 40% of the periphery of the principal passage tomb at Newgrange revealed Beaker-associated activity which it has been argued includes evidence for metalworking, a number of hearths, spreads of occupation debris and up to eighteen possible structures (see Fig. 3.2; O’Kelly et al. 1983; Cooney and Grogan 1999, 80). However, a range of different factors relating to the excavation at Newgrange impede our ability to discern the Beaker-associated element on this multi-period site. Notably, the absence of detailed contextual information for most of the artefacts found outside the tomb makes it difficult to argue for associations between artefacts and features. The fabric-driven methods of classification originally employed in the analysis of the ceramics at Newgrange (Cleary 1980), which treated the pottery as a single contemporaneous assemblage also hinders the identification of where each pottery type was found (Brindley 1999a, 33). While Cleary (1983, 100) identified Grooved Ware from the excavation, this was not largely differentiated from Beaker and some of the pottery that was considered as Beaker, including those described as ‘undecorated Beaker-associated bowls’ and ‘rusticated Beaker ware’ (Cleary 1980: Groups 20, 21b, 25a, 27–9) actually represent Grooved Ware (Roche 1995).

The excavations at Newgrange revealed a deposit described as the ‘Beaker layers’ which was located around the perimeter of the passage tomb mound, but seems to have primarily occurred in five main concentrations focused upon the area in front of the entrance to the tomb (see Fig. 3.3; Cleary 1983, 58–117; Mount 1994, 435). This Beaker-associated horizon occurred just beyond the quartz granite slip — which had apparently fallen from the mound where it had formed a façade (O’Kelly 1982, 72–3) — and was sealed beneath various episodes of collapse from the top of the cairn (see Fig. 3.4; O’Kelly et al. 1983 27–9, fig. 9). Investigations of this deposit produced 3600 Beaker sherds from 200 vessels including two polypod bowls as well as a large number of small convex scrapers (Lehane 1983, 131–3), three barbed and tanged arrowheads (one Conygar and two Sutton B types) (Lehane 1983, fig 64, nos E56: 781, 675 and 1025), two serpentine disc beads (O’Kelly and Shell 1979), a Killaha bronze flat axe and a large faunal assemblage dominated by pig bone (van Wijngaarden-Bakker 1974, 1986; see Mount 1994).
Evidence for earlier and later activity including Middle Neolithic pottery, Late Neolithic Grooved Ware and Early Bronze Age Food Vessels was discovered to be mixed within these layers (Cleary 1983, 58–117). Indeed, the largest amount of Grooved Ware at Newgrange came from this horizon (Cleary 1983, 84–100, 115) and the lithics assemblage which also included transverse arrowheads as well as large end and side scrapers very closely resembles the Grooved Ware associated flint from Knowth (Roche and Eogan 2001, 129). All of this suggests that the so-called ‘Beaker layers’ represent a temporally mixed assemblage possibly representing a duration of potentially 1400 years.

The idea that these represent a chronologically insecure deposit formed over a considerable period of time is reinforced by the occurrence of the ‘Beaker layers’ both under and over a bank of yellow boulder clay (see O’Kelly et al. 1983, figs. 9; 11 and 13) which inscribes the mound to the west of the tomb entrance and sealed some of the Late Neolithic hearths (see O’Kelly et al. 1983, 27–9, 35–9, fig. 9; Cooney 2006, 705). O’Kelly (1983, 27–29; 1989, 75) regarded the bank as being contemporary with Beaker activity precisely because of this stratigraphic relationship between it and the ‘Beaker layers’ and he suggested that it may have been specially created to cover earlier features such as hearths (O’Kelly et al. 1983, 39). The bank has subsequently been interpreted as part of a sequence of deliberate constructions that were built to enclose the tomb (Cooney 2007, 705–6) and has been compared to the banks of nearby embanked enclosures (Mount 1994, 435). However, its exact date and function remain unknown. Nevertheless, it remains unlikely that Beaker-associated settlement debris could occur both below and above such a monument. Overall, the dating and interpretation of these deposits at Newgrange are problematic and it is particularly difficult to disentangle the Grooved Ware activity from that associated with Beakers.

The discovery of a Killaha bronze flat axe in ‘these Beaker layers’ in close proximity to a putative metalworking area which produced hammerstones, a polishing stone and a possible metalworker’s anvil was regarded as evidence for Beaker-associated metalworking in a ‘domestic’ setting (O’Kelly and Shell 1979; Stout and Stout 2008, 91). However, the chronological integrity of these layers is highly questionable and so the strength of association between these discoveries is particularly weak. Regardless of whether or not metallurgy was conducted outside the tomb, the axe itself dates from 2200–2000 BC (Needham 1996, 130; 2000, 37–8; and Van der Plicht 2001; Brindley 2007, 333) and is more likely to post-date the currency of Beakers at Newgrange (see Chapter Eight).
A total of 18 rectangular stone-lined formal hearths were found in association with the so-called ‘Beaker layers’ surrounding the front of the passage tomb and those occurring to the west of the entrance were sealed beneath the yellow clay bank (O’Kelly et al. 1983). The presence of Beaker pottery within some of the hearths — such as Hearth No. 1 in the ‘Eastern Area’ (O’Kelly et al. 1983, 15) — as well as the pits that surrounded them led to the interpretation of these as Beaker-associated features. Each of the hearths are thought to represent the remains of circular structures, some 5–6m in diameter, comprising arcs of post or stakeholes and lengths of possible foundation trench (Cooney and Grogan 1999, 80–1; Grogan 1996, 44; Grogan 2004a, fig. 9.3). These have been widely regarded as the remains of Beaker dwellings (ibid), although these have also been interpreted as ceremonial buildings (Bradley 1998a, 110). Given that many of the features at Newgrange represent a palimpsest and that the only consistent component of each putative structure was a hearth, it remains unclear whether the other features in the vicinity were genuinely contemporary and if they really did represent the remains of buildings.

While Beaker pottery was present in some of these hearths and Grooved Ware was present in others, evidence from excavations elsewhere suggests that these features represent Late Neolithic creations (see Roche and Eogan 2001, 132; Carlin and Brück forthcoming). A very similar rectangular stone-lined hearth was found at the centre of a Grooved Ware-associated building at Slieve Breagh in Co. Meath (de Paor and Ó h-Eochaidhe 1956; Herity and Eogan 1977, 49; Grogan 1980; 1996). These distinctive hearths bear more than a passing resemblance to those found within Orcadian Grooved Ware buildings (Richards 1990; 2005). Notwithstanding the issue outlined above about the difficulties with establishing the contemporaneity of features at Newgrange, at least one of the hearths occurs within an apparent four-post setting such as that commonly found inside Late Neolithic Irish timber circles (see Fig. 3.5; Carlin et al. forthcoming; Smyth 2010, 26). As highlighted by Jessica Smyth (2010, 25–7), the Grooved Ware associated features at Newgrange share a number of common aspects with the recently discovered Late Neolithic houses at Durrington Walls in England (Parker Pearson et al. 2007). If these hearths do represent the remains of buildings, then these were almost certainly of Late Neolithic date.

Overall, it is not clear that any Beaker-associated habitation actually occurred at Newgrange. Certainly, the putative Beaker dwellings seem to represent Late Neolithic activity and though Beaker-associated occupational debris was deposited in front of the main passage tomb, it is difficult to assign an exclusively Beaker date to many of the features discovered on this site because they represent multiple phases of activity. The admixture of anachronistic pottery types within the deposits, as well as the construction of
the Grooved Ware-associated large pit circle immediately southeast of the main passage tomb and the probable timber circle containing Beaker pottery to the west of the main mound suggest that the Middle Neolithic monument continued to be a focus of interest over the period of use of Grooved Ware and Beaker ceramics at Newgrange (see Chapter Five). This concurs with Richard Bradley's (2007, 106, 112) observation that the exterior of passage tombs assumed greater importance over the course of the third millennium BC and that deposits were deliberately placed around their entrances to emphasise these locations.

Although the large faunal assemblage at Newgrange is unlikely to represent a single chronological horizon, Charles Mount (1994) detected some patterns that shed some light on the nature of the activities conducted outside the passage tomb entrance. A very large amount of pig bone was present, but its calorific content had not been fully exploited. The age structure of the cattle bone suggested that fattened mature animals had been specially selected and brought to the site. None of this was commensurate with what one might expect to find on a settlement, instead it represents behaviour typical of ceremonial feasting, some of which certainly dates from the Late Neolithic/Early Bronze Age. The Beaker activity at Newgrange is usually interpreted as ‘domestic’ in character (e.g. Stout and Stout 2008, 91), but it is in fact extremely difficult to identify distinct ‘domestic’ and ritual spheres during this period (Brück 1999a), and it is likely that the majority of Beaker-associated activity at Newgrange occurred in the context of ongoing ceremonial activities at the site (see Chapters Four, Five and Six).

3.2.3 Monknewtown

An embanked enclosure at Monknewtown, Co. Meath (Sweetman 1976), was partially excavated by David Sweetman in 1971 ahead of agricultural development (Sweetman 1976) resulting in the recovery of evidence for multi-period activity including 5000 Beaker sherds, as well as Early Neolithic, Middle Neolithic, and Middle Bronze Age pottery from features in the interior (see Fig. 3.6; Roche and Eogan 2001, 135). The chronological relationship of the various phases of activity to the monument is unclear, and while no clear evidence was excavated to clarify the date of the enclosure, its construction is generally assumed to have occurred in the Late Neolithic (Stout 1991; Condit and Simpson 1998; Cooney and Grogan 1999, 87–91).

The extended duration of human activity at this place was not recognised at the time of excavation: Beaker pottery was thought to represent the youngest ceramic on the site and
the features were considered "as part of the Beaker culture" (Sweetman 1976, 25). The Middle Neolithic activity at the site was considered to overlap with the currency of the Beaker activity (Sweetman 1976, 70) and so, as Sweetman (1976, 39) acknowledged, all pottery was considered as if it were contemporary with Beakers. Consequentially, many features of Middle Bronze Age (or even later) date were not recognised as such at the time. Instead, they were assumed to be Late Neolithic or Early Bronze Age (see Roche and Eogan 2001) and so, the extent of Beaker activity at this site was overstated. Unfortunately, the published accounts of this excavation (Sweetman 1971 and 1976) only consider most of the finds at a site-level and so it is difficult to retrospectively attribute particular artefacts to individual features.

In the south-western part of the site, the excavation revealed an extensive spread of occupation debris — referred to as "a habitation" — consisting of dark charcoal-rich soil, up to 0.6m deep, which produced most of the 5000 Beaker sherds (Sweetman 1976), as well as an admixture of pottery from other periods. While it has traditionally been assumed to represent Beaker activity, the presence of ceramics dating from between the fourth and second millennia within this deposit may indicate that the Beaker pottery is not within its final depositional context. This deposit may only indirectly reflect Beaker-associated activity. Ultimately the presence of so much Beaker pottery within it demonstrates that this spread is unlikely to have developed prior to the existence of Beaker pottery.

Underneath (Fig. 3.7), this deposit was found a putative Beaker structure within a large oval depression (6m by 4m x 0.50m), described by the excavator as an "egg-shaped pit dwelling" (Sweetman 1971, 139). This had a flat floor, steep sides and a centrally located oval hearth (1m in diameter) that was defined by vertical flagstones (Fig. 3.8). Thirteen stone-packed postholes were found on the surface, mainly along the western side of the pit, although these displayed no obviously recognisable structural pattern (Sweetman 1976). Significantly, none of the postholes produced Beaker pottery; instead these were filled with sterile material resembling the natural subsoil (Sweetman 1976, 38).

The oval hollow forming the putative house was filled by the deposit that was also present upon the surface. Combined oak and birch charcoal found in the area around the hearth returned a radiocarbon determination of 2459–2136 BC (UB-728: 3810±45 BP) (Smith et al. 1974, 269); however, this material seems more likely to date the deposit of occupational debris that filled the pit rather than the hearth itself. Leaving aside the many unconvincing characteristics of this putative structure and the lack of any Irish parallels, it seems that the presence of the Beaker-rich deposit within this pit gave the excavator the
impression that this was a Beaker-associated dwelling. However, it remains unknown if the deposit actually dates to the Beaker period or not (see above) and the presence of the spread within it could represent post-Beaker activity.

The oval hollow was clearly created before the material that backfilled it, was deposited in that location. However, no evidence for any gradual infilling of this hollow was detected. This suggests that the hollow was backfilled very soon after being dug. Most likely, this backfilling occurred at the same time that the surface-spread was deposited, but we do not know when that occurred. Given the evidence for Post-Beaker activity at Monknewtown, it is possible that this feature could have been dug after the demise of Beakers in Ireland and then backfilled with a deposit containing residual or disturbed Beaker material.

At present, the only conclusion that can be drawn about the Beaker presence at Monknewtown is that Beaker-associated habitation debris was deposited there and that it shares a spatial relationship with the monument and the other features. Whether this represents settlement or ceremonial activity remains unknown (though see below and Chapter Five)

3.2.4 Knowth

The main Beaker-associated features found at the passage tomb cemetery at Knowth comprised five large separate deposits — labelled as Concentrations A–E — described as "spreads of dark earth that had developed from occupation refuse" (Roche and Eogan 2001, 131). Each of the concentrations of culturally-rich occupational debris was at least 15m long and 10m wide. They occurred in widely separated areas surrounding the perimeter of the large centrally-located passage tomb known as the main mound (see Fig. 3.8).

These spreads produced a total of 4307 sherds from 293 Beakers as well as 1,500 lithics comprising debitage and 198 modified tools, including 160 scrapers and three (two barbed and tanged and one hollow-based) arrowheads (Eogan 1984, 286–304; see Eogan and Roche 1997, 223–260; see Section 4.3.3). 'Beaker Concentrations' B, D and E only produced Beaker-associated materials thereby suggesting that these represent chronologically secure deposits. Two spreads — 'Beaker Concentrations A and C' — produced a small amount of pottery from other periods. Grooved Ware was retrieved from both of these (Eogan 1984, 270; Roche and Eogan 2001, 129), while a few sherds from Early Neolithic Carinated Bowls and Middle Bronze Age pottery were also present in Concentration A (Helen Roche pers. comm.)
Despite the large amounts of Beaker pottery present within each of these spreads, this ceramic was found in very few others contexts at Knowth. Only seven pits produced any Beakers and each of these contained only a small number of sherds (Eogan 1984; Eogan and Roche 1997). Beaker pottery was also recovered in very low quantities from the passages of Tombs 2 and 15 (Eogan 1984, 308–12; see Chapter Four).

Each of the deposits of culturally-rich occupational debris seems to have been situated at or near the entrance to a passage tomb (see Fig. 3.9). ‘Beaker Concentration A’ surrounded the entrance and much of the southern and western perimeter of Passage Tomb 15. ‘Beaker Concentration B’ was located directly outside the entrance to passage tomb 6. Beaker Concentration C’ was situated directly opposite the entrance to Tomb 20. Concentration D overlay the Grooved Ware associated timber circle opposite the entrance to the eastern passage of Tomb 1 (Roche and Eogan 2001, 137; Roche 1995, 39). Concentration E occurs opposite the entrance to Tomb 2 (but at a distance of 8m) and overlay a circular stone setting situated beside the kerbstones (Nos 27–28) of the main mound (Eogan and Cleary forthcoming). These kerbstones are decorated with megalithic art featuring two ‘eye-like motifs’ whose gaze is thought to be directed towards another ornately decorated kerbstone (K52, O’Kelly 1982, fig. 28) at the rear of the Newgrange passage tomb (Eogan and Cleary forthcoming). Again, the location of these deposits corresponds with the suggestion that passage tomb exteriors and entrances gained greater significance over the course of the third millennium BC (Bradley 2007, 106, 112), yet this aspect of the deposits at Knowth has received very little attention to-date.

Overall, a considerable amount of Beaker deposition occurred at Knowth, though this is almost exclusively concentrated within the five deposits. These artefact-rich layers have been interpreted as the product of ‘domestic’ activity (Eogan 1984, 313; Roche and Eogan 2001, 131) that may represent “the remains of homesteads” (Eogan and Roche 1997, 256). However, the evidence for this is highly ambiguous. While the deposits certainly relate to occupation, there is little to indicate what the nature of this was or whether the activity from which this debris was originally generated actually occurred at Knowth. Conversely, it is clear that the locations of each of these spreads seem to have been deliberately chosen to make reference to particular aspects of the monuments, notably their entrances. The deposition of large piles of occupational debris certainly seems to have served a commemorative function that referenced the passage tombs. However, their relationship to settlement is currently rather vague. These could represent the remains of feasting or some form of ceremonial activity that involved the collection and deposition of settlement materials (see Section 5.4).
On the whole, this re-assessment of the results from these various excavations shows that the Beaker component of these sites was overstated, particularly the evidence for Beaker-associated settlement.

3.3 Beaker settlement sites

The majority of settlement evidence have been found on multi-period sites — (72 out of 101 sites: 71%) — in the course of large-scale development-led excavations, a fact that has certainly affected the way in which these features have been treated. For example, Beaker-associated pits often represent the only Beaker feature discovered during the investigation of a much greater array of archaeological remains dating from various millennia. In such cases, these isolated pits were generally considered to represent a minor component of that site’s archaeological record and correspondingly, is less likely to be radiocarbon dated or deemed worthy of particularly rigorous attention. Unsurprisingly a greater proportion of these multi-period sites display evidence for post-Beaker (63 examples) than pre-Beaker (45 examples) phases of activity. Interestingly, when Beaker pottery occurs on sites with older archaeological remains, these are predominantly of Early Neolithic date (39 out of 45 sites) and often tend to consist of Early Neolithic houses. In the case of those excavations that have revealed evidence for Beaker and post-Beaker activity, the latter are usually of Early (29 of 63 sites), Middle (20 of 63 sites) or Late Bronze Age (25 out of 63) date.

It was previously observed that Beaker settlement sites are generally located in slightly undulating topography on a gentle south or southeast facing slope between 6 m and 120 m above sea level and within 1 km of a river (Carlin 2005a). Although some of these sites are located in low-lying locations, most of these are in locally elevated positions. A clear preference was observed, for free draining and fertile soils such as Brown Earths and Grey Brown Podzolics that could be used for either pasture or tillage (Carlin 2005b). These locations would certainly have been suitable for occupation as is emphasised by their regular occurrence on sites which include both Early Neolithic and Late Bronze Age houses.

Beaker-associated settlement sites in Ireland generally comprise a mixture of features such as pits, spreads, postholes and stakeholes but on the majority of these, pits are the only definite Beaker feature. It is rare to find stakeholes or postholes containing Beakers

\[6\] E.g. – the only feature containing Beaker pottery.
without an associated contemporaneous pit or spread that also contains Beaker pottery. The character of these structural features which contain Beaker deposits are now examined. Pits are studied in detail in Chapter Four (see Section 4.2).

### 3.4 Beaker Postholes

At least 34 Beaker-associated postholes have been excavated on a total of 19 sites. The majority (11 of 19) of these sites comprise a single Beaker posthole and there are only a few exceptional sites like Kilgobbin, Co. Dublin, or Newtownbalregan 5, Co. Louth, (though see below) where more than five Beaker-associated postholes were excavated (see Table 3.1). These never occur in isolation and have only ever been found alongside other Beaker features, predominantly pits, though there is no evidence for any correlation between the number of these and the number of postholes (see Table 3.1).

All the postholes are circular or oval shaped and range in diameter from 0.10–0.55m and in depth from 0.04–0.55m. Although aceramic postholes are commonly discovered in spatial association with Beaker pits, these seldom contain Beakers. These generally occur on multi-period sites comprising a palimpsest of features, so it is rarely possible to deduce whether they should be regarded as contemporary with those containing Beaker-associated deposits. Most of the Beaker postholes do not appear to form part of a recognisable structure. The postholes from Newtownbalregan 5 may represent the remains of a building but these are considered to belong to a poorly preserved timber circle (see Chapter Five and below). On almost every site except Newtownbalregan 5, postholes form a very minor element of the contexts from which Beakers have been retrieved. Presumably, this is simply reflective of the nature of postholes from any era – given that postholes do not generally produce finds, very few contain sherds of pottery necessary for them to be defined as ‘Beaker’. No doubt, postholes originally formed a more important element of these sites, but this is no longer apparent to us because they were rarely a focus for deposition.

These 34 postholes produced a total of 132 sherds from a total of 31 Beaker vessels. The only other Beaker-associated finds from these features are lithics which have been recorded within 11 postholes on five sites. These consist almost entirely of flint debitage with only one formal tool — a scraper — being discovered in a posthole at

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7 This analysis excludes the Beaker postholes from Paulstown because these form a timber circle and thus these are examined in Chapter Four.
Newtownbalregan 5 (Bayley 2009b). The majority of postholes (22 of 34) contained three sherds or less with single sherds occurring in ten of these. Only five postholes produced 10 sherds and more, four of which were at Newtownbalregan 5. Slightly more than half (19 out of 34) of the postholes contain the remains of a single vessel, while only three postholes contained the remains of two vessels. A higher number of pots have only been retrieved from postholes at Newtownbalregan 5, where three of these features each produced a total of three, four and nine Beakers (see Table 3.2). All Beaker-producing postholes displayed a sherd ratio that was less than or equal to 5:1 (11 of these had a ratio of 1:1), except for one such feature at Newtownbalregan 5 which contained 10 sherds from one pot. All of this certainly suggests that these features from Newtownbalregan 5 represent something quite different from the other postholes. The Newtownbalregan examples are much wider and deeper than all the others and contained a much greater amount of artefactual material. In terms of their size, shape and contents, they most resemble the postholes forming timber circles and are considered alongside other such monuments in more detail in Chapter Six.

Traditionally, a distinction has been made between ‘fine’ Beaker and coarser, larger or heavier or more informally decorated ceramics by labelling the latter as ‘domestic’; however, these belong to a single ceramic repertoire comprising a spectrum of different Beaker pots (see Grogan and Roche 2010, 36). Although sites and features containing only ‘fine’ or ‘domestic’ Beakers are known, both ‘fine’ and ‘domestic’ vessels often occur on the same site and occasionally within the same context. Both ‘fine’ and ‘domestic’ pottery have been found within these postholes, occurring together in the same feature in two instances. Six postholes from six different sites contained ‘domestic’ only, though three of these only produced one sherd. 18 postholes on 12 sites produced ‘fine’ only, though six of these contain just a single sherd (see Table 3.2). With the exception of Newtownbalregan 5, most of the sherds from postholes are small and worn and certainly appear to represent accidental inclusions within these features. Overall, it is clear from this analysis that Beakers were rarely deposited in postholes and that in almost every case; postholes did not form the main focus of Beaker deposition on a site. Significantly, this suggests that structures on Beaker settlements were not a focus of deposition. This is consistent with the idea that houses from this era were ephemeral buildings that were neither architecturally nor symbolically elaborated (see section on Beaker houses below).

### 3.5 Beaker Stakeholes
Beaker pottery has only been recovered from five stakeholes on three sites; three of these stakeholes were excavated at Graigueshoneen Field 3, Co. Waterford where they formed part of an oval structure (Section 3.7.3). All five of the Beaker-associated stakeholes are circular or oval shaped, ranging in diameter from 0.09–0.14m and in depth from 0.12–0.22m. Beaker stakeholes never occur as the only Beaker feature on-site and all five examples have been discovered in association with pits containing Beakers (see Table 3.3). Beaker stakeholes have produced a very small quantity of Beaker pottery: 24 sherds in total with the largest assemblage of 11 sherds occurring within a stakehole excavated at Rathwilladoon, Co. Galway (see Table 3.4). It is rarely possible to extrapolate much information from the pottery or relate these sherds to any particular vessels, due to their small number and size.

The only other finds from stakeholes are lithics — flint debitage — and cereal grains, all of which were recorded within the stakeholes of the Graigueshoneen building where a total of 12 Beaker sherds came from three different structural stakeholes. This structure is discussed in greater detail below (Section 3.10.3). Overall, very little Beaker artefactual material has been recovered from stakehole contexts, but this is quite unsurprising given the size and nature of these slender holes. The fact that any of these features produce Beaker pottery at all is quite noteworthy.

### 3.6 LINEAR GULLIES AND SLOT TRENCHES

At least 12 linear features excavated on a total of seven sites have been found to contain Beaker pottery. These typically represent short narrow linear features best described as gullies or slot trenches, though the use of either term here, is not intended to depict their function. These linears are generally narrow and may be straight or curvilinear. The longest example is 5.6m, widths vary from 1.10m to 0.16m and depths range from 0.65 to 0.08m (see Table 3.5). There is so much diversity in the shapes and sizes that it is difficult to detect any defining general characteristics. Generally (four out of seven sites) linears occur singly but these have also been discovered in greater numbers. The largest number of these to be found on a single excavation was recorded at Mell, Co. Louth, where four such features combined to form a discontinuous arc surrounding the edges of a spread (see Section 4.3.3). Linear features are always discovered alongside other Beaker features, most commonly in association with pits (see Table 3.6).

The 12 Beaker-associated linear features have produced a total of 72 sherds from a minimum of 18 'fine' and 'domestic' vessels (see Table 3.7). Apart from the cattle bones
discovered within the slot trenches at Ross Island, only stone finds have been recorded within these features (see Table 3.8). The lithics mainly comprise flint debitage which occur in five linear features, a scraper found in the linear feature at Haggardstown and a hollow-based arrowhead from Ross Island. A high number of stone macro-tools — two anvils and 12 hammerstones — also occur in slot trenches, but these are almost exclusively from the ‘camp’ beside the copper mine at Ross Island (see Section 3.7.2; O’Brien 2004). The majority of linears (8 of 12) contained five sherds or less, though a single sherd only occurring in one of these, at Mell (see Table 3.7). Only two slot trenches produced 10 sherds or more – one of these occurred at Kilgobbin and the other at Ross Island contained 14 sherds which represents the highest number recorded in any linear feature.

Due to the small size and worn condition of many of the sherds recorded in these contexts, it is rarely possible to assign these to individual vessels. However, based on the available information, these linears tend to only contain a few sherds from one or two pots and display quite low sherd: vessel ratios. The low number of sherds and their small, worn and fragmentary nature all combine to suggest that the sherds have experienced considerable life-histories after their breakage but prior to their eventual deposition. In fact their occurrence within linear features seems fortuitous and apart from the arrowhead at Ross Island, there is very little evidence for any formal or deliberate aspect to the deposition of material within these features. Overall, it is difficult to interpret or characterise these 12 linear features or be certain of whether or not the Beaker material within them is in a secure context. The exact function of many of these is unclear, though some do seem to have a structural aspect (see discussion of Beaker structures below – Section 3.7). One certainty is that these represent a minor aspect of Beaker depositional practice and rarely formed a focus for the burial of Beaker artefacts.

### 3.7 Beaker Structures

As we have already seen (Section 3.2), a Beaker date was falsely attributed to a range of different ‘houses’ at Lough Gur (Ó Riordáin 1954, Grogan and Eogan 1987), Newgrange (O’Kelly et al. 1983, Cooney and Grogan 1999, 80) and Monknewtown (Sweetman 1976). A number of other alleged Beaker houses from Ireland are reviewed in this section.
3.7.1 The ‘Beaker house’ within the ‘Beaker farmstead’ at Roughan Hill

At Roughan Hill, in the Burren, Co. Clare, survey work by Carleton Jones (1996 and 1998a) revealed a prehistoric landscape including ancient field walls, enclosures, structures and a dense concentration of wedge tombs (see Fig. 3.10). A cluster of four enclosures — interpreted as contemporary farmsteads — were found to be at the centre of a network of radiating field divisions defined by low, grass covered stone-work described as ‘mound walls’ (Jones et al. 2010, 37).

These ‘mound walls’ overlie the limestone karstic terrain of the Burren, thereby protecting the bed-rock from erosion. This results in the survival of preserved pedestals of bedrock underneath each wall that are higher than the surrounding unprotected limestone which has become more eroded over time. The measurement of the heights of the bedrock plinths under the various walls enabled a relative chronology for these field-divisions to be developed. The ‘mound walls’ had high pedestals suggesting that they pre-date many of the other stone walls in the locality which had lower pedestals, particularly those associated with early medieval features such as ring forts (Jones 1998a; 2008, 42; Jones et al. 2010, 37).

One of the large ‘mound wall’ field-systems circumscribed an area of 75 acres and was centred upon a kidney-shaped enclosure labelled as ‘Settlement 1’/‘Farmstead 1’ thought to represent a Beaker-associated farm (Jones 1996, 17; Jones et al. 2010; 52). This enclosure was defined by a mound wall with similar pedestal heights and morphology to the surrounding field walls which suggested that all of these were broadly contemporary.

Partial excavation of the middle of the enclosure revealed at least two distinct periods of occupation. The earliest habitation is dated by the presence of Beaker pottery and the second is represented by Iron Age activity. This site may also have been reused at some stage in the medieval period. The main features at the heart of the site comprised a Beaker-associated midden deposit (see Section 3.8) and the remains of several stone structures representing various episodes of rebuilding on the same spot over an extended duration, one phase of which is thought to have been a Beaker house, whose form can no longer be distinguished (see Fig. 3.11; Jones 1998b, 33).

Beaker-associated activity at the settlement is represented by a centrally located surface-deposit of occupational debris containing 254 Beaker sherds, a sherd from an Irish Bowl, thumb-nail scrapers, hollow-based arrow heads, flakes from polished stone axes, saddle querns, hammerstones and retouched stone tools (Jones 1996, 19). While dates are still
awaited for the lower part of the midden, a cattle bone from the less-secure upper levels produced a radiocarbon date of 1665–1464 BC (UB10262: 3288±35 BP).

At a later stage, during the Iron Age, some parts of the midden were disturbed to create a level surface for the construction of a phase of the house (see below; Jones 1998a, 2008). At this time, three smaller pits and a large pit were also dug into the midden. The large pit contained both Beaker and Iron Age artefacts and materials from this returned three distinct radiocarbon determinations of 2288–2140 BC (UB 10258: 3784±25 BP), 1900–1699 BC (UB10257: 3492±32 BP) and 193–54 BC (UB-10477: 2106±23). The latest of these is thought to date the digging of this pit to the Iron Age (Carleton Jones pers. comm.).

The central stone-built house displayed multiple phases of re-use which impede its dating, as well as the recognition of its various forms. However, the only stratigraphic relationship established between this structure and the Beaker-midden was that some sections of its walls were clearly built over the Early Bronze Age deposit and re-deposited midden materials were found within these walls (Jones 1998a, 1998b, 36). Very slight pedestals of bed-rock were displayed under all parts of the building that was excavated, thereby indicating that each of these were of a younger date than the ‘mound wall’ of the kidney-shaped enclosure which had much higher pedestals of 21 cm (see above). Artefacts associated with the use of this structure include iron objects, a large grooved sandstone block and blue glass beads (Jones 1998b, 35). Indeed, the excavator concluded that there was no archaeological evidence for an association between the excavated walls and the Final Neolithic/Early Bronze Age occupation (Jones 1998a). Nevertheless, a Beaker house was still considered to have existed in this location (see below).

A Beaker date was assigned to the kidney-shaped enclosure within which the midden and the buildings were located. This compound was defined by a ‘mound wall’ which displays higher pedestal heights than many of the other walls in the area such as the Iron Age and early medieval examples that were constructed differently and have lower pedestal heights. All of this suggests that the enclosure pre-dates those walls and is of considerable antiquity. Prior to the absolute dating of the site, it was assumed that the enclosure must represent a Beaker-associated construction because of the presence of the Beaker-rich midden at the centre of this enclosure and the absence of other pre-Iron Age artefacts in the Roughan Hill area (Jones 1998a and b). While this is a reasonable assumption, there is absolutely no evidence for a stratigraphic association between any Beaker materials and this enclosure to confirm this. This enclosure could potentially date from any time in the Bronze Age; this possibility is supported by the recently obtained radiocarbon dates from the excavation which produced at least two post-Beaker determinations ranging from the
Early to Middle Bronze Age: 1900–1699 BC (UB10257: 3492±32 BP) and 1665–1464 BC (UB10262: 3288±35 BP).

Despite the lack of supporting evidence, a Beaker house is presumed to have existed in the same location as that dating from the Iron Age or early medieval period and these later constructions are thought to have obscured its recognition (Jones 1998a, 1998b, 33). This idea seems to be partially based upon the presence of phases of building in the same spot as the Beaker midden that seems to pre-date the later structure. Mainly it seems to reflect the expectation that a Beaker structure should exist inside an enclosure that is considered to represent Beaker activity. Jones states that “the enclosure wall is contemporary with the Final Neolithic/Early Bronze Age occupation and the substantial nature of the enclosure wall suggests the former presence of a substantial structure, probably similar to contemporary structures at Lough Gur” (Jones 1998a).

Overall, the only definite Beaker component of the occupation at Roughan Hill is a midden and there is no definitive evidence to indicate that a Beaker structure was present in this location or that the enclosure or by extension any of the field walls in this area date from the Beaker period. The extent of Beaker activity in this landscape may therefore have been overstated. Based upon the revised dating of the stone-built enclosures and structures at Lough Gur to the Later Bronze Age (see Section 3.2.1) and the excavation of morphologically similar sites of Later Bronze Age date at Knockadoon (R. Cleary 2003), it seems most probable that the Roughan Hill enclosures and field systems are also of that date. Indeed, no other Beaker-associated field systems or stone-built houses are known from Ireland and almost all Irish examples of enclosed prehistoric settlements date from the Later Bronze Age (see K. Cleary 2007). It is my interpretation that the Beaker midden at Roughan Hill pre-dates the enclosure and that the survival of this deposit is largely due to the protection afforded to it by the later construction of buildings and walls over and around it. In many ways, this parallels the misunderstandings of the various Beaker deposits at Lough Gur and it may be speculated that Jones was strongly influenced by the longstanding but inaccurate belief that the Lough Gur enclosures were built c.2500 BC.

3.7.2 The Beaker camp at Ross Island

Excavations outside the copper mines at Ross Island, Co. Kerry revealed ten possible Beaker structures, as well as 456 sherds from 25 Beaker pots, stone tools and animal bone, thought to represent the remains of a Beaker camp associated with ore-processing and other metallurgical activities (O’Brien 2004, 173–215). This habitation-evidence was
discovered in an area known as the Western Shelf - an escarpment platform immediately adjacent to the mines and overlooking the lakeshore of Lough Leane (O’Brien 2004, fig. 53).

In the Western Shelf, two surface deposits were found to overlie each other and the ground-level. The uppermost deposit consisted mainly of ore-processing sediments with a depth of 0.10–0.75m and contained hammerstones and anvil blocks, bone fragments, a quernstone, and polished stone axe (O’Brien 2004, 358–9, fig. 166). Sherds from 13 Beaker vessels and an Irish Bowl were also present in the lowest levels of this horizon. Six radiocarbon determinations obtained from charcoal and bone samples within this deposit returned dates ranging between 2457BC and 1527 BC: 2457–2142 BC (GrN 19627: 3820±35 BP), 2345–2025 BC (GrA 7512: 3760±50 BP), 2289–1978 BC (GrA 7009: 3730±50 BP), 2136–1782 BC (GrA 7010: 3610±50 BP), 2028–1755 BC (GrA 7513: 3560±50 BP), and 1870–1527 BC (GrA 7007: 3380±50 BP).

The lower layer represented a thin dark silty deposit containing 182 sherds from 18 Beakers and sherds from the Bowl mentioned above, as well as hammer stones, bone, and flint debitage. This spread of occupational debris was interpreted by the excavator as a trampled occupation surface (O’Brien 2004, 171). Three radiocarbon dates were obtained from materials within this deposit: 2470–2206 BC (GrN 19628: 3875±45 BP), 2467–2147 BC (GrN 19624: 3845±40 BP) and 2139–1828 BC (GrA 7552: 3620±50BP).

These deposits sealed the structural features including pits, 400 stake and post-holes, and six slot trenches that were dug into the ground level which O’Brien (2004, 173–214) considers to represent an array of at least 10 Beaker huts (Structures A–K, see Figs. 3.12–14). A short curvilinear slot trench, an arc of 15 stakeholes and a number of postholes were considered to form the remains of a small (2.85m by 1.75m) oval building - Structure A (see O’Brien 2004, 183, fig. 78). An assortment of 27 stake-holes was considered to represent the outline of a small oval hut — Structure B — with a diameter of 1m. No artefactual or other dating evidence was found in any of these features to suggest that these were Beaker-associated or that they were contemporary. The identification of these structures from the array of features in this area seems rather speculative.

The foundations of a small sub-circular (3.15 x 1.8m) hut — Structure C — comprised two short curvilinear slot-trenches that contained stakeholes. One gully produced fragments of stone hammers and cattle bone which returned a radiocarbon date of 2140–1786 BC (GrA-7530: 3620±50 BP). The other contained three Beaker sherds, a stone hammer and an animal tooth. The Beaker pottery was not of a late-style and so would typically date from 2450–2200 BC (Brindley 2004, 338) (see Chapter Eight). The radiocarbon date from the
other foundation seems to post-date the use-life of these sherds, suggesting that these features may not be contemporary or that the chronological integrity of the deposits within these may not be secure.

Another short curvilinear feature was thought to form the remains of a sub-rectangular (3 by 2m) hut — Structure D — in tandem with 22 stakeholes. The foundation trench contained stone hammer fragments, animal bone, a copper ore and one lump of copper-sulphide ore and a hollow-based flint arrowhead. Beaker sherds and a stone hammer fragment were also discovered in a surface-deposit occurring inside the putative dwelling.

The foundations of a comparatively large (5 by x 4m) trapezoidal building — Structure E — was identified amongst the features present on the Western Shelf. This comprised a long slot trench on one side and the remainder was formed by an assortment of post and stakeholes. Finds from the trench included hammerstones, two Beaker sherds and cattlebone which produced a radiocarbon date of 2271–1937 BC (GrA-7523: 3690±50 BP).

Another rectangular building plan (5 by 2m) known as Structure F was discerned from a concentration of 60 stakeholes, none of which produced any artefactual or dating evidence. The remaining four ‘Beaker structures’ (G, H, J and I) are comprised of very similar collections of spatially associated features which are interpreted as the remains of huts (see O’Brien 2004, fig. 82). However, these do not display clearly defined coherent or readily definable lay-outs and there is little evidence to suggest that they should regarded as forming elements of the same structures. These structures seem to be highly reflective of the interpretative stance of the excavator. As no Beaker artefacts or Beaker dates were obtained from these putative buildings, there is no need to examine them in greater depth in this thesis.

Overall, while some of the structures at Ross Island may represent dwellings, the evidence that these were Beaker-associated is a little bit ambiguous. The artefacts found within the various structural features are very similar to those within the two deposits occurring on the surface in the Western Shelf area. The only definite Beaker-associated feature from this habitation seems to be the surface deposit of occupational debris. In this regard, it may be highly significant to note that at least four of the radiocarbon dates from that layer pre-date all of those from the structural features that appeared to be stratigraphically below it. The chronological integrity of the deposits within the structural features is certainly questionable. Given the presence of Food Vessel pottery and post-Beaker radiocarbon dates on this site, it seems quite possible that the trenches post and stake holes that were found upon the removal of the surface deposit may actually post-date rather than pre-date this layer. Indeed, if these features were dug into the Beaker spread
and then backfilled with this same material, it would be almost impossible to detect this during the excavation. Based on this, it is my own belief that the few Beaker sherds from structural contexts at Ross Island are in a disturbed or residual context. The deposition of Beaker materials within a spread just outside the entrance to a copper mine at Ross Island may have been highly significant and may represent some form of ritualised activity relating to the dangerous transformative work associated with the mine (see discussion of the deposition of Beaker debris in spreads in Section 4.5).

3.7.3 Graigueshoneen, Co. Waterford

The least ambiguous example of a Beaker-associated structure is the sub-oval stakehole-built example from Graigueshoneen, Co. Waterford (see Fig. 3.15, Section 3.5, Johnston et al. 2008; fig. 1). This consisted of three concentric rings of stakeholes (0.20 x 0.25m) measuring 7.6m in (external) diameter with a probable north eastern entrance that was 2m wide. The inner arc was the most complete and was composed of a group of 22 small stake-holes though spacing between them varied. The stakes of the outer two (comprising 18 and 11 stake-holes respectively) were placed at a wider distance from one another and may have functioned as an enclosing element, a support for the roof or may have been remnants of wall repairs. The excavator suggested that house consisted of a possible double layer wattle and daub wall supporting a straw roof.

A total of 15 Beaker sherds came from three different structural stakeholes. One of these (0.11 x 0.09 x 0.18m) contained two small Beaker sherds (too indistinct to assign to a vessel), occasional burnt clay, one piece of worked flint, two grains each of barley and wheat, a sorrel seed, probably one seed of redshank and charcoal that returned a radiocarbon date of 2860–2490 BC (Beta 170161: 4110±40 BP). Two pits, a number of ancillary stakeholes and a hearth pit were recorded in the north eastern interior of the structure – these produced sherds from seven Beaker vessels and occasional pieces of worked flint and chert. The hearth (0.40 x 0.28 x 0.31m) contained three deposits of burnt clay and charcoal. One of the pits was located within the inner arc of stakeholes. It was filled by two deposits containing charcoal, burnt clay, burnt stone, seven sherds from a Beaker pot, a worked quartz crystal, seven hazelnuts, 77 barley and 18 wheat grains, as well as charcoal dating from 2460–2200 BC (Beta 170160: 3860±40 BP).

3.8 DISCUSSION: DWELLING ON THE EVIDENCE
Overall then, there are far fewer Beaker 'houses' in Ireland than has been alleged and no distinct architectural form of Beaker-associated dwelling is recognisable in Ireland. In this chapter, it has been shown that understandings of Beaker-associated habitation in Ireland have been quite misinformed. The depiction of the Beaker phenomenon in Ireland as being settlement-rich with much evidence for houses and occupations now seems highly erroneous. Many of the features from historic landmark excavations in Ireland that were deemed as archetypal examples of Beaker-associated habitation either pre-date or post-date the currency of Beakers. In the few cases where these investigations uncovered Beaker pottery within the context in which it was originally deposited, the relationship between these deposits and settlement activity is unclear.

Recognisable Beaker houses are not a feature of the Irish settlement record. Instead, it seems that people lived in insubstantial structures that have not survived within the archaeological record because the architectural technology employed in their construction was of a kind that left little or no lasting footprint in the ground (see Gibson 1996, 138). After rectilinear structures ceased to be constructed at the end of the Early Neolithic, 'domestic' architecture became much more insubstantial and it is only after 1700 BC in association with Cordoned Urns that recognisable evidence for houses becomes widespread. Any of the flimsy prehistoric structures that have been discovered in Ireland and Britain owe their survival to the differential levels of preservation afforded to them by certain forms of land-usage and/or by the protection created by the construction of nearby upstanding monuments (see Gibson 1996, 137; Darvill 1996, 81 for discussion and examples).

The absence of identifiable structures from the majority of excavations, many of which produce copious amounts of Beaker-associated occupational debris within in pits, spreads and other features certainly does not indicate that such sites represent short-term settlements. The paucity of houses is not particularly reflective of contemporary settlement practices at all. Instead this phenomenon is primarily a reflection of contemporary depositional strategies. Structural features were rarely a focus for Beaker-associated deposition (see Sections 3.4-6), and houses were ephemeral structures which were neither architecturally nor symbolically elaborated. This finding enriches our understandings of social practices and beliefs at this time. It informs us that unlike Early Neolithic houses (see Smyth 2010; Grogan 2004a; Cooney 2003), the earliest Bronze Age 'domestic' buildings were probably not regarded as an important medium for constructing social identity or negotiating social relations. This point is returned to at the end of Chapter Four and in Chapter Ten.
As detailed throughout this thesis the collection and deposition of occupational debris in large above-surface piles represented an important form of Beaker-associated social practice (see Section 4.3). This simple fact seems to account for many of the occurrences of Beaker pottery in disturbed or residual contexts and is certainly partially responsible for the mis-attribution of a Beaker date to so many aspects of Irish prehistory (see Chapter Two). By now, quite a number of spreads of Beaker-associated occupational materials have been excavated in a range of other monumental and non-monumental sites in Ireland; many of these seem likely to represent the eroded remains of middens. These deposits and pits seem to represent most of the evidence for Beaker settlement in Ireland. This phenomenon warrants further investigation and so these features are examined in greater detail in relation to each other within Chapter Four to gain a better understanding of these and their relationship to settlement.
BEAKER-ASSOCIATED DEPOSITION IN SETTLEMENT CONTEXTS - PART TWO

Pits, Spreads and Burnt Mounds
CHAPTER FOUR – BEAKER-ASSOCIATED DEPOSITION IN SETTLEMENT CONTEXTS - PART TWO: PITS, SPREADS AND BURNT MOUNDS

4.1 INTRODUCTION

An in-depth consideration of the "settlement" contexts in which Beaker pottery occurs is essential to achieving a better understanding of the uses and social significance of this ceramic and the artefacts associated with it. A considerable amount of new archaeological data concerning Beaker-related activities in Ireland has been generated by the increase in development-led excavations over the last 12 years (see Chapter One). Features which have been interpreted as Beaker-associated settlement remains have now been discovered at a total of 101 sites, each of which has comprised at least one pit containing Beaker pottery. These ubiquitous pits are generally the only identifiable Beaker-associated feature on each site. The lack of accompanying Beaker-associated features suggests that pits may not directly represent settlement activity. Yet, these have never been studied in detail and as a result, our understanding of these as well as other contemporary settlement features has remained extremely poor.

This chapter examines the character of the deposition of Beaker-associated artefacts in putative settlement contexts including pits, spreads, middens, and burnt mounds. Case studies from a few sites are used to examine some of these in more detail. Overall, this chapter comprises an assessment of the defining characteristics of each type of feature such as their quantity, shape, size, as well as the numbers of each that occur together and the relationship of these to other Beaker-associated features occurring on the same sites. The range, frequency and manner of deposition of Beaker materials in each of these feature types are examined and contrasted with each other.

An assessment is conducted of the form, quantity and condition of the artefacts occurring in Beaker-associated deposits in each context-type. A greater level of attention is paid to the depositional treatment of pottery in these features. This includes an assessment of the total number of Beaker pots and sherds in each context, as well as the number of sherds per vessel and their condition. These investigations assist in understanding the processes and activities associated with their creation and in elucidating what these can inform us about past social practices. Particular efforts are made to recognize evidence for recurrent selectivity or patterning in these deposits that may reflect the enactment of a grammar or
overarching set of rules and that might offer insights into the meanings that were socially constructed through these depositional practices. This leads to new insights into the use and significance of Beaker material culture in Ireland.

A key aim of this chapter is to gain insights into the deposition of Beaker materials in a 'domestic' setting, so as to achieve a better understanding of the function of these features and the nature of the sites upon which they are found. The results from my analysis are considered to determine whether particular features display sufficient evidence for occupation to indicate that these deposits represent the remains of settlements or some other form of activity. The results of this inquiry into Beaker-associated settlement in Ireland are placed within their wider European context and the implications of these findings are considered.

All the results within this chapter are based on data available to the author before December 2009. Some of the data is incomplete in nature (see Chapter One) but this should not overly affect any of the patterns identified. This chapter does not directly examine aspects of the settlement evidence such as diet or economy, as these are considered to be beyond the remit of this study (see Chapter One).

4.2 Beaker pits

Over 177 Beaker-associated pits have been excavated on a total of 91 sites – this comprises almost half of the 219 sites yielding Beakers in Ireland and undoubtedly this represents the context in which this ceramic is most commonly found (see Chapter Nine). Unfortunately, a sufficient level of information for analysis was only available for 83 out of these 91 sites; however, this should not overly affect the findings of the study.

Typically, only one Beaker pit occurs per site (58%: 48 of 83), though pairs of pits are also relatively common (20% of 83). The discovery of four Beaker-associated pits on a site represents a relatively seldom occurrence (10%) and it is extremely rare to find a greater number of these features containing Beaker pottery (see Chart 4.1). However, in a notable exception, as many as eleven such pits were excavated at Paulstown, Co. Kilkenny.

On most (89% of 83) of the sites where Beaker pits are excavated, no other features are found to contain Beaker pottery. Consequentially, on 38 (out of 83) sites, a single pit has proved to be the only feature containing Beakers. Similarly, on 12 of the 17 sites where Beaker pit-pairs have been found, they have not been accompanied by any other types of features also containing this ceramic. However, it is common to find aceramic pits
alongside their Beaker-associated counter-parts that display many similarities in terms of shape, size and fill. Some of which have been proven to be of broadly contemporary date (see case study in Section 4.2.9 below).

4.2.1 The shape and size of Beaker pits

Beaker pits display a variety of different shapes in plan ranging from linear to sub-rectangular to amorphous, with the majority (120 out of 177 pits – 68%) presenting as circular, sub-circular or oval features with a bowl-shape in section (Fig. 4.1). In most cases, these features tend to be longer than they are wide and wider than they are deep. Beaker pits display lengths varying from 0.21 to 5.45m, but more than half of these (59%: 82 out of 141 pits) range between 0.25 and 1.0m, a large proportion of which (60 pits) display a length of 0.50–1.0m (see Chart 4.2). In width, many pits (55%: 78 of 141) are between 0.25 and 0.75m. In depth, these are generally (90%: 128 of 141) less than 0.50m, with many (75) being quite shallow – less than 0.25m (see Chart 4.2). In short, Beaker pits are typically sub-oval with a length of 0.80 m, a width of 0.65m and a depth of 0.25m.

Most Beaker pits (86%: 126 out of 145) were filled with three or less deposits and just over half (54%: 78 out of 145) contain a single fill, though a small number exhibit multiple deposits (see Chart 4.3). A select group of Beaker pits (24 pits from 22 sites) display evidence for a stone lining or stone deposit (Fig. 4.2). Significantly, these often contain a higher quantity of artefactual material than unlined pits; this point is discussed in more detail below.

Almost all Beaker pits appear to have been backfilled quite soon after they were dug and it seems likely that these features were created specifically to receive their deposits (this point is returned to below). Only three pits displayed any evidence for previous use or of being left open for an extended duration such as cumulative infilling or eroded sides or base. Those pits that contain more than one fill appear to have received separate dumps of material which were deposited over quite a short time-frame. This is suggested by the common discovery of sherds from the same vessels within each of these different layers.

4.2.2 The artefactual content of Beaker pits

Beaker pottery is recovered more often from pits than any other context in Ireland (42% of 219 sites) and these seem to have been particularly important as places of deposition (see Chapter Nine). At least 4436 Beaker sherds from 472 vessels have been found in 177
pits representing roughly 20% of all the 21772 Beaker sherds found in Ireland. This appears quite a low proportion compared to the 75% found in spreads and middens at settlement and ceremonial sites. However, if we exclude all the pottery from those contexts, then 76% of the remaining Beakers in Ireland come from pits. Other rare forms of Beaker ceramics including the remains of (at least) three polypod bowls have been found in pits on 3 sites – Newtownbalregan 2, Co. Louth; Newtownlittle, Co. Dublin and Rathmullan 12, Co. Meath8 and two dishes were discovered within pits at Paulstown, Co. Kilkenny and Kilgobbin, Co. Dublin (Grogan and Roche 2005a, 2005c, 2011b, 2009a, Grogan 2005c). Pieces of burnt or fired clay have been found in six pits and some of these appear to be wasters from the production of ceramics.

Leaving aside the ceramic content of these pits for now — this is returned to below to consider other aspects such as the average number of sherds per pit, sherd to vessel ratios — let us turn attention to the other materials found in these features. The most common Beaker-associated artefacts found in pits are related to the manufacture and use of stone tools. Lithic debitage is recovered more frequently than any other material: split pebbles, chunks, cores, flakes, microflakes and micro debitage from flint, quartz and chert have been found in 46 Beaker pits from 29 sites (Fig. 4.3). Unworked abraded lumps of flint have also been found in eight pits on five sites, occasionally occurring in large quantities such as the 29 natural pieces found with Beaker pottery in a pit at Ballymoyle, Co. Wicklow (Whitty 2006b). Unfortunately due to the limitations of this study and the lack of sufficient data, it is not possible to give detailed information about the different classes of waste products from the manufacture of stone tools or the quantities of each (see Chapter One, where this issue is explained in further detail).

Formal retouched lithics, particularly flakes and blades are less common than debitage: eight of these have been found in four pits. However, small convex scrapers which have the same breadth and length (20–30mm) — often referred to as ‘thumbnail’ — represent the artefact most frequently associated with Beaker pottery in pits. At least 80 scrapers have been recorded in 21 Beaker pits on 15 sites and occasionally these occur in large enough quantities to be regarded as a cache (see Table 4.1 and 4.2). For example, at Rathdown, Co. Wicklow, sherds from seven Beaker pots, hazelnuts, barley and wheat grains, and an assemblage of 300 flints that included eleven thumbnail scrapers, were all

8 Recent analysis of this pottery by Eoin Grogan and Helen Roche has revealed that the remains of four polypod bowls were present in the pit at Rathmullan 12, some of which were deliberately broken (Grogan and Roche 2011a)
found within the charcoal-rich fills of a pit dated to 2470–2210 BC at 2σ (Beta 202304: 3870±40 BP) (Eogan and O’Brien 2005).

Only seven arrowheads have been found within six pits on five sites, all of which were barbed and tanged (see Table 4.1 and 4.3). For example, a pit at Hill of Rath, Co. Louth, contained 127 sherds representing at least 30 Beaker pots (two of which were Maritime Beakers), seventy-three pieces of flint (including blades, scrapers, one partial and one complete barbed and tanged arrowhead), as well as fragments of burnt bone within a charcoal-rich matrix (Duffy 2002; Brindley 2000).

A complete or fragmented polished stone axe was found with Beakers in a pit on at least six different sites (Cloghers, Dunmoon, Gortatlea, Monadreela 13, Burtonhall Demesnse and Gortore: see Table 4.1; Fig. 4.4). Other stone macro-tools include nine hammerstones from seven Beaker pits, two grinding stones, three anvils and three quernstones (see Table 4.1 and 4.4). The discovery of some of these tools in one of the pits at Cloghers, Co. Kerry is particularly noteworthy: this pit contained two beaker sherds, 11 flint flakes and 534 barley grains, as well as a complete polished sandstone axe, a hammer stone and a grinding stone thought to represent a stone axe production kit (Kiely and Dunne 2005).

The only discovery of obvious personal ornaments in a Beaker pit was made at Paulstown, Co, Kilkenny (Fig. 4.5), where 23 disc-beads were found in a large pit containing total of 172 sherds from at least 23 Beakers, charred hazelnuts and cereal remains, as well as flint debitage (Fig. 4.6; Elliott 2009; Grogan and Roche 2009a; Carlin forthcoming). Hazel charcoal from the primary fill of the pit which contained one of these beads produced a radiocarbon date of 2430–2147 BC (UBA 15435: 3821±26 BP). Significantly, this represents the only instance of disc-beads being found in a secure direct association with Beaker pottery in any context in Ireland (see Chapter Six and Nine).

### 4.2.3 Ecofacts in Beaker pits

It is not just artefacts that occur in Beaker pits – a small number of these have also contained burnt and unburnt animal bone and the charred remains of cereals and fruits. Cereal grains — identified as barley, wheat, emmer wheat and bread wheat that usually occur together — have been found with Beaker pottery in 14 pits on 13 sites (see Table 4.5). In some cases, these cereals occur in unusually high numbers and may represent deliberate deposits. One example of this is the pit at Cloghers which was mentioned above and contained 534 grains of barley (Kiely and Dunne 2005). Similarly at Mell, Co. Louth, a
sub-rectangular pit contained 74 barley grains, 86 indeterminate cereals, a wheat grain and three sherds of Beaker pottery (McQuade 2005).

Hazelnuts have been recovered from at least 15 pits on different sites (see Table 4.6). The remains of fruit including crab apples, blackberries, sloes and apples in the form of pips, seeds, stones and endocarps have been found within four pits on four sites (see Table 4.7). Seashells have only been found in one Beaker pit at Aughinish, Co. Limerick (Cleary 2006).

Cremated bone has been found with Beaker pottery in 26 pits on 20 sites; however, these mostly occur (16 pits from 14 sites) as fragments that are too small to be able to be identified as either human or animal bone. For example, at Corbally, Co. Kildare, one pit produced two sherds from a Beaker pot, a thumbnail scraper and highly fragmented burnt bone, while a second pit contained 18 sherds from two Beakers, cremated bone and a barbed and tanged arrowhead. Unfortunately, it was not possible to identify whether any of this bone was human or animal (Purcell 2002). Burnt animal bone representing pig, goat, cow and sheep has been positively identified from 11 pits on eight sites (see Table 4.8). Cremated human bone has been identified from seven pits but in many cases, it is doubtful whether these should be regarded as burials either because the identification of the bone as human is not definitive or the quantity of the bone is so small as to raise questions about whether or not it is the product of ostensibly sepulchral activity (see Table 4.9). Certainly, in no case, was there sufficient bone to indicate any details regarding age or sex.

One of the most clearcut examples of a Beaker pit cremation burial was excavated at Monadreela 13, Co. Tipperary, where a stone-lined oval pit exhibiting evidence for in situ burning contained 110 sherds from at least 10 Beakers, many fragments of cremated human bone, a large quantity of hazelnuts and acorns and a small polished stone axe (Fig. 4.7; Richard O’Brien and Joanne Hughes pers. comm.; Grogan and Roche 2006a). This and some of the other probable examples are discussed in further detail in Chapter Five. However, it is interesting to note that almost all of these possible and probable burials were found in association with evidence for occupational activities, a fact that lends yet more ambiguity to their interpretation.

### 4.2.4 Artefacts found with ‘fine’ or ‘domestic’ Beakers

Returning now to the deposition of pottery in pits, a distinction has often been made between ‘fine’ Beaker and larger or heavier or more informally decorated ceramics referred to as ‘domestic’ vessels; however, these tend to be equally well made and seem to belong to a single ceramic repertoire (Grogan and Roche 2010, 36). This certainly seems to
be the case based on their occurrence in pits. Out of 104 pits on a total of 80 sites, 52 pits contained 'fine' Beakers only\(^9\), 25 contained 'domestic' Beakers only\(^10\), while both occurred together within 26 pits. Those pits producing both types contained a much greater proportion of 'fine' vessels (see Table 4.10), though a greater number of 'domestic' than 'fine' sherds occurred in three pits where the remains of a large Rockbarton type pot was present (see below). The occurrence of pits containing 'fine' only and/or 'domestic' only sherds on sites where both forms of vessel have been discovered may suggest that there was an effort made to exclude certain forms of pottery from certain deposits. These 'fine'-only and/or 'domestic'-only pits generally occur on sites with large assemblages where sherds from different vessels are usually found mixed together. There does seem to have been an element of selectivity involved in the separate deposition of these pots, though the evidence is equivocal and could be explained by issues of chronology or function.

A consideration of the range and quantity of finds (both artefacts and ecofacts) found in pits containing either 'fine' only or 'domestic' only or both 'fine' and 'domestic' Beakers suggests that some distinctions may have been made between these finer and coarser vessels in pit depositions. Both 'fine' only and 'domestic' only pits have yielded very similar material including charcoal, cereals, unclassifyable burnt bone, scrapers and macro stone tools, though the 'domestic' only pits are less likely to contain other artefacts, while pits with 'fine' only Beakers display a wider range of associated finds. For example, arrowheads have been found in pits containing 'fine' only as well as 'fine' and 'domestic' pots, but never with 'domestic' only. Overall, those pits containing both 'fine' and 'domestic' pots contain the greatest quantities and ranges of objects including disc beads and polished stone axes (see Table 4.11). While these observations seem to indicate selective aspects in the deposition of 'fine' and 'domestic' Beakers within pits, the data is too fuzzy and the numbers involved are too low to fully substantiate this.

4.2.5 The deposition of sherds and vessels in pits

A closer examination of the numbers of Beaker sherds and vessels in pits reveals a number of interesting patterns. Many of these features (62%: 87 out of 139) contain ten sherds or less and a sizeable proportion (20%: 29 out of 139) have only produced a single sherd (see Chart 4.5 and 4.6). 28 pits have been found to contain between 50 and 200 sherds, but it is

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\(^9\) Yet 'domestic' Beakers were also present on 16 of these sites

\(^10\) Fine' Beakers were also present on 16 of these sites
extremely rare to find more than 200 sherds in a pit and this has only occurred on five sites: Lismullin, Co. Meath; Dunmoon, Co. Tipperary; Windmill Site 36bii, Co. Tipperary; Gortmakellis, Co. Tipperary and Kilgobbin, Co. Dublin\(^{11}\) (see Table 4.13). Extraordinarily, as many as 696 sherds from a minimum of 38 vessels were discovered within the pit at Kilgobbin.

The majority of pits (82%: 96 out of 118) contain the partial remains of five vessels or less and a single vessel is represented in just over half (52% of 118) of all these features (see Charts 4.7 and 4.8). Multiple pots are seldom found within individual pits, though 17 pits from 17 sites each contain between six and 15 vessels. The remains of more than 15 vessels have only been recovered from five exceptional pits including the aforementioned examples at Kilgobbin, Hill of Rath, Paulstown and Dunmoon (see Table 4.13).

There is no evidence to suggest any correlation between the size or shape of a pit and quantity of sherds or vessels within it. Neither does there seem to be any link between the numbers of fills in a pit and the size of its Beaker assemblage (see Table 4.14). In fact, pits filled with a single deposit occasionally contain the remains of more vessels than those with two or three fills. In many cases, pits containing multiple fills comprise a single artefact-rich deposit in combination with a few layers of clean artefact-free materials that probably represent some dumping of the earthen spoil from the initial digging of the pit (see Garrow 2006, 44). The unusual pit at Kilgobbin represents a unique discovery as this feature comprised six fills, each of which produced multiple sherds and contained the largest Beaker assemblage found in any single feature in Ireland (Grogan 2005c).

As stated above, 62 pits — half of all the pits in this study — contained the remains of just one vessel (see Table 4.15 and 4.16). The number of sherds representing each of these Beakers varies from one to as many as 205 (Table 4.15), but it is most common (55 pits out of 62) for pits containing the remains of single pots to display a sherd: vessel ratio of 8:1 or less. Only six (10%) of the pits containing lone vessels have been found to display a high sherd to vessel ratio (e.g. <14, see Table 4.15, see Rockbarton pots below).

A single Beaker sherd was retrieved from 29 pits and was the only artefact present within most (20) of them. These single-sherd pits generally occur in association with other Beaker features - an isolated pit has only produced a single Beaker sherd in six instances

\(^{11}\) More recently, Eoin Grogan & Helen Roche (2011a & b) identified 224 sherds representing at least 13 Beakers from a pit at Rathmullan 9, and more than 389 sherds and 78 fragments from at least 18 Beakers from a pit at Rathmullan 12 (aka Rathmullan 6), both in Co. Meath. This pottery is not included in this thesis.
Beaker-associated deposition in settlement contexts - part two

(see Table 4.16). Other artefacts found with single sherds are usually lithics; these include scrapers and but predominantly consist of debitage (see Table 4.17). However, a barbed and tanged arrowhead was found along with a flint flake and a single Beaker sherd in a pit at Kilgobbin. While it is tempting to dismiss the discovery of a single sherd as meaningless or completely accidental, the example above suggests that this was not always the case. Instead it seems that the placement of single Beaker sherds in pits formed part of the spectrum of contemporary depositional practices (see discussion below).

An examination of the sherd to vessel ratio per pit (regardless of the number of pots) within 118 pits reveals that the majority of these features contain only a few sherds from any vessel - 49 (42%) pits display ratios ranging from 2:1 up to 5:1 and half that number (26) display sherd to vessel ratios between 6:1 and 10:1. As stated above, approximately a fifth (29) of all pits contains a single sherd from a lone pot (see Chart 4.4). Clearly, most vessels were deposited in an incomplete and highly fragmented state.

This observation is confirmed by the analysis of the sherd: vessel ratio for the pottery from the 27 pits that contain the remains of more than five vessels. In fact, each Beaker is represented by nine sherds or less in 21 of these features. A similar examination of the ceramics from the three pits containing the remnants of between 26 and 30 Beakers reveals that each of these exhibits ratios of 4:1. Overall, it can be concluded that that the majority of Beakers in pits are represented by only a few sherds each. This indicates that the pottery was probably not deposited until sometime after their breakage and that prior to deposition, these vessels may have experienced considerable wear and movement.

4.2.6 Exceptionally incomplete vessels

There is a sizable group of (at least 30) pits which contain the exceptionally incomplete and highly fragmented remains of several vessels each represented by a few sherds. It would be easy to dismiss the partial nature of the assemblages within these pits as the by-product of various post-depositional factors including the truncation of the uppermost parts of pits during modern agricultural activity such as ploughing. While such a scenario may apply to some pits, it fails to account for many of the other characteristics of the artefacts within these features, that are highlighted below. Indeed, based on the discovery of similar fragmentary assemblages within pits located in protected contexts — such as those buried under a barrow at Upper Ninepence in the Walton Basin, Wales (Gibson 1999) — it has been argued in a British context that these pits had not been radically
altered and that the partial nature of their assemblages accurately reflects the originally deposit (ibid; Garrow 2006).

The presence of highly fragmented assemblages with very few refitting sherds in Beaker-pits suggests that there was a time-lapse between the original breakage of these ceramics and their final deposition. Clear evidence for such post-frAGMENTation but pre-depositional interludes is provided by the occurrence of burnt and unburnt, as well as abraded and unabraded sherds deriving from the same vessels in pits that display no evidence for in situ burning. This has been noted at a number of sites such as Monadreela 13, Co. Tipperary, where burnt sherds from one Beaker (Vessel No. 8) were found with conjoining unburnt examples, while another vessel (No. 5) comprised heavily abraded sherds that refit with unworn sherds (Grogan and Roche 2006a). A Beaker (Vessel No. 5) from a pit at Windmill 6BII, Co. Tipperary, was represented by conjoining sherds: some of which were very well-preserved and others that had an abraded exterior (ibid). Another example of this comes from Carrigrohane, Co. Cork, where 65 sherds from two Beakers were found within a pit that had clearly been rapidly formed and contained a single fill. One of these vessels was represented by a burnt portion that exhibited reasonably fresh edges and surfaces suggesting that it was deposited immediately after breakage. However an unburnt portion of the same vessel in the same pit displayed worn surfaces and edges (Grogan and Roche 2005d).

In some cases, these sherds display very little edge or surface damage, while others are often worn or even abraded. However, the extent of this damage is generally less than one might expect to occur, given the high levels of disintegration displayed by the vessels within these pits. Many of the sherds exhibiting signs of weathering have worn surfaces but very little edge-wear. This is aptly illustrated by Eoin Grogan’s (2005) analysis of the 38 Beakers from the large pit at Kilgobbin, many of which had had unabraded edges in combination with surface-damage. He observed that many of those were worn on only one side, some of which displayed localised wear to just a portion of that surface. Collectively, this indicates that the Beaker ceramics found in pits were predominantly redeposited from an accumulation of pottery and other materials such as a rubbish pile or midden where they had enjoyed varying degrees of protection from the elements.

Significantly, these potsherds tend to be distributed throughout the fill or fills of each pit indicating that these were dumped within a soil matrix and there is very little evidence for the individual deposition of specially selected sherds. The presence of tiny pieces of worked flint within many of these Beaker-pits also suggests that materials were not being obtained for deposition from its previous context on a piece by piece basis (Garrow 2006,
43). All of this suggests that most of the materials found within Beaker pits were derived from larger aggregations of settlement debris (see Garrow 2006; Pollard 2000, 365; Case 1995b, 10–11). This conclusion is particularly well supported by evidence from the pit at Kilgobbin which has been referred to a number of times already. This feature contained over 1400 artefacts including 600 sherds from at least 38 Beakers, many of which occurred throughout the two fills of the pit. Sherds from the same pots were repeatedly found in both fills, suggesting that while the contents of the pit represented two separate depositional events, these probably occurred over quite a short space of time. Indeed, on both occasions, the deposits found in the pit were obtained from the same accumulation of occupational debris. The presence of unusually large quantities of lithics including microflakes and tiny fragments, almost none of which could be refitted suggests that the material in the pit represents the deposition of scoops taken from a collection of occupational detritus (Milliken 2005).

4.2.7 Structured deposition

Although, many Beaker-pits clearly contain dumps of material derived from another context, a few of these also display evidence for ‘formalised’ or structured deposition such as that described by Richards and Thomas (1984, 192), involving the deliberate selection and/or arrangement of artefacts within a feature. For example, at Doonmoon, Co. Tipperary, a pit contained two hundred sherds representing the remains of up to 23 mainly incomplete Beaker pots, as well as 3 heat shattered pieces of flint with a small mixture of silty clay. Few of the vessels were complete on deposition but some of the larger pots appeared to have been set inside each other with the outermost example inverted over the whole deposit. A greenstone axe was found among the sherds near the base of the pit (Gowen 1988, 53–4). At Barnagore, Co. Cork, two water–rolled bolster-shaped stones appear to have been deliberately placed in an upright position within a Beaker pit (Danaher 2003).

At Rathmullan 12 (a.k.a. Rathmullan 6), Co. Meath, the primary fill of a large pit produced 33 sherds representing 10 Beakers (Grogan and Roche 2011b). Within this deposit, a distinct lens of black charcoal-rich clay was identified that yielded a large amount of (unidentified) burnt bone, two small worn Beaker sherds and 31 well-preserved conjoining sherds from a comparatively intact Grooved Ware vessel. A sample of the burnt bone returned a radiocarbon date of 2470–2200 BC (SUERC-31908: 3855±35 BP). The presence of so many sherds from the Grooved Ware vessel indicates that this pot was specially selected for deposition and may have been relatively undamaged at this time. Its
appearance within a distinct localised layer suggests that it was deliberately placed into this Beaker pit. The Grooved Ware pot was almost certainly not contemporary with these Beakers (see dating of the demise of Grooved Ware in Chapter Eight) and appears to represent an anachronistic object taken from elsewhere to be deposited within this pit.

The presence of special or socially significant objects such as polished stone axes, polypod bowls, barbed and tanged arrowheads and caches of scrapers within pits also suggests that materials were not simply being dumped into these pits. Unusual discoveries such as the polished stone axe manufacturing kit in a Beaker-pit at Cloghers or the 23 disc beads from another Beaker-pit at Paulstown indicate that certain types of objects were specially selected for deposition. Similarly, pits containing high numbers of flint tools but very little debitage such as that at Rathdown or caches of cereal grains may also indicate the careful deposition of particular materials within pits. The particular treatment of Rockbarton pots discussed below may represent a similar type of depositional practice.

4.2.8 The selective treatment of Rockbarton pots

There are only 23 pits which display high sherd: vessel ratios (e.g. <10:1; see Chart 4.4), 60% of which contain a maximum of just three pots, while the remains of a solitary vessel are present within another 26%. This seems to indicate that a greater proportion of a vessel's remains are likely to be found in a pit that contains very few pots. Significantly, seven of the 23 pits exhibiting high sherd: vessel ratios contain remnants from large bucket shaped pots with cordons below the rim, often referred to (in an Irish context) as Rockbarton pots (Case 1961; Grogan and Roche 2010). Indeed, those pits containing this type of Beaker tend to produce more sherds per vessel than pits containing other Beakers (see Table 4.18). It is possible that the presence of a greater number of sherds from specific Rockbarton pots in pits can be partially attributed to the greater size of these vessels. However, the repeated discovery of substantial portions of numerous adjoining sherds from Rockbarton pots that display less evidence for post-depositional damage than other Beakers suggests that these may have received particular depositional treatment (Fig. 4.9).

For example, at Lismullin, Co. Meath, a pit contained 205 sherds derived from a large Rockbarton pot which displayed evidence for repair (O'Connell 2009; Grogan and Roche 2009c). At Kilmainham 1B, Co. Meath, a near complete Rockbarton pot was found in a pit with half of the vessel occurring in situ in the centre of the pit (Fig. 4.8; Bayley 2010; Grogan and Roche 2009b). Another Rockbarton pot was discovered at Cluntyganny, Co.
Tyrone, as an almost complete inverted vessel within a stone lined pit (Brennan et al. 1978). This vessel which is considered to resemble the Dutch type of Beaker known as a potbecher Alison Sheridan (pers. comm.) is very similar to a further such pot from Frankfort, Co. Wexford. At Kilgobbin, 46 sherds from the upper portion of a Rockbarton pot were retrieved from the aforementioned unusual pit (Grogan 2005c, see Fig. 4.9).

The Frankfort Rockbarton pot comprised 160 sherds and many of these conjoined. They were recovered from a pit containing a number of big stones, a large quantity of charred cereal grain and hazelnut shells, as well as 30 sherds from two ‘fine’ Beakers. Although this pit displayed evidence for in situ burning, none of the sherds had been burnt and most of the pottery only displayed a moderate amount of wear, although a few sherds from the Rockbarton pot were quite abraded (Grogan and Roche 2008a). This suggests that these ceramics had experienced different events in intermediate contexts, after their breakage but before their final deposition. The Rockbarton pot had been broken for some time during which, some sherds were subjected to abrasion, while others enjoyed partial protection from the elements.

On the whole, the evidence for the deposition of Rockbarton pots within pits indicates that these were often treated in a very deliberate and selective manner that differs from that of other Beakers, particularly ‘fine’ vessel. While the presence of multiple and often conjoining sherds from a single pot suggests that these were deposited very soon after breakage, the evidence from Frankfort suggests that this was certainly not always the case. One possibility is that these particular pots may have been specially selected from a larger assemblage of broken Beakers for deposition.

4.2.9 Case-study: Newtownbalregan 2 and Faughart 6, Co. Louth

Such is the complexity of Beaker-pits, that it is difficult to capture the essence of their character using quantitative methods alone. To gain additional insights into Beaker pit deposits, we will now examine two case studies from Newtownbalregan 2 (Bayley 2009a) and Faughart 6, Co. Louth (Hayes 2007). These sites are situated 5kms from each other within a low-lying undulating landscape (c. 20–40m O.D) to the west of Dundalk Bay and south of the Carlingford Mountains. Beaker pottery has been found on a number of sites within their immediate locale and the north western extent of the central plain of Co. Louth was clearly a focus of intense activity from 2400–2000 BC. These sites were excavated in 2005 in advance of the construction of the Dundalk Western Bypass.
A Beaker pit was excavated in combination with aceramic pits and postholes at Newtownbalregan 2 (Fig. 4.10). A near complete polypod bowl — that had been intact when deposited — in an upright position was found within a shallow pit (Fig. 4.11). Right beside this, was an oval pit containing 133 sherds derived from at least 11 Beaker pots (Grogan and Roche 2005a) that was filled with four separate deposits and had large stones located at its base (Fig. 4.12). Numerous artefacts were recovered from its charcoal rich basal layer – 126 sherds representing the partial remains of at least 10 Beakers and 30 lithics, including a considerable number of unworked pieces as well as two thumbnail scrapers, a small cutting tool and a small number of burnt bone fragments (Nelis 2009a). One of the overlying deposits contained three sherds and two pieces of flint debitage. Only four Beaker sherds were found in the uppermost fill. Alder charcoal from the primary deposit produced a radiocarbon date of 2190–1890 BC at 2σ (WK-18558: 3649±49 BP).

The presence of unburnt pottery and lithics in deposits containing charcoal and burnt bone within a pit displaying no evidence of burning also indicates that these materials were found in a derived position. The condition of the lithics in the pit ranges from the heavily abraded or patinated to fresh and some of the worn flints suffered from post-use damage (Nelis 2009a). This indicates that they had been exposed to the elements for some time before they were deposited (Carlin 2009). Only a small number of sherds from each of the 11 Beakers were present within the pit, suggesting that these have been redeposited from another context. Yet many of the sherds could be rejoined, and they did not display any edge-wear abrasions indicative of pre- or post-depositional disturbance (Grogan and Roche 2005a). This implies that they were completely protected from post-breakage weathering within the pre-pit context from which they were obtained for deposition. A midden seems to represent the most likely type of context from which these were derived.

The horizontal and vertical distribution of artefacts throughout the fills of the pit and the occurrence of tiny pieces of worked flint strongly suggests that these were deposited within a soil matrix. Sherds from the same vessels occurred within the different pit-fills (Grogan and Roche 2005a). A flint scraper and a bipolar flake which were almost certainly derived from the same core were also found within the pit (Nelis 2009a). All of this suggests that these layers were rapidly formed and may have been derived from the same source (Carlin 2009). The pit itself displayed no evidence for previous use such as erosion to the sides and base. Instead it appears to have been dug and subsequently backfilled.

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12 Sherds from the same pots (Vessel number 5 and Vessel number 11) were found in both the first and the last fills
over a very short timescale. This points towards the conclusion that this pit may have been created specifically to receive the deposits which filled it.

Although 11 Beakers were found in the pit, there is not much evidence to indicate that the activities in which they featured were of extended duration. Only a very restricted range of tools were present and these represented a very low proportion of the total chipped stone assemblage. This suggests that activity in this location was short-term. This is supported by the lack of evidence for other indicators of residency such as cereal cultivation (e.g. carbonised cereal grains and quernstones). While the lack of evidence for long term occupation may result from poor site-preservation, signs of excessive disturbance or truncation were not noted.

Despite the lack of clear evidence for residential settlement in this location, the quantities of material retrieved from the pit, as well as the worn nature of the lithics, the apparent collection of materials within a midden and its subsequent deposition, all certainly suggests some level of time-depth to the activities conducted here. It does remain possible that these materials were brought here from elsewhere specifically to be deposited. However, a more plausible interpretation may be that this site represents the location of a short-term camp which may have been periodically reoccupied for peripheral task-specific activities or for social gatherings such as feasts. Support for the latter suggestion is provided by the presence of the near complete polypod bowl in one pit and the nature of the Beaker pottery from the other pit.

These Beakers had the appearance of very ‘fine’ thin-walled pottery yet they were poorly made and inappropriate for extended use (Grogan and Roche 2005a). This stands out as unusual compared to the majority of Irish Beaker pottery which is generally very well-made (Grogan and Roche 2005a). It may be the case that the Newtownbalregan ceramics were specially produced for a specific occasion, such as a feast or celebration. The occupational debris within the pit may represent the remains of a feast that were stored before being buried at a later stage perhaps as a commemoration of this event. The Newtownbalregan pottery does seem reminiscent of those Beaker pots from British and French funerary contexts which tend to be poorly made but highly decorated (Boast 1995, 71; Salanova 2000, 174). It has been suggested that such pots were specially made for funerary purposes and represented something separate to everyday pottery (Apsimon 1969, 53; Gibson 1984, 77; Needham 2005, 175).

At Faughart Lower 6, excavations revealed seven pits of similar form that each contained quite a uniform fill (Fig. 4.13 and 4.14; Hayes 2007). Two of these [C3] and [C5]) produced Beaker pottery comprising 36 sherds representing seven ‘fine’ and ‘domestic’ Beaker pots
(Roche and Grogan 2006). Four of the pits (two containing pottery and two without) were radiocarbon dated and these returned determinations ranging from 2800–2400 BC indicating that the various features were broadly contemporary. While five of the pits were aceramic, one [C11] contained a flint flake and a two yielded small quantities of cremated animal bone. The aceramic pits were located at least 5m away from the two Beaker-pits which were situated only 0.10m apart at the eastern part of the site.

One Beaker-pit [C3] was filled by a single charcoal-rich deposit with occasional flecks of cremated animal bone, hazelnut shells, and 27 sherds derived from six Beakers. Hazel charcoal returned a radiocarbon date of 2850–2460 BC (Beta 217946: 4030±50 BP). One of these vessels was an AOC Beaker — one of the earliest styles of Beaker in Ireland — represented by one sherd and three fragments (Fig. 4.15; Roche and Grogan 2006). The other Beaker-pit [C5] contained a dark charcoal-rich deposit with occasional flecks of cremated animal bone, and nine sherds derived from three vessels.

The ceramic assemblage from both of these pits was fragmented with only a few weathered and abraded sherds representing each vessel. All of this suggests that these Beakers had been exposed in an intermediate context such as a midden before their ultimate deposition within these pits (Roche and Grogan 2006). Sherds from the same vessel were actually found in both of these pits and this material connection between the features may indicate that the debris was obtained from the same source. Similar to the pits at Newtownbalregan, the exact reasons underlying the deliberate re-deposition of occupational debris remains unclear, the relationship between the contents of these pits and the activities conducted in this location seems to be quite ambiguous. Some insight is offered by the fact that the aceramic features on the site seem to be broadly contemporary with the Beaker-pits. This suggests that the placement of Beaker pottery in pits was quite selective. Significantly, it also implies that the “empty” aceramic pits, so often found in association with Beaker pits form part of the spectrum of Beaker-associated activities on these sites.

4.2.10 Overview of results from analysis of pits

Overall, it is clear that pits played a major role in Beaker depositional practices – these represent the context in which this ceramic is most commonly found. Significantly, these features seem to have been specially created to receive deposits of Beaker pottery and other occupational materials. Thus, it is unsurprising that on so many sites, these are often the only feature containing Beakers.
Although Beaker-pits generally contain occupational debris that has been derived from a greater accumulation, there is much variety in the composition of their contents. A small number contain definite or probable human bone. Some appear to display the ‘formalised,’ selective or structured deposition of either precious objects such as polypod bowls or of quite large quantities of artefacts. Many appear much more mundane, often containing only a few sherds. The absence of so many of the typical Beaker artefacts such as bracers, copper daggers, gold ornaments, V-perforated button from so many of these pits seems to emphasise their quotidian character.

The broad range of different forms of deposition within these features complicates the recognition of any purely ‘domestic’ component but there does appear to have been a strong link between these and occupational activity. The long-standing reductionist and functionalist interpretations of these features as mere storage or refuse pits are incorrect. The quantity and character of the materials within these pits, as well as the pits themselves suggest that these deposits were not just ad-hoc events (Pollard 1999, 89). These seem to represent highly meaningful and deliberate actions. All of this, including the function of these pits, the meanings behind the deposition of materials within them and their relation to settlement are discussed below.

4.3 **SPREADS, SURFACE-DEPOSITS AND MIDDENS**

Spreads such as those discussed in Chapter Three from Brú na Bóinne (see Section 3.2) form an important aspect of the repertoire of what has traditionally been considered as Beaker settlement contexts in Ireland. The curious occurrence of such spreads at places like Knowth and Newgrange raises the question of whether or not those deposits should be considered alongside those from non-monumental settings. The approach taken in this study has been to consider all these deposits together so as to allow any differences or similarities to emerge.

At least 39 Beaker spreads or deposits have been excavated at 30 sites. Unfortunately, 14 of these sites were excavated before 1990 with a further five being excavated prior to the year 2000. Approaches to excavation, recording, analysis and presentation of material from archaeological sites changed radically over this period (see Chapter One, also see Section 3.2). Thus, relevant detailed information is lacking or is not readily available for many of these sites and it is not possible to conduct in-depth analysis of the formation processes that resulted in all of these Beaker deposits. In some cases, such as Newgrange and Monknewtown (see above), it has not been possible to disentangle the Beaker element
from the admixture of multi-period evidence. Despite the questionable chronological integrity of some of these deposits (see Section 3.2), they are included here because it is believed that they genuinely represent the above-surface deposition of Beaker artefacts.

The majority (20 out of 27) of excavations of above-surface Beaker occupational deposits revealed only one spread per site, though an exceptional five spreads occurred at Knowth (see Table 4.19). Spreads are generally associated with a range of other Beaker features including postholes, slot trenches and gullies, though they are most often found with Beaker pits (12 sites). Spreads also occur as isolated features or as the only one containing Beaker pottery on at least nine sites (see Table 4.20).

4.3.1 The shape and size of spreads

The majority of spreads display an amorphous shape that often owes much to the particular factors that have enabled its preservation such as the occurrence of a hollow or depression. They range greatly in length from the longest example of 25m at Kilgobbin and 21m at Knowth Concentration D down to much smaller instances – the smallest of which is 1m long (Fig. 4.16). These survive to varying heights above ground-level with the highest example occurring at Mell, Co. Louth (McQuade 2005) which displayed a height of 0.40m (see Table 4.21).

4.3.2 The artefactual content of spreads

At least 9721 sherds from a minimum of 567 Beaker vessels have been found in 39 spreads on 30 sites in Ireland. Spreads from 13 of these sites contained more than 200 sherds, however, the amount of Beaker pottery in each spread varies greatly (see Table 4.22). Large quantities were recorded in the deposits forming the ‘Beaker layers’ at Newgrange (5000 sherds) and at Concentration D at Knowth, where 2072 sherds deriving from at least 104 Beakers were excavated (Eogan 1984, 286-304). Another large amount of Beaker pottery (1043 sherds) was discovered within a similar spread — Concentration C — at Knowth (Eogan and Roche 1997, 197, 202-211). In contrast to this, 21 spreads produced 50 sherds or less, but 14 of these yielded 10 sherds or less, while three contained only a single sherd. Information regarding the number of vessels was only available for 17 spreads: a single vessel was found in nine of these deposits, while larger quantities ranging from 12 to 104 Beakers were represented in eight spreads.
The remains of five polypod bowls were discovered within a spread on four sites: Newgrange (Cleary 1983, 74, fig. 25, group 15), Mell, Co. Louth (McQuade 2005), Rathmullan, Site 10, Co. Meath (Bolger 2002) and Newtownlittle, Co. Dublin (Grogan and Roche 2005c). At Newtownlittle, the spread was relatively small (7.30m x 3.40m x 0.16m) and contained 350 sherds derived from at least 20 Beaker pots, including a Beaker dish and five pieces of flint debitage (Ward 2006). A pit that was dug into the top of this spread also produced sherds and a foot from another polypod bowl. At Mell, the polypod sherds came from a series of overlying Beaker-associated deposits (see below).

Other forms of pottery of earlier or later date have been found in six Beaker spreads. For example, both Concentrations A and C at Knowth contained Grooved Ware. In concentration A, Grooved Ware and Beaker came from the same horizon; however, the Beakers were mainly found within the north western extent, while the Grooved Ware was only found in the north eastern part (Roche and Eogan 2001, 129). A small number of sherds (six sherds of two vessels) from Irish Bowls of the Food Vessel tradition have been found in spreads with Beaker pottery at Roughan Hill (Jones 1996; Roche 1999) and Ross Island (Brindley 2004). Vases were discovered with Beakers in a spread at Laghaunstown site 78, Co. Dublin, within a deposit (2.8 by 3 by 0.20m) of dark black brown sandy silt with frequent flecks of charcoal, occasional flecks of burnt bone and animal teeth which filled a shallow irregular hollow. It produced 33 Beaker sherds, 85 sherds of Vase and Cordoned Urn pottery, as well as 122 flint pieces including burnt and unburnt split pebbles, bipolar cores, scrapers and other retouched pieces. A radiocarbon date of 1690-1520 BC (OxA 12751: 3341±31 BP) obtained from charcoal within the midden deposit may suggest that the Beaker and Vase pottery were in a residual position. However, it is also possible that this date represents the continued deposition of occupational debris at this exact place throughout the Early Bronze Age.

Lithics have only been found in 13 spreads on 11 sites and the most common retouched artefacts within these assemblages are small convex scrapers. 152 of these have been found within nine spreads on seven sites, thereby representing the most common Beaker-associated artefact in this type of context. However, the majority of these tools — 94 in total — did occur solely within the midden deposits at Roughan Hill (Jones 1998a and b; O’Hare 2005). Although 29 examples were found in the spread forming Concentration C at Knowth and another nine were recovered from the deposits at Mell, such large volumes of scrapers did not occur elsewhere.

Spreads have produced at least nine arrowheads (including two barbed and tanged and one hollow-based example that were discovered within the concentrations at Knowth and
three barbed and tanged projectiles from the “Beaker layers” at Newgrange: Lehane 1983, fig. 64, nos E56: 781, 675 and 1025). Excavations of the Roughan Hill midden (Jones 1996), and the spreads of Beaker-associated habitation debris at Lough Gur Circle K and Site 10 (Grogan and Eogan 1987, fig. 63: 14a, fig. 70:1112) produced a single hollow-based arrowhead each (see Table 4.23). Two flint knives came from the spreads at Haggardstown (McLoughlin 2009) and Mell (McQuade 2005). A single polished stone axe was found within the spread of occupational debris and ore processing spoil at Ross Island and 38 polished stone axe flakes came from the Beaker midden at Roughan Hill. Large numbers of hammerstones were also present within the deposits at Ross Island. Other stone macro-tools found within spreads include two quernstones and a honestone.

A range of items have been discovered in this group of spreads (see Table 4.23) that are rarely found in association with Beaker pottery in Ireland and certainly not in apparently 'domestic' contexts or even in the course of archaeological excavations (see Chapter Five and Six). At Rathmullan, Site 10, a fragmentated bracer (Type A2 -2TPC) occurred within a deposit along with 250 Beaker sherds, the foot of a polypod bowl and lithics (Fig. 4.17; Bolger 2001). An enigmatic lead rod was present in the spread at Mell (McQuade 2005). A gold sundisc, part of a copper chisel and a Lough Ravel flat copper axe were discovered within the spread of Beaker-associated habitation debris that lay under a Later Bronze Age terrace wall at Site D, Lough Gur (Ó Riordáin 1954, 410–12) and a Killaha bronze flat axe (O’Kelly and Shell 1979) was found in close proximity to a putative metalworking area in the ‘Beaker’ layers at Newgrange. However, the chronological integrity of these layers is highly questionable (see Section 3.2).

Surprisingly, only a very small amount of ecofactual material has been recovered from these deposits of occupational debris. Barley cereal grains were identified within the Beaker spread at Mell. Faunal remains in the form of cattle bones were recorded at Ross Island, while sheep or goat bones came from the deposits at Roughan Hill and unidentifiable burnt bone occurred within the spread at Mell. The only human remains from any of the spreads were found under the cairn at Moneen where burnt and unburnt fragments of a human skull were found within a deposit of Beaker habitation debris. However it seems likely that these were displaced from the large central cist or chamber whose contents included the partial remains of two inhumations (see discussion of this monument in Chapter Five).

Three spreads contained ‘domestic’ Beakers only and another three produced 'fine' only; however all of the assemblages from these deposits comprise less than 10 sherds and the absence of ‘domestic’ or 'fine' from these may be due to the small number of ceramics
found within them. Five spreads produced both 'fine' and 'domestic' Beakers and these tended to be much larger assemblages (see Table 4.24). Unfortunately sufficient information was not available from 28 of the spreads and so it would be erroneous to read too much into the numbers of 'fine' or 'domestic' Beakers occurring in such contexts.

Sufficient information was available to calculate the sherd: vessel ratio for 19 spreads (see Table 4.22). Eight spreads display a ratio of less than or equal to 5:1, five have ratios ranging between 6:1 and 10:1, while higher ratios of up to 19:1 occurred at six spreads including the Newgrange 'Beaker layers' (18:1), Knowth Concentration D (19:1) and Lough Gur site 10 (19:1).

Interpreting spreads of occupational debris is extremely difficult and it is rarely possible to discern the extent to which the excavated characteristics of these spreads accurately reflects their original nature when they were formed c. 4400 years ago. Deciphering whether these spreads represent trampled habitation layers or deliberate deposits of material in rubbish piles is very complicated and information pertaining to their contents is rarely sufficiently detailed to enable analysis that could shed further light on their formation or purpose.

Apart from Roughan Hill with its polished stone axe flakes and scrapers – there is no spread that displays evidence of the refuse being repetitively created by a particular activity. Instead they seem to comprise general occupational debris, though in comparison to other apparent settlement contexts such as postholes and pits, a far greater range of artefacts occur in these deposits. Items such as bracers, copper axes and gold discs are rarely found in the course of excavations (see Chapter Nine).

4.3.3 Case study: Mell, Knowth ‘Concentration E’ and Newtownlittle

The large assemblages of pottery from deposits at sites like Knowth and Newgrange and — in a less monumental context — at Mell and Newtownlittle stand out in contrast to other spreads, only half of which produce more than 10 vessels compared to the 104 Beakers within Concentration D at Knowth. A closer examination of the deposits at Mell, Knowth Concentration E and Newtownlittle, as well as the condition of the Beaker pottery within these may shed some light on the formation processes involved in their deposition. Hopefully it may be possible to extend (by inference) some of these findings to the other spreads.
Excavations near the base of a sloping hill at Mell, Waterunder, Co. Louth in the Boyne Valley during 2005 uncovered a multi-period site dating from the Early Neolithic to the Post medieval period, including Beaker and Late Bronze Age activity (McQuade 2005). Definite Beaker-associated features included a spread, two pits and a posthole. An aceramic burial that is broadly contemporary with the Beaker activity was also excavated on this site (see Chapter Five).

The spread comprised four extensive (10 by 5m) deposits that overlay each the other to a height of 0.40m and sealed a metalled surface (9.5 by 3.2m; Fig. 4.18). The layer of compressed stone occurred within a deep hollow that had previously been in-filled with a deposit of sterile boulder clay. However, a slight depression remained and this seems to have protected the overlying deposits from damage such as ploughing and ensured their survival in this location (Fig. 4.19).

The northern and eastern extents of the spread were defined by a discontinuous arc of four curvi-linear gullies. The exact stratigraphic relationship between the spread and these linear features is unclear, though it seems that they may post-date the deposits. This is suggested by the location of the gullies which seem to respect the spread by occurring along its edges. The occurrence of a few Beaker sherds within the fills of the gully that belong to vessels occurring within the spread also implies that the deposit existed before the linear features. For example, one linear contained a single fill that produced six sherds from three vessels, each of which were present within the spread. However, another of the gullies returned a radiocarbon determination of 3820–3690 BC (WK-17459: 4998±41 BP) which may suggest the Beaker pottery was intrusive. Strangely, no non-Beaker materials were retrieved from any of these linear features and no Early Neolithic artefacts were found anywhere during the excavation.

The deposits forming the spread produced 471 sherds from a minimum of 38 Beakers (30 'fine' and 8 'domestic'), seven sherds from a polypod bowl, as well as a lead rod, fired clay wasters, burnt bone and carbonised cereals. A total of 38 lithics were found, including a core, 26 flakes, 8 convex scrapers and a flint knife. Modified tools represented 23% of the total lithic assemblage - a percentage of between 10 and 15% are considered indicative of a highly residential element (see Schofield 1991). Ash charcoal from one of the deposits produced a radiocarbon date of 2470–2290 BC (WK-17457: 3906±33 BP).

On average, there are roughly 12 sherds per vessel (including un-assigned sherds), but vessels are predominantly represented by fewer than 10 sherds (26 examples) and eight of those were comprised one sherd each. Overall, most of the vessels in the spread are highly fragmentary (Fig. 4.20). However, six Beakers consisted of 10 to 20 sherds, while
another six vessels — No. 6 (24 sherds), No. 10 (28 sherds), No. 18 and 19 (32 sherds each), and No. 20 (37 sherds) — are represented by more than 20 sherds each (see Table 4.25). The sherd: vessel ratio for these 12 Beakers is considerably higher than that for pottery occurring in pits, which generally (65%) displays a ratio of less than 10:1 (see section 4.2.5). The discovery of three Beakers in the spread comprising more than 30 sherds each is certainly noteworthy.

The presence of sherds from the same vessels within each of the deposits suggests that the spread was created over a short period of time through the deposition of materials derived from the same source. However, the low sherd: vessel ratio of many of the vessels from the spread, as well as the occurrence of a large number of fragments (89) and small sherds (113) that could not be assigned to any particular vessel indicate that this assemblage is quite partial. The fragmentariness of the pottery suggests that a period of time elapsed after the vessels' breakage but before its eventual deposition during which it was exposed to weathering. This is borne out by Helen Roche and Eoin Grogan's (2005) observation that a large proportion of the sherds from this spread displayed worn edges and surfaces and very few of the sherds could be refitted. All of this indicates that post-breakage, this assemblage was in an exposed location for some time, where it was subject to a considerable level of damage, before being gathered for deposition within the spread, which would have provided protection to most of the pottery.

Enigmatically, the high number of pots (38) combined with the high number of modified tools both present within this spread suggest the occurrence of a considerable level of occupation at this location in terms of its intensity and duration (see Hill 1995), yet very few other features were found containing Beakers on the site. Overall, there is little evidence to inform us about the nature of the activities that generated all of this occupational debris and how it came to be deposited here.

Excavations at Newtownlittle, Co. Dublin (Ward 2006), discovered multi-period activity dating from the Middle Neolithic, Early, Middle and Late Bronze Age. This site was situated at the base of a gentle slope at the foot of the Three Rock Mountain. Beaker-associated features consisted of eight pits, two of which were sealed under a deposit containing a large assemblage of Beaker pottery. This spread was situated within a slight depression that seems to have resulted in the survival of the deposit in this location. Large granite boulders were also very prevalent across the site and these seem to have deterred modern agricultural activities such as ploughing that might have damaged these deposits (Fig. 4.21).
The spread was relatively small (7.30m x 3.40m x 0.16m) and comprised a number of separate deposits (Fig. 4.22). In total, it contained 362 sherds derived from at least 23 Beaker pots (16 'fine' and 3 'domestic'), including a Beaker dish, two plain Beaker bowls and a polypod bowl (Ward 2006) as well as five pieces of flint debitage. Similarly to Mell, sherds from many of the pots occurred throughout the deposits suggesting that these accumulated rapidly over a short amount of time. Eoin Grogan and Helen Roche (2005c) observed that although this pottery is well preserved and unabraded, some wear was present on the surfaces and edges on many of the sherds. The presence of the edge-wear resulted in a very small number of re-fitting sherds. The average sherd to vessel ratio (including un-assigned sherds), is 16 sherds per vessel. Most of the vessels are represented by fewer than five sherds (16 examples) and six of those comprised one sherd each, while three examples consisted of five to 10 sherds. Only four vessels — No. 13 (11 sherds), No. 25 (15 sherds), No. 14 (22 sherds), and No. 26 (25 sherds) — are represented by more than 10 sherds (see Table 4.26).

Clearly much of the assemblage within the spread is quite fragmentary and this is further indicated by the occurrence of a large number of fragments (204) and sherds (200) that could not be assigned to any particular vessel. The overall character of these Beakers indicates that a period of time elapsed after the vessel's breakage but before its eventual deposition, during which it was exposed to weathering. This pottery was subsequently gathered together and deposited into the protective environment of the spread. Akin to the Mell spread, not all of the Newtownlittle pottery was highly fragmented and two pots — vessels 14 and 26 — displayed higher sherd: vessel ratios than that occurring in most other settlement contexts including pits.

At Knowth, Concentration E was located on the southeastern part of the hill and comprised a rectangular shaped area (16.5 by 10 by 0.14m) of black organic earth that overlay the natural boulder clay and extended right up to the base of the kerbstones of the main mound (Eogan and Roche 1997, 241; see Section 3.2.4; see Fig. 3.9). This spread contained 341 sherds from 45 Beaker pots and 100 lithics composed of flint cores, debitage, 7 unmodified tools and 30 modified tools including eight thumbnail scrapers and one barbed and tanged arrowhead (ibid, 241–260). The average number of sherds per vessel is seven. The majority of pots were represented by fewer than five sherds (27 examples) — ten of which comprised one sherd each — while seven examples consisted of six to ten sherds. Only 11 vessels are represented by more than 10 sherds and the highest number of sherds from a pot within the assemblage was 16 (see Table 4.27). Although the condition of the Knowth pottery is not explicitly stated (Eogan and Roche 1997), there were very few refitting sherds in the assemblage and this may suggest that the edges of most of the sherds had
experienced some wear. Like the spreads at Mell and Newtownlittle, there was a large number of fragments (165) at Knowth (ibid) and its ceramic assemblages are the most fragmentary of the three. It displays the lowest average sherd: vessel ratio. In addition, its highest sherd: vessel ratio of 16: 1 is much lower than those of 25:1 at Newtownlittle and 37:1 at Mell.

4.3.4 Overview of results from analysis of spreads

The discovery of surface-deposits comprising occupational debris in association with large volumes of Beaker pottery represents a recurrent but poorly understood feature of the Irish archaeological record. The large amounts of highly fragmented pottery present within some Beaker spreads might give the impression that these deposits represent habitation surfaces or trample zones where pottery and other debris accumulated over an extended duration due to the conduct of occupational activities in that location. However, the sherd surfaces of the pottery from spreads does not display the considerable levels of abrasion usually found on ceramics from floor surfaces. Vessels represented by numerous sherds such as one would expect to retrieve from in situ deposits are rarely found in spreads.

Based largely on the three case studies, it has been shown that the sherds in these spreads were not recovered in situ deposits. Each of these spread can be characterised as containing multiple Beakers most often represented by a few sherds, though a small number of Beakers consist of a greater number of sherds. The fragmentary and partial nature of the pottery indicates that this does not represent primary (in situ) refuse but rather that it has been collected from elsewhere. The condition of these sherds implies that these were obtained from a context where they had been exposed to weathering before being gathered together in piles that protected most of the pottery from further wear. The occurrence of sherds from the same vessels in different layers within these three spreads implies that these deposits did not build up slowly over the course of an occupation. Instead the assemblages within each of these spreads are highly partial aggregations of material that were deliberately brought together. The presence of artefacts rarely found in settlement contexts such as polypod bowls, a bracer, arrowheads, a gold sundisc as well as metal axes within spreads suggests that these were also regarded as suitable repositories for these items.

Upstanding features such as spreads are by their nature particularly vulnerable to destruction or alteration. Most of the Beaker spreads that have been found, seem to owe their survival to mitigating factors such as the construction of later features over or around them (see Sections 3.2 and 3.7.1) or their occurrence in a depression as was the
case at Mell or on terrain that was unsuitable for modern ploughing, like at Newtownlittle. It may be significant to note that most spreads in this study were excavated before 1997 rather than after it, when the amount of development-led archaeological activity in Ireland greatly increased (see Chapter One). Much of these recent excavations occurred in advance of road building and other construction activity. Accordingly, these were mainly focused upon lower-lying areas that have generally been subject to extensive ploughing or land-improvements, rather than upland locations where upstanding deposits are more likely to survive.

Overall, it has been shown that the deposition of occupational debris in large piles forms part of Beaker-associated settlement practices in Ireland. The sizable quantities of pottery present within some of these spreads suggest that they may have functioned as repositories akin to middens for the storage or deposition of occupational debris. However, Needham and Spence (1997) have critiqued the uncritical application of this term to all spreads of refuse. They characterise middens as the product of the deliberate and sequential accumulation of refuse at one location (Needham and Spence 1997, 80). None of the spreads within this study have displayed convincing evidence for the sequential deposition of material, but this may be strongly related to taphonomic factors. In many instances, it is plausible that episodic dumping occurred at these places but that only the bottom-most layers of these features have survived. Regardless of what labels are assigned to these deposits, their relationship to settlement activity remains unclear and this is tackled in greater detail below (Section 4.5).

4.4 BURNT MOUNDS

Burnt mounds, also known as *Fulachta fiadh* are the most common prehistoric monument in Ireland with over 7,000 examples identified throughout the country (Power 1997). They generally consist of a ploughed-down mound of burnt stone and charcoal overlying a number of consistently present features: a trough, traces of fires, sometimes represented by a formal hearth and pits. These mounds are composed of the debris formed by the use of hot-stone technology to heat liquid. Thus, although the exact function of burnt mounds remains unknown, it can be inferred that they were used to boil water. Given this water-heating function, it is of little surprise that sites of this type are most frequently located in low-lying poorly drained areas, particularly on the interface between wet and dry land in places that were rarely deemed suitable for settlement (e.g. Power 1990). Experimental work by O’Kelly (1952) demonstrated that these could represent cooking places, which may have been utilised for communal feasting. However, the consistent absence of
artefacts or ecofacts from burnt mounds led to alternative hypotheses regarding their function. These include the suggestions that these sites could have been bathing places or saunas (Barfield and Hodder 1987) or that they may have been used in textile-processing and leather working (e.g. Jeffrey 1991). While uncertainty exists regarding the exact relationship between burnt mounds and Bronze Age habitation, these are included here because of the growing body of evidence that these formed an integrated part of the settlement landscape (see below; Cooney and Grogan 1999, 141).

4.4.1 Beakers and burnt mounds

Recent investigations in Ireland have revealed an exponential increase in the use of hot stone technology in the Final Neolithic/Early Bronze Age. Examples include the results of excavations in advance of the M4 motorway (Carlin et al. 2008), the Bord Gáis Eireann Gas Pipeline to the West (Grogan et al. 2007) and the Sligo Inner Relief Road (Danaher 2007). Significantly, despite the hundreds of burnt mounds dating from 2600–2000 BC, Beaker artefacts are rarely found during the excavation of these sites. This is unsurprising given the marked scarcity of finds of any date from burnt mounds (see Cherry 1990). However, Beaker pottery has been found during the recent excavation of burnt mounds at six sites: Cherrywood (O’Neill 2000) and Carmanshall (Delaney 2001), both in Co. Dublin, Charlesland Site 1C (Phelan 2004) and Ballyclogh (Carlin 2006), both in Co. Wicklow, Ballyvollane II, Co. Limerick (Coyne 2002), and Aghanagloch, Co. Waterford (Johnston et al. 2008). Unfortunately it was not possible to attain detailed information regarding the results of the excavation of the sites at ‘Rocklands’ in Carmanshall. These six burnt mounds have produced a (minimum) total of 155 sherds from at least 11 Beaker vessels.

Other finds are rarely discovered in association with the Beaker pottery within burnt mounds, though lithics have been found at two of these sites. At Cherrywood, a spread (24m by 9m by 0.4m deep) of burnt stone and charcoal consisted of two layers that produced 42 sherds from a Beaker pot, 33 lithics including a convex scraper and two hammer stones and an animal tooth (O’Neill 2000). The tooth returned a radiocarbon date of 3800±40 BP: 2400–2100 BC (GrA-23011). Sealed under the mound were eight troughs, one of which contained sherds from a Grooved Ware pot as well as heat-shattered stone debris. A few pieces of lithic debitage were present in the same layers of the burnt mound at Charlesland Site 1C that contained Beakers (see below) (Phelan 2004).

At Ballyvollane, a burnt spread sealed an oval pit that was filled with a black deposit of firing debris containing one Beaker sherd. This pit has been cut by another pit which
contained a broken wooden shovel. A hollow-based arrowhead was found in the excavation of a burnt mound at Rathbane South, Co Limerick, dating to 2140–2040 BC, though no pottery was recovered (O'Donovan 2002). At the Charlesland complex, a set of graded yew pipes, that may have been part of a composite musical instrument, were found to have been placed at the base of a trough at Charlesland Site CA1 and timber from one of the pipes was radiocarbon dated to 2137–1909 BC (Molloy 2005). No Beaker pottery was present at this site and the radiocarbon date suggests that the use of this feature occurred towards the end of the currency of Beakers in Ireland. The Beaker-associated burnt mound at Carmanshall also contained Bowls and Vases of the Food Vessel tradition, though it is not known if all of these were contextually associated.

The amount of pottery present within each of the Beaker-associated burnt mounds is quite small (see Table 4.28). Two burnt mounds - Ballyvollane and Ahanaglogh - produced only a single Beaker sherd. At Ahanaglogh, a burnt mound consisted of an oval trough and a very shallow spread of burnt stone containing a small worn Beaker sherd. Charcoal from the trough produced a radiocarbon date of 2300–2040 BC (Beta 170159: 3790±40 BP). The greatest number — 72 sherds from five (two 'fine' and three 'domestic') Beaker pots — was discovered within a burnt mound at Charlesland Site 1C located on low-lying wet poorly-drained land at the base of a low hill (Roche and Grogan 2005a). Most (59 sherds) of these occurred within the primary layer which comprised a grey silty clay that was lacking heat fractured stones. This was sealed by the main deposit of burnt stone debris containing 13 Beaker sherds (Phelan 2004). The surfaces and edge breaks of most of the sherds were much worn (Roche and Grogan 2005a).

The remains of just one pot were retrieved from three burnt mounds and a greater quantity of Beaker vessels were only found at two sites: Ballyclogh which produced two vessels from a pit under a burnt mound and Charlesland Site 1C, where a total of five vessels were identified. At Ballyclogh, a pit containing a deliberately deposited fill of charcoal-enriched, black silty sand with frequent inclusions of heat shattered stones and a high organic content was sealed beneath a burnt mound. This contained 38 sherds and 20 fragments derived from two 'fine' Beaker vessels (Grogan and Roche 2007a), as well as an unretouched flint flake. A single worn sherd from one vessel and multiple sherds from the second were identified. These were in good condition with little evidence for surface or edge wear and a relatively high percentage of them could be re-fitted (ibid). This suggests that this pot suffered very little pre- or post-depositional disturbance and that it was almost complete when deposited.
The Beaker vessels from burnt mounds are incomplete and highly fragmented. All of the sherds were worn with the exception of those from the pot at Ballyclogh described above. Four Beakers from four different sites were all represented by only a single sherd and high sherd: vessel ratios were only present in three vessels from three different sites – Charlesland 1C, Ballyclogh and Cherrywood. At the former, a ‘domestic’ Beaker was represented by 59 sherds, at Ballyclogh, a pot was represented by 37 sherds and at the latter, 42 sherds were derived from a single ‘fine’ Beaker (see Table 4.29). Overall, the small worn and fragmentary condition of the majority of Beaker pots from these contexts suggests that they experienced extensive life-histories after their breakage but prior to their eventual deposition. It is unclear whether the pots were broken at these burnt mound sites or brought there as sherds to be deposited. However, the poor preservation of the sherds is consistent with the types of activities that would have been conducted at these sites such as the heating of water and the discard of large volumes of shattered stone. The presence of single sherds in some of the mounds may suggest that their presence in this context is fortuitous rather than deliberate. However the rare occurrence of multiple sherds from pots particularly the well-preserved vessel from Ballyclogh suggests that these were almost certainly deliberately deposited.

Significantly, the construction and use of burnt mounds would certainly have required substantial investments of energy and time. Regardless of whether or not these sites were used for feasting or some other activity, they were the product of group activity and as such, they may have been seen as communal places. So, although burnt mounds were rarely a focus for Beaker deposition, the discovery of Beaker pottery in association with six sites of this type is noteworthy, particularly so given the scarcity of finds from burnt mound sites of any date. At least some of the activities conducted at these sites may have had ceremonial connotations and the deposition of some Beaker sherds may have been related to this. Perhaps the clearest example of this is the well-preserved and unworn pot from Ballyclogh that was deposited in a pit with an older worn sherd.

Although burnt mounds were often located in marginal areas and may only have been used seasonally, evidence from recent investigations confirms that burnt mounds formed an integral part of the contemporary inhabited landscape with many of these being placed in spatial proximity to settlement sites, albeit at a slight remove (Danaher 2007, 39-41; Cooney and Grogan 1999, 141; Grogan 2005a, 41). Burnt mounds seem to have been located in boggy or marshy places at the interface between dry and wet and at the boundary between the human or cultural and the natural or wild landscape. These types of places were considered to be appropriate for the conduct of activities associated with the use of hot stone technology and these were episodically revisited and re-used for these
purposes over the course of millennia (Danaher 2007, Carlin et al. 2008). Practices associated with burnt mounds including the locations of these and the deposition of materials within them seem to have been guided by protocol about what types of activities were suitable in particular places and are reflective of the cosmological views of the contemporary society. So, while burnt mounds represent important components of the earliest Bronze Age settlement landscape, they were rarely a focus for Beaker-associated deposition.

4.5 DISCUSSION: UNDERSTANDING DEPOSITION IN SETTLEMENT CONTEXTS

This study shows that the evidence for Beaker-associated settlements predominantly comprises pits and to a lesser extent spreads. Pits represent the most commonly found Beaker-associated feature (71% of 250 features) in a settlement context (see Charts 4.9-12). Indeed, a pit is often the only feature containing Beaker pottery on many excavations (38 sites). Furthermore, Beaker-associated postholes, stakeholes or slot trenches have never been found without an associated Beaker pit. In this regard, these pits appear to be one of the few unitary aspects of Beaker settlement evidence. Despite the ubiquity of pits, a far greater number of Beaker sherds have been found in spreads (9721 sherds or 68%) than pits (4436 sherds or 31%) in settlement contexts. It seems clear that more Beakers were deposited above rather than in the ground.

4.5.1 Comparing the amount of Beaker pottery in solitary pits, pit clusters and spreads in Ireland

This can be investigated further by comparing the amount of pottery occurring in isolated pits compared to the total quantity from pit groups and the amount generally present in spreads. Analysis of 30 of these isolated pits reveals that while there is some variety in the number of sherds and vessels present within these, most contain relatively small amounts of this ceramic. The remains of a single vessel was present in 16 (53%) of these, many (11) of which were represented by less than four sherds each. Seven (23%) solitary pits produced sherds from between two and five vessels, while only three pits (10%) contained a higher number of Beakers (see Table 4.30). One such pit containing an unusually large quantity of Beaker pottery was excavated at Gortmakellis, Co. Tipperary, and produced 418 sherds from 16 vessels (Roche and Grogan 2008). The majority (72%) of the 30 solitary pits contain artefactual or ecofactual material other than Beakers. This includes a range of finds including scrapers, hammerstones, a polished stone axe, as well
as the remains of fruits, nuts and cereals (see Table 4.31). These imply the occurrence of a wide range of activities at these locations, some of which may have been of extended duration. Yet it is hard to explain the discovery of such evidence within single pits which occur in apparent isolation from any other Beaker-associated features. This suggests that either very few traces of past occupation have survived in that location or that the materials were brought there from elsewhere for deposition. This issue is returned to below (see Section 4.5.2).

Much larger ceramic assemblages are generally recovered from sites with clusters of Beaker pits than from isolated pits (Table 4.32). Nevertheless, a few pit groups have cumulatively produced fewer sherds and vessels than some solitary pits. For example, at Gortybrigane, Co. Tipperary, only 37 sherds from five Beakers were retrieved from three pits that occurred within a larger group of these features (Long and O’Malley 2008). Broadly the same proportion (70%) of the 120 Beaker pits occurring in clusters contained other artefacts as those from the single pit category. However, a much greater number and range of artefacts occur in the pit groups (see Table 4.31). For example, rare finds like arrowheads and disc-beads have never been found in solitary pits but do occur in pit clusters. All of this suggests that a broader range of activities of more intense or prolonged character were conducted in most locations with multiple pits.

Far more pottery generally occurs in spreads than has ever been found in any Beaker pit. These upstanding deposits have a far greater volume than pits and produce an average of 20 vessels each, with maximum quantities ranging from 12 to 104 Beakers (Section 4.3.2). As observed in the earlier examination of pits (Section 4.2.5), most pits (82%) contain the partial remains of five Beaker or less, but half of them contain the remains of just one vessel. Only a small number of exceptional pits contain more than 15 vessels and the maximum amount from any pit is 38 Beakers. This pales in comparison with the 104 vessels within Concentration D at Knowth. However, in a few cases, the total combined amount of vessels from all the Beaker pits in a cluster matches the number of pots present within some spreads. This was the case at Kilgobbin, Hill of Rath, and Dunmoon, where more than 30 vessels were retrieved from each pit group (see Table 4.32). Lithics are the most common Beaker-associated artefact in spreads, and far larger quantities of these have been retrieved from these deposits than from pits. This is illustrated by the discovery of 152 scrapers from a total of nine spreads compared with a sum of 80 scrapers from 21 Beaker pits on 15 sites.

Overall, it remains clear that much smaller amounts of pottery were deposited in pits than spreads. This suggests that the materials found within pits represent a very small
proportion of the debris originally present on some sites. Indeed, in many cases, the spreads may have been of much greater extent, but these have not survived due to taphonomic factors such as plough damage (see Section 4.3.4). It is also evident that no simple correlation can be observed between the number of features or even the number of pits per site and the amount of pottery deposited within these. The occurrence of solitary pits containing Beaker pottery are often dismissed by excavators in Ireland as the remnants of very short term-activities, but as detailed above, a few of these contain larger quantities of pottery than some pit clusters. Ultimately, the contents of these pits seem to be more reflective of depositional choices than of actual settlement practices. Although there are broad patterns in the forms of deposition evident in settlement contexts, there is also much variety in terms of the shape, size and artefactual content of the various features. This diversity does not lend itself to simple reductive interpretations of these features. But some insights into Beaker-associated depositional practices can be proffered.

4.5.2 Connecting deposition in spreads and pits

It has been established that spreads represent deliberate aggregations of settlement materials (Section 4.3). The character of the fragmentation and weathering displayed by the Beaker sherds within these repositories suggests that this debris was collected together some time after those vessels were broken. Once deposited within these midden-like features, most of the ceramics were protected from further weathering or other forms of post-depositional damage. However, those sherds that were exposed on the extremities of these middens occasionally experienced considerable levels of wear.

It has also been demonstrated that pits represent features that were dug specifically to receive a deposit of occupational debris and that very little time elapsed between the creation of a pit and its subsequent backfilling (Section 4.2). It is clear that the most of these pits contain materials derived from larger aggregations of occupational debris because while the pits themselves were rapidly formed, their contents were certainly not. These pits rarely contain multiple sherds from a few freshly broken pots. Instead, they generally contain a few worn sherds from one or a few vessels. Quite a number of pits contain the partial remains of multiple pots (e.g. Kilgobbin: 81 vessels) suggesting that the material deposited within them must have been accumulated elsewhere prior to its deposition. This is supported by the occurrence of burnt and unburnt materials within pits that display no evidence of being heat-affected. The existence of material connections (e.g. sherds from the same vessel) between different pits such as those discovered at Faughart Lower or between different contexts in the same pit also implies that the deposited debris
was being obtained from the same refuse source on various occasions, or that several pits were dug and filled as part of the same event.

The very incomplete and fragmentary nature of the ceramic assemblages within Beaker pits suggests that a significant duration of time passed between the original breakage of these vessels and their final deposition. Yet despite being quite fractured, many of these sherds only display low levels of wear. This implies that these were stored in an intermediate context that offered considerable protection from the elements prior to being placed in pits. The occurrence of sherds deriving from the same pots but displaying quite different post-breakage biographies suggests that they may have been obtained from different locations (within this repository) that determined the extent to which they were protected or exposed to wear, abrasion or burning.

So then, although it is not certain, it seems highly plausible that the spreads featured in this study represent the intermediate contexts from which debris was obtained for deposition within pits. Analysis of the pottery within pits and spreads suggests that the depositional treatment of Beaker pottery involved a highly complex and lengthy chain of events before its burial within a pit or some other feature. The materials found within pits seem to represent a very small proportion of the debris originally present in that location. Beaker pottery was almost never deposited straight after being broken. These ceramics display complicated post-breakage life histories, one stage of which seems to be represented by the provisional or ultimate deposition of the pottery within these spreads.

It seems that a certain level of selectivity was exercised regarding the types of materials deposited in each type of settlement context. In contrast to structural features like postholes or linears, spreads and pits were preferentially chosen as suitable repositories for the deposition of Beaker-associated occupational debris. Different objects were deposited in separate contextual compartments in accordance with an island-wide set of rules (see Barrett and Needham 1998, 130). For example, six polished stone axes have been found within pit contexts compared with just one example from a spread. This is similar to the exclusion of stereotypical non-ceramic artefacts from most contexts in the settlement domain. Some of these items such as a bracer, arrowheads a gold sundisc and metal axes have been found in spreads, but not in pits or any other ‘domestic’ feature. Of course, the much larger volumes of material within spreads makes it inherently more likely that unusual objects would be found in these rather than in other contexts purely as a result of chance alone. Conversely, the smaller range of artefacts in pits compared to spreads may be related to the fact that pit contents were probably being derived from
these spreads and this would have provided much scope for the deliberate inclusion or exclusion of artefacts.

The occurrence of largely complete Rockbarton pots within some pits but not in spreads suggests that different depositional processes were involved for Beakers of this type. For example Rockbarton Vessels 31 and 32 in the spread at Mell displayed sherd: vessel ratios of 11:1 and 7:1 respectively, while the Rockbarton pot in the Newtownlittle spread displayed a ratio of 4:1. These scenarios contrasts strongly with the much higher sherd: vessel ratios displayed by the substantial remains from numerous Rockbarton pots found within pits such as the vessel from Lismullin which comprised 205 sherds (see Section 4.2.8). Perhaps it was the case that some of these were deposited much sooner after breakage than other Beakers, possibly in association with a special event. Nevertheless, these were accorded contextually specific treatments.

4.5.3 Relating pits and spreads to settlement

One of the major questions arising from this examination of Beaker-associated deposition in settlement contexts is that of the relationship between these features, their contents and settlement activities. Undoubtedly, the materials present in these deposits comprising pottery sherds, food remains, stone tools and other occupational by-products represent habitation debris. Indeed carbonised residues and sooting have been identified by Eoin Grogan and Helen Roche on the interior of many Beaker sherds, particularly on Rockbarton pots, indicating that these were used for the preparation and consumption of food. However, the paucity of archaeologically recognisable houses in the Final Neolithic/Early Bronze Age makes it difficult to establish whether these deposits of occupational detritus resulted directly from occupation in the places where they are found. Determining whether Beaker pits and spreads might represent the remains of a permanent settlement, a seasonal occupation or some other form of short-term activity, for example where people came together for feasting and celebrations, is very problematic.

The discovery of so many Beaker pits and associated features in places that were historically favoured as settlement locations — as demonstrated by their co-location with both Early Neolithic and Late Bronze Age houses (see Section 3.3) — suggests that at least some of these should be interpreted as directly resulting from on-site occupation. In some cases, it certainly seems likely that these features do represent the only surviving element of what must have been long term or repeated habitations - groups of contemporary
Beaker-associated deposition in settlement contexts - part two

features including Beaker pits and spreads have been found to contain a wide range of tools that form a high proportion of the total chipped stone assemblage, as well as evidence for cereal cultivation in the form of carbonised cereal grains and quernstones (Carlin 2005a and b).

Although the relationship between the quantity of artefacts in a feature and the duration of occupation is not necessarily a straightforward one, pits and spreads containing the remains of multiple vessels suggest that activity in that location had been of sufficiently significant extent or duration to provide such a large supply of pottery (Hill 1995). Conversely, the repeated discovery of a small number of pits and/or small surface deposits containing smaller numbers of artefacts may also represent short term, task specific or episodic activity, perhaps even feasting. In Britain, the discovery of isolated pits similar to so many of the Irish Beaker examples has led to the suggestion that materials were specifically brought from elsewhere to certain locations to be deposited (e.g. Thomas 1999, 68). However the simplest explanation may be to assume that the pits were filled with on-site occupational debris unless there is clear evidence to suggest otherwise (see Garrow 2006, 35).

Spreads seem to represent ploughed-down or disturbed middens containing deliberately accumulated occupational debris which was presumably generated on-site. Regardless of whether occupation at these sites was prolonged or comprised of repeated but shorter visits, the above-surface nature of these deposits enabled ongoing engagement with them. This included the addition and subtraction of materials to or from these features to fulfil various practical and social functions during particular events (see below). These repositories serving as visible reminders of past events and activities at particular locations and in doing so, physically demarcated these as meaningful places. In this regard, these features indicate a considerable attachment to place in the mid-third millennium BC.

In some cases, the aggregated materials may have derived from everyday habitation activities, but in others such as at Knowth, Newgrange and Monknewtown (see Section 3.2), this may have been created through large-scale acts of consumption, including social feasting. This could explain the very large amounts of pottery that survive at these locations and seem to reflect events of considerable intensity and/or duration. Indeed given that these locations fulfilled important ceremonial roles for people in the middle and late Neolithic, it would be unsurprising if people continued to aggregate there for various social functions. A similar interpretation could be made of some of the other Beaker
Beaker-associated deposition in settlement contexts - part two

spreads within Brú na Bóinne including the deposits at Monknewtown and Newgrange (see Chapters Three and Six).

Overall, pits and spreads certainly provide broad insights into aspects of settlement practices such as routinely-used artefacts and diet. However, it is clear that these features and their contents are a poor reflection of the activities that were conducted in these places. After all, pits were specially dug to receive deposits of artefacts that had probably been obtained from middens and these middens were formed through the collection of materials from some other context. This study demonstrates that there is not a simple straightforward relationship between the deposition of settlement materials and actual occupational activity. The highly partial nature of the assemblages found in settlement contexts indicates that a very large proportion of the original material from occupation sites was probably not deposited in middens and certainly not in pits.

The refuse deposits found by archaeologists predominantly comprise the end-product of the selective and strategic deposition of occupational debris (Pollard 2001, 316; 2002, Hill 1995, Thomas 1999). The survival of these materials within the archaeological record owes much to the culturally prescribed and highly formalised manner in which these activities were routinely conducted (Bradley 2003, 6-12; 2005, 208-9). The Beaker-associated settlement deposits found in Ireland represent the residue of a social practice involving the deliberate deposition of occupational materials selected from the remains of settlement (Thomas 1999, 73). So, while the creation of Beaker-associated pits and spreads was probably inherently associated with the process of occupation and these features prove to be among the only surviving aspect of occupation in many locations, these deposits are only an indirect and carefully crafted representation of settlement (Thomas 1999, 7; Harding 2006, 123).

Leaving aside the issue of establishing a direct link between these Beaker deposits and settlement activity, it is important to consider what these deposits represent and what they can tell us about the people behind their creation. Our understanding of rubbish is culturally specific (see Moore 1982 and 1986) and from our present-day dispositions, it is easy to dismiss settlement debris as refuse without giving it further consideration (see Pollard 2002, 23). It is clear from the complex treatment of Beaker-associated occupational debris that it was considered a highly significant and meaningful cultural material that fulfilled numerous important social roles.
4.5.4 The meaning of Beaker settlement debris

The person is constituted through their relationships with others and these are metaphorically portrayed through the use of objects (Brück 2004a, 326). This includes occupational debris. After all, it is through their everyday material engagement with the world in which they are temporally and spatially located that people construct and negotiate their relationships, identities and worldview. Refuse is generated in the course of such daily activities and, consequentially, social relationships become enmeshed in these material remains to the extent that these fragments come to signify these interactions (Moore 1986; Brück 2006a, 298). For example, occupational debris may have symbolized the vitality and productivity of the social group because of the inherent connection of these artefacts with the preparation and consumption of food (Brück 1999c, 155; 2006a, 304). Over the course of their use-lives, these materials became symbols of social identity that acted as physical metaphors for various different forms of connection between people, places and things (see Woodward 2002, 1040–1).

All of this is particularly applicable to the treatment of Beaker potsherds in settlement contexts, the deposition of which was very circumscribed. The evidence suggests that Beaker sherds were collected to form middens, before being removed and placed in specific contexts, especially pits along with a recurrent set of materials. Through their use in a range of routine activities, pottery served to negotiate and maintain relationships between different people as well as between people and ancestors. It was not just pottery vessels that were ideologically or socially significant, sherds took on a life of their own that was independent of the vessels to which they once belonged (see Appadurai 1986, Kopytoff 1986).

Pottery fragments were regarded as objects that both possessed and created meaning, and played a key role in the social lives of people (see Section 10.5). Through their particular biographies, sherds provided a material link between the past and the present. These may have been seen as heirlooms or relics of the social and cultural identity of the people who made and used them or as mementoes from special occasions such as feasts (Brück 1999a, 319–21; Jones 1999, 57; 2008b, 331; Chapman 2000a and b; Pollard 2001, 327; Woodward 2002, 1040–1). It was probably because of symbolic meanings gained during their life history that some sherds had to be treated in particular culturally-prescribed ways including their collection, curation and deposition in middens or pits (see Chapman 2000a and b; Brück 2006a, 303).

In the Bronze Age, a close relationship seems to have existed between the life-cycle of the inhabitants of a settlement and the debris that they produced (Brück 2006a, 299; 2006b).
The fragmentation and burial of Beaker sherds and other occupational refuse may have deliberately mirrored the life-cycles of the people associated with them (Brück 1999c, 155; Woodward 2002, 1040–1), particularly the transformative journey of human bodies into the after-life (see Chapter Five). The life of a Beaker did not always end upon breakage. Instead, its form changed from a vessel into sherds, some of which were gathered and stored before being placed in another context. As sherds went through each of these stages, it would have gained new characteristics and meanings, but it would not have been forgotten that this was once part of a Beaker that had been used for particular purposes (see Brück 2006a, 303).

As suggested by Joshua Pollard (2002, 23): “the process of transformation of refuse, involving primary discard (the death of objects), its incorporation in middens (essentially a liminal state), then deliberate reburial in a pit (reincorporation), perhaps stressed metaphoric connections between the transformation of the material world and that of the human dead”. This form of physical engagement with their refuse which so strongly emphasised social and spatial transitions enabled people to think about the passing of time, the nature of their existence, and the cyclicality of life (see Brück 2006a, 297-303; 2006b, 86). Rubbish was a resource that helped people to negotiate and understand changes to their world such as transitions in personal or group identity, life stages, lifestyles, as well as relationships with other people, places and things (Brück 2006b).

4.5.5 The ideologically significant depositions of Beaker-associated refuse

The deposition of occupational debris in pits and spreads was a conscious practice whereby people used the meanings that had been ascribed to particular objects through their life-histories to negotiate and reproduce cultural values and social relations (see Needham 1988, Pollard 2001, 325; 2002, 22, Fontijn 2002). In other words, the manipulation of these quotidian items was a strategy used by people to make sense of their lives and the world in which they lived. The process of digging and immediately backfilling pits served to presence the material being deposited and to physically locate a particular time and place in people’s minds (see Pryor 1995, 105). Through the burial of these fragments of ‘domestic’ life, the meanings associated with these artefacts were recalled and reproduced (Rowlands 1993, 146; Fontijn 2007, 76-7). In this way, people maintained a continuous link between themselves and the past events or people.
connected with the original generation of this debris (Chapman 2000a, 64; Pollard 2001, 323-8).

While the deposition of habitation refuse situated people in relation to time, it also anchored people in space, thereby creating and sustaining their sense of belonging to a particular group and place. The burying of these mementoes of sociality in specially dug pits within specific locations was a method of inscribing meaning and memories onto people and places across a landscape that was not easily forgotten (Thomas 1996, 197; 1999, 87; Pollard 1999). Some of these Beaker pits may have served to mark and re-mark the boundary of a settlement within the landscape (Pryor 1992, 519; 1995, 105). Indeed in the Late Bronze Age, settlement boundaries were often chosen as suitable locations for the strategic burial of items (Brück 2001, 153; Cleary 2006).

Ideologically significant depositional acts involving the placement of occupation debris into pits may also have been conducted at important occasions or stages in the lifecycle of a settlement such as the transition from childhood to adulthood or the marriage of some of the inhabitants (Brück 1999c, 154; 2001, 153; 2006a, 299-303). Given that Beaker pit deposition occurred at the end of a long and complex chain of events, it can be speculated that most Beaker-associated pits were dug and then filled with ceramic residues of the inhabitation of that spot to mark or commemorate the end of or the former occurrence of that occupation (Thomas 1999, Pollard 1999, 89; Harding 2006, 123).

The burial within pits of materials obtained from middens may also have been conducted in accordance with beliefs about the existence of a conceptual link between death and fertility, renewal, and regeneration (see above; Pollard 2000; Cooney 1998, 116; 2000, 197; Gibson 2003, 141; Brück 1999c, 154; 2006a, 297-303). Indeed, it was the foremost scholar of Irish Beakers, Humphrey Case, who originally suggested in an Irish context that people were depositing settlement refuse comprising materials taken from the earth to fertilise the ground and ensure a positive future for themselves (1969, 13; 1973).

4.5.6 Ritualising the domestic

Though Beaker-associated pits are the most commonly found feature in settlement contexts, these features probably post-dated occupation in that location. These deposits seem to have a strongly ceremonial character and may not directly reflect settlement activity, although they are certainly related to it. Instead these pits seem to represent a ritualised performance of the everyday that intentionally depicts the ‘domestic’ aspects of life (see Bradley 2005a, 32-36). These features almost exclusively contain quotidian artefacts including Beaker sherds, the condition of which seems to deliberately emphasise
the routines of everyday life in that particular place (see Cooney 2005, 25). These fragments of inhabitation reflected communal endeavours such as the shared preparation and consumption of food and symbolised the sociality of the household.

The formalised deposition of these materials ritualised the occupational customs of daily life, in a manner that accentuated people’s shared connections with each other. These deposits served as metaphorical depictions of the various social ties that bound people, places and their ancestors together to form a socially cohesive cosmology. In this way, people commemorated their togetherness, while also renewing their shared social memories. These demonstrations of their mutual membership of an imagined ‘domestic’ community facilitated local groups in the construction and maintenance of a collective identity (see Thomas 2010; Carsten and Hugh-Jones 1995; Waterson 1995; Lévi-Strauss 1983).

4.6 OVERVIEW AND IMPLICATIONS OF FINDINGS

Overall then, it seems that Beaker pottery was used for a wide range of different occupational activities. It is commonly found in habitation refuse and there is no evidence that this was a special-purpose vessel whose use was restricted. Beaker-associated settlement debris is predominantly found in pits and spreads. As we saw in Chapter Three, very few Beaker-associated ‘domestic’ structures are known. Houses do not seem to have been subject to architectural elaboration and structural features were not the focus of depositional activity. There is no evidence to indicate that people expressed ideas about themselves through their houses, but this may largely reflect the poor survival of these structures.

Most of the evidence for Beaker-associated settlement activity has a strongly ritual character. This reflects the lack of a clear division between ‘domestic’ and ritual spheres at this time; neither of these represent self-contained types of activity (see Brück 1999a, 319–26). Beaker-associated settlement debris was a highly significant resource that was treated in a complex and circumscribed fashion. People constructed their group identity through the collection and deposition of refuse from occupations. These materials seem to have played multiple vital roles in the negotiation of social relationships.

The form and character of Beaker-associated settlement sites are highly comparable to those from the Middle and Late Neolithic as well as the Early Bronze Age (Smyth 2007, 2010; see Carlin and Brück forthcoming). A paucity of archaeologically-recognisable dwellings is a consistent feature of all these periods, each of which displays evidence for a
strong emphasis upon the deposition of ‘domestic’ materials in pits and to a lesser extent in spreads. A complex settlement system in the third millennium BC seems to have comprised a mixture of long term sustained activity in some locations combined with some level of residential mobility. There is little to suggest any major changes occurring to settlement practices in tandem with the introduction of Beaker pottery to Ireland.

4.7 **Beaker settlement in Ireland in its wider context**

Traditionally, Ireland has been considered to be uniquely rich in terms of the quantity of Beaker settlement sites found here and this has often been contrasted with Britain, which is usually regarded as lacking in such evidence (O’Brien 2004, 565, Burgess 1979, Case 1995a, 19, Thomas 1991, Needham 1996, 128, Cooney and Grogan 1999, 87, Case 2004b). However, it has been demonstrated in Chapter Three and the present chapter that many of the so-called Beaker structures in Ireland were incorrectly identified as such and that there is little direct evidence for Beaker-associated habitation on this island. We can now see that the Irish and British settlement evidence is actually very similar. In Britain, with the exception of the Western Isles (see Parker Pearson et al. 2004), direct evidence for Beaker occupation such as houses are rarely found; instead settlement sites mainly consists of ephemeral remains such as pits, artefact scatters and spreads (Case 1995b; Needham 1996; Allen 2005; Garrow 2006, Thomas 1999, 64-74; Bradley 2007, 150).

The characteristics of Irish Beaker pits are almost identical to those found in Britain (see Thomas 1999, 64-74; Garrow 2006; Woodward 2002) and these British examples also seem to contain materials derived from larger aggregations of occupational debris such as middens (Garrow 2006, Pollard 2000, 365; Case 1995b, 10-11, Brück 1999b). As in Ireland, most Beaker pit sites in East Anglia consisted of a single pit without any associated features (Garrow 2006, 119). Beaker middens like those in Ireland have also been found in Britain (Garrow 2006; Jones 2005; Bennett et al. 1998). It has been observed in Britain that while large amounts of Beaker occupational debris was generated, most of this was placed above the surface rather than buried in pits (Garrow 2006, 126-7). Just like in Ireland, Beaker pottery seems to have remained in circulation after its breakage for an unusually long time before its final deposition (Brück 1999b, 376; Bradley 2000a, 128, Woodward 2002, Garrow 2006, 130-36).

On a wider scale, the scantiness combined with the diversity in form of Beaker-associated settlement sites in Europe impairs any attempt to compare these with the Irish evidence (Salanova forthcoming; Shennan 1993; Turek 1997; Guilaine et al. 2001; Vander Linden...
In most cases, Beaker pottery occurs in occupational contexts that reflect the pre-Beaker settlement practices of that region (see Vander Linden 2007a, 186). This closely corresponds with the continuity of settlement systems in Ireland. All of this is highly suggestive of the adaptation of Beaker pottery to fit into local practices, the implications of which are discussed in the final chapter.
5
BEAKER-ASSOCIATED DEPOSITION IN FUNERARY AND MEgalithIC CONTEXTS IN IRELAND
CHAPTER FIVE - BEAKER-ASSOCIATED DEPOSITION IN FUNERARY AND MEGALITHIC CONTEXTS IN IRELAND

5.1 INTRODUCTION

Throughout Europe, Beaker pottery is typically found as part of funerary assemblages in association with other artefacts accompanying single burials (Vander Linden 2006a). In contrast to this, the Beaker complex in Ireland is viewed as being rich in settlement evidence with a much smaller funerary component (Case 1995a, 19; Needham 1996, 128; Brindley 2007, 250). The classic crouched inhumation with Beaker-associated grave goods is completely absent. Instead, funerary activity seems to have mainly consisted of collective burials in primary and secondary contexts in megalithic tombs. This scenario has contributed to the view that the use of Beaker ceramics and many of the objects forming part of the associated ‘package’ in Ireland was radically different from elsewhere in Europe (e.g. Clarke 1976, 472-3; Burgess 1979, 213). However, hitherto there has been no detailed study of the occurrence of Beaker artefacts in funerary contexts in Ireland and the current generalisations serve to mask the complexity and richness of the Irish data.

This chapter characterises the deposition of Beaker artefacts in a megalithic or funerary context in Ireland including earlier Neolithic megalithic tombs, contemporary megalithic monuments known as wedge tombs, as well as cists, cairns and pits. Particular attention is paid to identifying Beaker-associated deposits of human remains. This includes an assessment of whether or not these were deposited in conjunction with Beaker pottery and if they should be considered to represent funeral activity. Clear-cut divisions between funerary and ceremonial or settlement activity probably did not exist at this time (see Brück 1999a; Bradley 2005a) and correspondingly not all deposits of human remains actually constitute burials. These may reflect some other form of ritual practice - cf. skull fragments in later Bronze Age settlement contexts (Brück 1995; Cleary 2006). The human remains from most of the earlier Neolithic megaliths cannot be definitively associated with the deposition of Beaker objects in these contexts and so it is unknown if the rituals enacted at these places were actually sepulchral in any sense.

The aim of this assessment is to improve understandings of the activities associated with the formation of Beaker-associated deposits in funerary and megalithic settings. New insights are gained into the Beaker-associated mortuary practices in Ireland as well as the role played by Beaker material culture in these customs. The findings from this enquiry
are placed within its wider European context and the alleged uniqueness of Irish Beaker-associated funerary deposition is addressed.

5.1.1 Methodological considerations

To conduct this study, it was essential to discover and collate all the known occurrences of Beaker material in funerary contexts. For older excavations, it was necessary also to incorporate all new information or interpretations regarding the findings of these investigations, particularly in relation to the identification and reassessment of the Beaker pottery (e.g. Case 1961, Herity 1982, 1987; see Chapter One). The various results from all these excavations generally needed to be integrated so that artefactual and ecofactual details could be considered together in relation to information about the various different scales of the contextual environment — ranging from the macro-level of the site to the micro-level of specific deposits within individual features — in which they were found.

In this chapter, the frequency and manner of occurrence of Beaker materials in these various contexts are examined. The artefactual content of Beaker-associated deposits is assessed in terms of type, quantity and condition of the objects. The deposition of Beaker pottery is studied in more detail. This includes an appraisal of the total number of Beaker pots and sherds in each context as well as the condition of these pots, and where possible, the number of sherds per vessel (see Chapter One). The number and form of burials in each context as well as the type, quantity and character of any securely associated objects are recorded. Other details such as age and sex are also detailed. The results from all of the analysis of the various different features and their contents are compared and contrasted.

5.1.2 Some problematic aspects

Many of the excavations featured in this study were conducted prior to 1950 when archaeologists’ understanding of chronologies was very different to today. Accordingly, many of these suffer from problems associated with their age. Different techniques were employed on these investigations and the quality of recording is highly variable. The pottery, lithics and bone from many of the older excavations clearly needs to be re-examined (see Chapter One). Contextual information for the artefacts is often highly ambiguous and thus, it is difficult to argue for an association between various artefacts and/or particular burials. Radiocarbon dating was not commonplace and thus the human remains from many of the megaliths are poorly dated. Burials in earlier megaliths —
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particularly court tombs — are often assumed to be primary rather than proven to be so and some of these may yet prove to date to the start of the Early Bronze Age.

Many megalithic tombs remained open and continued to be reused for considerable periods of time after their construction. Thus, the deposits contained within many have been disturbed or poorly preserved. Secure closed deposits are very rare and the achievement of complete certainty of association between objects and human remains is just not possible. In the absence of radiocarbon dates, it can be very difficult to identify the Beaker component of the funerary remains present in these monuments, particularly when multi-period activity has occurred in conjunction with multiple burials.

To take account of this, all available information from various reports including site photos, plans and section drawings have been examined in an attempt to ensure that recorded associations between objects and or burials represent genuine deposits and not just the chance juxtaposition of different artefacts created by the presence of residual or intrusive objects. However, in the case of Beaker-associated burials in unsealed contexts like megalithic tombs, it has rarely been possible to link individuals directly to specific pots or to conclusively demonstrate an irrefutable connection between the deposition of the human remains and the Beaker pottery found with it.

Instead, an association is understood to be genuine based upon the balance of the evidence. Where a burial from a tomb containing Beaker pottery has returned a radiocarbon date consistent with the currency of that ceramic and there is no other ceramic with a similar currency present in the tomb, it has been assumed that these depositions were indeed directly linked. Similarly where the excavator has observed a particularly strong association between a particular pot and a specific burial, it is assumed that these were deposited contemporaneously.

Similar problems affect the outcome of any comparative analysis of the number of sherds per vessel in many of these megaliths which have suffered from later disturbance. Post-depositional activities in these monuments could have resulted in the destruction or removal of Beakers, but it is not possible to quantify which of these megalithic tombs have been more disturbed than others. Therefore, the results of this particular analysis must be viewed with some degree of scepticism. Nevertheless, the patterns identified in these examinations are quite consistent and there are no wild variations to suggest that these results are anomalous.
5.2 BEAKER DEPOSITION IN WEDGE TOMBS

There are at least 500 monuments in Ireland comprising stone-built chambers of wedge-
shape or trapezoidal plan that are known as wedge tombs (O’Brien 1999, fig. 5.1). These
are predominantly distributed in the west of Ireland and display a more Atlantic and
southerly distribution than any other megalith on the island (Walsh 1995). Although these
are the most numerous form of Irish megalith, only 30 of these monuments have been
evacuated and Beaker pottery has been recovered from an apparently primary position in
the chambers and/or antechambers of at least 13.

The majority (21 out of 30) of wedge tomb excavations were conducted over 50 years ago.
Of the six examples excavated in the 1990s, two produced Beakers but one of these
remains unpublished and it was not possible to gain information regarding the results of
its excavation. The quality of recording throughout these excavations, particularly of the
context of artefacts, is highly variable. Furthermore, many of these tombs suffered a
considerable level of re-use and later disturbance, accordingly very few have been found
to contain what could be regarded as secure closed deposits.

Brindley and Lanting (1991) dated charcoal and bone from seven wedge tombs and more
recently, dates have been obtained from wedge tombs at Ballybriest (Hurl 2001) and
Largantea (Schulting et al. 2008) to produce a grand total of 30 radiocarbon
determinations. While much more work is needed to clarify the dates of burials within
wedge tombs, the construction and primary use of these has been firmly dated to the
period 2400–2050 BC and there is no evidence to suggest that they were built pre-2500
BC (Brindley and Lanting 1991).

5.2.1 Deposition of Beaker pottery in wedge tombs

Unfortunately, it is not currently possible to state the total amount of Beaker pottery found
in wedge tombs or to consider the number of sherds per vessel (without a complete
reassessment of the ceramics), but based upon available information, 13 wedge tombs
have produced at least 509 sherds from 51 Beaker vessels. The majority of these (six)
contained a minimum of four to six Beaker vessels with single pots occurring in only three
tombs (see Table 5.1). The greatest number was discovered during the excavation of the
Cashelbane tomb (Davies and Mullin 1940) which produced the remains of 10 Beakers.

Many Beakers are represented by multiple large conjoining sherds such as Pot A and B
from Ballyedmonduff (see Fig. 5.2, Table 5.2, Ó Riordáin and De Valera 1952, 73, fig. 1) and
these may have been deposited intact as is suggested by the discovery of almost complete pots within at least three tombs (see Table 5.1). For example, the wedge tomb at Ballybriest contained the remains of six near complete Beaker vessels (Fig. 5.3 and 5.4). The high number of sherds present from each pot led the excavator, Declan Hurl (2001, 16) to suggest that these may have been broken in situ – “where they stood within the burial chamber”. Though it is also possible that they may have been whole when deposited and subsequently became broken in the course of the repeated use of the tomb.

Not all Beakers from these monuments are so well represented. A total of 24 Beakers (from six tombs) were represented by ten sherds or less and eight of these vessels consisted of a single sherd. The largest amount of Beaker sherds found in any wedge tomb was recovered from the megalith at Lough Gur (O Riordáin and O h-Ileadha 1955), where 250 sherds were recorded, but these were quite small and it was not possible to reconstruct any vessels (see Tables 5.1 and 5.2). In some of the tombs containing Beakers, almost whole vessels were found alongside those represented by only a few sherds. This was the case at Largantea, where a stone cist-like structure within the tomb contained two near-complete Late-style vessels (B1 and B2, see below and see Fig. 5.5). In contrast to these two pots, the chamber deposits produced an additional four Beakers, three of which were represented by only two sherds each. There may originally have been more of those pots in the chamber at Largantea but these could easily have become damaged and dispersed in the course of the ongoing re-use of the tomb throughout the Bronze Age. This is suggested by the fact that the pots in the protected environment of the cist are far more complete. However, it remains unclear whether the variety in the fragmentation of Beakers in wedge tombs represents diversity in depositional practices or is largely due to the high levels of disturbance caused by their long history of re-use.

5.2.2 Beaker-associated human remains in wedge tombs

Human bones representing the remains of 73 individuals have been recorded in 24 of 32 wedge tombs (O’Brien 1999). Most of these chambers contain multiple - mainly cremated-burials (Cooney and Grogan 1999, 86). However, many of the burials in wedge tombs represent undated or Post-Beaker activity. Beaker sherds have only been found in association with burnt and unburnt human bone in apparently primary positions in nine such monuments: Moytirra, Co. Sligo (Cremin Madden 1969, 157-159, fig. 2), Aughrim, Co. Cavan (Channing 1993, Labbacallee, Co. Cork (Leask and Price 1936; Brindley et al. 1987), Baumnadomeeny, Co. Tipperary (O’Kelly 1960), Lough Gur, Co. Limerick (O Riordáin and O h-Ileadha 1955); Cashelbane, Co. Tyrone (Davies and Mullin 1940), Kilhoyle (Herring and
At least 18 Beaker-associated cremation burials have been excavated in six of these wedge tombs (see Table 5.3). However, only five (out of 30) radiocarbon determinations from wedge tombs have been obtained from cremated bone, just one of which was definitely Beaker-associated and the remaining four were probably Beaker-associated (see Table 5.4). In the absence of more radiocarbon dates, it is difficult to identify the Beaker component of the funerary remains present in these monuments. This is particularly true when evidence for multi-period activity occurs in conjunction with multiple burials. For example, although three near complete Beakers and the cremated remains of at least four individuals were found in the chamber of the Loughash wedge tomb, these were recovered from mixed deposits that included a Vase Urn, Encrusted urn and Late Bronze Age pottery (Davies 1939). Thus, in the absence of radiocarbon dating, it is currently impossible to identify any connection between these Beakers and the four cremations that were also present in the monument.

Even when radiocarbon dates are obtained, it can still be difficult to conclusively demonstrate a connection between the deposition of Beakers and burials in the same tomb. For example, Beaker pottery and the cremated remains of at least eight individuals representing six adults (male and female), a child and infant were found in the wedge tomb at Largantea, Co. Derry (see Fig. 5.5; Herring 1938, 174-5). However, most of the human bone came from the tomb's main chamber, while all of the Beakers were in the entrance chamber, and thus the association between these is quite weak. Nevertheless, radiocarbon suggests that at least three burials from the wedge tomb may well represent Beaker-associated deposits.

In the main chamber, a primary layer contained black charcoal-rich soil, and a large quantity of cremated human bone. Radiocarbon dating of bone from three separate cremations returned determinations of 2459–2200 BC (UB-6974: 3837±35 BP), 2458–2147 BC (UB-6976: 3828±37 BP) and 2467–2209 BC (UB-6977: 3871±37 BP). Charcoal from the same deposit produced a date of 2468–2211 BC (UB-7024: 3877±34 BP) (Schulting et al. 2008). Overlying this black layer, was a thick secondary deposit of yellow earth containing cremated bone, the burnt tip of an arrowhead, three unburnt scrapers, a bronze razor, sherds from a Food Vessel; a Cordoned Urn, an Accessory vessel, and Late Bronze Age pottery as well as a bone toggle (Herring 1938, 172–3; Schulting et al. 2008, 8). Alder charcoal from this yellow layer produced a radiocarbon date of 2033–1783 BC.
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(UB-7025: 3586±34 BP), while cremated human bone from the same context produced a date of 1738–1505 BC (UB-6975: 3333±47 BP) (ibid).

In the entrance chamber, a small amount of cremated bone and nine sherds from four Beaker vessels (A1, A2, A3) were found on the floor-surface. A yellow brown deposit overlying this contained other sherds from a tripartite Irish Bowl (B3), two other Food Vessels (F1 and F3) and a Cordoned Urn (C1). Sherds of three Late Bronze Age pots were also present but these were located in the uppermost level of the deposit and appear to have been deposited after the collapse of a roof slab. Immediately inside the entrance chamber was a stone cist-like structure containing the two near-complete Beakers (mentioned above in Section 5.2.1) and conjoining sherds of an early style Beaker (A2), as well as a convex scraper (Herring 1938, 171). Overall, while the Beaker pottery and the cremated bone at Largantea were not contextually associated, the dates from the three cremation burials within the aceramic black layer produced dates clustering together around 2455–2208 BC which strongly suggests that they were deposited at the same time as the Beaker pottery.

The greatest number of individuals deposited in definite association with Beaker pottery in a wedge tomb was recorded at Ballybriest (Hurl 2001). Here, a large quantity of highly fragmented burnt bone representing the remains of at least eight people was found in a sealed primary deposit in the main chamber which also contained multiple sherds deriving from four late-style Beakers, charcoal and a few flint flakes. The burials comprised adults and sub-adults including an adult male, an adult female, 2-5 year old child and an infant (Murphy 2001). A sample of burnt human bone from the deposit returned a radiocarbon date (GrA-13273: 3630±50 BP) of 2139–1830 BC. Significantly one pot (with a height of 50cms and rim diameter of 36cms) from this deposit displays a volume of about 9.5 litres which appears to be among the largest Beakers in Europe (see Fig. 5.4, Hurl 2001).

A high number of cremation burials were also discovered inside the Cashelbane wedge tomb (Davies and Mullin 1940). At least four individuals (a juvenile, two adult females and an adult male) were present in the main chamber and at least one individual occurred in one of the subsidiary chambers, all of which were in a secure contextual association with Beaker pottery (Davies and Mullin 1940). However, smaller numbers of Beaker-associated cremated individuals are more common and in three of these megaliths, only one Beaker-associated cremation has been detected. For example at Kilhoyle, it was observed that the cremated remains of Skeleton 1 — an adult female — were very closely associated with Beaker sherds (Vessel 4) on the floor of the main chamber (Herring and May 137, 45-6).
Two other cremated individuals were also excavated but the presence of later forms of pottery combined with the absence of C14 dating of their bones prevents these burials from being regarded as Beaker-associated.

At least 14 Beaker-associated inhumations have been discovered within a total of three wedge tombs. It is possible that a greater number of these burials may have been deposited alongside Beakers but were destroyed by acidic soil conditions or may have been removed during later phases of use. The greatest quantity of Beaker-associated inhumations in a single tomb — six (5 adults and 1 child) individuals — were found at Moytirra during two separate antiquarian investigations of this monument. Accurate details of these burials or of the relationship between these and the Beaker pottery in the tomb are not known (Cremin Madden 1969). One skeleton was described in an antiquarian report as being "in a crouching posture .... the skull and bones in a heap" (Cremin Madden 1969, 157). The other skeletons appear to have been found in two separate groups within one of the chambers — one group consisting of the bones of two adults and a child that were associated with three Beaker vessels, while the other group comprised the bones of two adults along with sherds of a fourth Beaker (see Cremin Madden 1969).

At Lough Gur, Co. Limerick, nine separate skeletons could be identified from the bones which were found scattered in highly disturbed deposits throughout the main chamber (O Riordáin and O h-Iceland 1955, 47). Five of these returned radiocarbon dates that overlap with the currency of Beakers and were probably deposited in conjunction with each other. Four skeletons returned determinations post-dating these, dates from two of which were broadly contemporary with the use of Food Vessels and were probably deposited with two Bowls that were also found in the tomb. However, it is impossible to associate pots with any particular inhumation because the contents of this tomb were extensively scattered and the exact location of any artefacts in the tomb is not documented. While a stratigraphic association between the Beakers and the five contemporary inhumations cannot be demonstrated, the majority of the artefacts from the tomb were early Beakers and these seem to form the most significant association with the burials (Brindley and Lanting 1991, 24; Brindley 2004, 335).

The primary deposits within the wedge tomb at Labbacallee, Co Cork (Leask and Price 1936) were found to contain sherds from a Beaker pot and the unburnt remains of three individuals (an adult female, an adult male and a child). The adult female inhumation was found in a strangely disarticulated and partially disordered state on the floor of the terminal cist-like chamber (Fig. 5.6). The skeleton lay on its right hand side with the legs
pulled behind the body, but with the left arm (rather than the right) under the body in an articulated position and the skull and neckbones were missing (though see below). The excavators suggested that body had been reburied after the flesh had become decomposed, but while some of the tendons still remained holding the bones together (Leask and Price 1936, 88).

An adult female skull that almost certainly belongs to this skeleton was found within the main chamber in direct association with 12 sherds from a ‘domestic’ Beaker (Leask and Price 1936, 93). The disarticulated skeleton was accompanied by burnt animal bone (pig, cattle, sheep) and a bone pin strongly resembling a boar’s tusk (Fig. 5.6). A longbone from this individual was radiocarbon dated to 2458-2062 BC (GrN-11359: 3805±45 BP) (Brindley et al. 1987/8, 16). In the main chamber, unburnt fragments of two other skeletons – a male adult and a child were found mixed with animal bones and more sherds of the ‘domestic’ Beaker from the terminal chamber. A longbone from the male adult was radiocarbon dated to 2459-2031 BC (OxA-2759: 3780±70 BP) (Brindley and Lanting 1991/92), while a longbone from the child returned a date of 2201-1775 BC (OxA-2760: 3630±70 BP) (Brindley and Lanting 1991/92).

In most cases, the successive placing of bodies in the same tombs obscures our ability to instances of single burial or to identify distinct groupings of grave-goods that may have been associated with specific individuals. However, some evidence for these practices can be found in compartmentalised locations such as the cist-like chambers located at the termini or inside the entrances of some wedge tombs. The Beaker-associated adult female inhumation from Labbacallee (described above) is one such example of this. Perhaps another example of this was excavated at the rear of the main chamber at Cashelbane where there were two small cists containing large quantities of cremated bone (Fig. 5.7; Davies and Mullin 1940; 150-1). Each of these contained an upper deposit of dark earth and a primary layer of grey clay that overlay a paved floor. In one of the cists, the upper deposit produced a probable Beaker sherd and burnt bone, while the primary deposit contained another probable Beaker sherd a flint flake as well as the cremated remains of an adult male. From the upper horizon of the other cist came burnt bone and a convex scraper. Underneath this, the primary layer contained a small Beaker sherd and “a great deal” of burnt bone which may be human, but could not be identified as such (ibid, 151).

The creation of these cist-like compartments within tombs may represent an attempt to visibly individualise a particular deposit. This may apply to the cist inside the entrance of the Largantea tomb (Herring 1938), containing two near complete Beakers and a scraper, though no human bone was identified within this compartment (Fig. 5.5, see above).
There does not seem to be any detectable demographic patterns in the Beaker-associated burial practices within the context of wedge tombs (see Table 5.6). There are 11 adult inhumations representing two females, one male, and eight individuals of unknown sex, while there are 10 adult cremations comprising two males, four females and four individuals of unknown sex. This suggests that adults of both sexes were being cremated and inhumed in wedge tombs and that there is no evidence to indicate that gender was a factor that influenced the form of burial chosen. Similarly juveniles were deposited both as cremations (total=2) and inhumations (total=3). So, although fewer children than adults were being buried in wedge tombs in association with Beakers, there is nothing that indicates that age affected the treatment of the body.

5.2.3 Non-ceramic Beaker-associated objects in wedge tombs

The most commonly associated artefacts found with Beakers in wedge tombs are lithics and these assemblages are dominated by debitage including split pebbles, and chunks, but mainly flakes. This was the case at Ballybriest (described above) where the only grave goods other than pottery were a few flint flakes. Similarly at the badly disturbed tomb at Ballyedmonduff, where 140 sherds from eight Beakers were found, the only other artefacts found in the tomb were a few flint flakes and split pebbles. These were found with 46 Beaker sherds in a primary deposit in the terminal chamber (Ó Riordáin and De Valera 1952, 69).

A total of 14 convex scrapers have been recorded in association with Beakers in three wedge tombs: Cashelbane, Kilhoyle and Largantea. At the latter, one scraper was found in a primary deposit inside a stone cist alongside sherds from three Beakers. Another three were found in a chamber of the same tomb, but within a secondary deposit containing materials of from different stages of the Bronze Age (see above). Six scrapers came from the tomb at Cashelbane where Beaker was the main ceramic, however, the only contextual details available for five of these is that they were found in the burial area. Presumably, this means they were found in the chamber deposit containing the cremated remains of at least four people were associated with Beaker pottery (see above), but this is not certain. As detailed above, the sixth scraper was found in the cist-like structure in a layer overlying a Beaker-associated deposit and possible human bone. Four convex scrapers were found in a deposit within the main chamber of the Kilhoyle tomb which contained Beakers and burials but also displayed evidence for multi-period activity, thereby preventing any definitive identification of these as Beaker-associated lithics. Overall, the strength of
association between these 14 scrapers and Beaker pottery or Beaker burials is questionable and the identification of these as Beaker objects lacks certainty.

Seven barbed and tanged arrowheads have been recovered from five wedge tombs: Cashelbane (Sutton and Green Low) and Clogherny (type unknown), Co. Tyrone; Kilhoyle (Green Low) and Boviel (Sutton Type B), Co. Derry, and Harristown, Co. Waterford (Green Low). Unfortunately, it is difficult to identify a strong association between the deposition of these and any of the Beaker pottery or Beaker-associated burials present in any of these tombs. At Cashelbane, two of these projectiles were found in the main chamber with Beaker pottery and the cremated remains of at least four individuals (Fig. 5.8, Davies and Mullin 1940). At Kilhoyle, the arrowhead was found under the septal slab (Herring and May 137, 45-6), perhaps suggesting that it was deposited during construction. Despite the lack of evidence for a direct association, all of these projectiles can be regarded as indicators of Beaker depositional activity as barbed and tanged arrowheads have never been found associated with Irish Bowls or Vases, and the few that are found with Collared and Cordoned Urns are quite different, e.g. Ballyclare type arrowheads (Woodman et al. 2006, 138).

Polished stone axes have also been found in wedge tombs such as Boviel and Lough Gur, Co. Limerick (Ó Riordáin and O h-Icedha 1955), where an axe fragment was discovered in the chamber of the tomb. However, it is impossible to determine whether or not these represent Beaker-associated depositions. Objects other than stone tools and production waste are rarely found with Beakers in these monuments. Two very notable exceptions to this are the Labbacallee and Moytirra wedge tombs. A bone pin/ spatula resembling a boar’s tusk was discovered with the Beaker-associated crouched inhumation of an adult female at Labbacallee, Co. Cork (Fig. 5.6), while a long thin bronze or gold object was reportedly found during the antiquarian investigations of the Moytirra, Co. Sligo. Based upon its description, this has been suggested to be a rapier (Cremin-Madden 1968, 157).

Overall, few typical types of Beaker object are found in wedge tombs other than pottery, arrowheads and scrapers. There is a lack of evidence for a close association between these artefacts and either Beaker pottery or any of the human remains of Beaker date. With the exception of the pottery, obvious Beaker grave goods are very rare and in many cases, the connection between the deposition of the burials and the pottery in these tombs is slightly ambiguous. In some cases, the paucity of aceramic grave goods may be attributed to the degree to which these tombs were open to re-use. However, the consistency of the evidence including that from better preserved examples sealed beneath peat such as
Ballybriest (Hurl 2001, 12) suggests that this is genuinely reflective of Beaker-associated depositional practices.

5.2.4 The chronology of Beaker activity in wedge tombs

Schulting et al. (2008, 13) conducted Bayesian modelling based on the limited number of existing early dates, from which they concluded that wedge tombs began to be built quite suddenly c. 2450 BC. The wedge tombs at Moytirra, Largantea and Cashelbane contained early styles of Beakers (e.g. Clarke’s E and W/MR, Case’s Group A) while later styles (e.g. Case 2004b Group B2, Clarke’s 1970 N and S groups) occurred at Ballyedmonduff, Largantea, Loughash Giants Grave, Ballybriest and Carriglong (see Table 5.5; see Chapter Eight and Nine for dating of pottery types). The occurrence of both forms in some of these suggests that Beakers continued to be deposited in these monuments for several hundred years – probably from 2450 to 2050 BC, by which time Bowls were starting to replace Beakers within the chambers (e.g. Loughash, Cashelbane, Lough Gur and Aughrim).

The present evidence (although somewhat ambiguous because of the paucity of dated cremations) suggests that inhumations and cremations were being deposited within wedge tombs contemporaneously and there is nothing to indicate that these different practices represent diachronic change. Beaker pottery of both early and middle style dating broadly from c. 2450–2200 BC (see Chapter Eight) have been found in wedge tombs containing inhumations and those containing cremations, as well as those containing both (see Tables 5.4 and 5.5). However, stylistically-late Beakers which were current from 2200 and 2050 BC (see Chapter Eight), have only been found in tombs containing cremations.

Significantly, while Bowls are inherently connected with a dramatic increase in inhumation burials c. 2200 BC, and seem to have functioned as the Irish version of British funerary Beakers, Bowl-associated inhumations have never been found in any wedge tombs. These Food Vessels have been discovered in at least six wedge tombs, occasionally in primary contexts, but these have only been associated with cremated bone. This contrasts with the insertion of unburnt skeletons with Bowls into court tombs and passage tombs. So it seems that while cremations continued to be to be deposited in wedge tombs, c. 2150 BC, these monuments no longer received inhumations. Instead, these unburnt burials were placed with Bowls in small rectangular cist and pit graves.

While the strength of association between the Beaker pottery and these burials is questionable, this broad-scale patterning suggests that both cremation and inhumations
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were deposited with Beaker pottery in wedge tombs from 2500 to 2200, after which point, only the placement of Beaker-associated cremations continued. This is borne out by the two radiocarbon dates from Beaker-associated cremated bone in wedge tombs (see above), and the eight dates from Beaker-associated unburnt bone at Labbacallee and Lough Gur (see Table 5.4 and Charts 5.1 and 5.2). However, this is an issue that warrants further investigation. Dates have never been obtained from both cremations and inhumations that have been found within the same wedge tomb such as Lough Gur. Rectifying this situation will certainly improve our understanding of chronological changes to practices in these tombs (see Schulting et al. 2008, 11).

5.3 Beaker deposition in court tombs

At least 36 court tombs have been excavated in Ireland and Beaker sherds have been found in secondary contexts in at least fourteen (39%) of these: Creevykeel, Co. Sligo, Ballyglass, Co. Mayo, Clontygora Large, Co. Armagh, Aghanaglack and Ballyreagh, Co. Fermanagh, Barnes Lower and Legland, Co. Tyrone, Tamnyrankin, Ballybriest and Carrick East, Co. Derry, and Ballyalton, Ballyedmond, Ballynichol and Goward, Co. Down. It is not possible to state the total amount of Beaker pottery found in court tombs or exactly how many sherds per pot without undertaking a complete reassessment of the ceramics from these monuments. However based upon the available information, at least 19 Beakers represented by a minimum of 103 sherds have been discovered in this context.

In the majority of cases (9 out of 14 tombs), the remains of only one Beaker pot was present (Table 5.7). The highest number of Beaker vessels in any tomb was three and these were excavated at Carrick East and Ballynichol. At the former, the southern chamber contained a layer of soft yellow earth that yielded the remains of three Beaker pots (A, B and C). Overlying this was a black layer containing sherds from two of the same Beakers (A and C) as well as multiple sherds of a Middle Neolithic globular bowl (D), flint scrapers and human bone (Mullin and Davies 1938; Herity 1982, 285 and 332, Herity 1987, 194). Beaker pots (A) and (B) were represented by at least three sherds each, while eight sherds deriving from Beaker pot (C) were found "in all parts of the south chamber and at very divergent levels" (Mullin and Davies 1938, 103). All of these Beaker sherds were so widely scattered throughout the chamber that it was not possible to identify any associations between these and any of the other materials in the tomb.

The greatest numbers of Beaker sherds in any court tomb were excavated at Ballyglass, Co. Mayo, where the front chamber of the eastern gallery produced fifty six Beaker sherds
from two vessels (Roche forthcoming). Interestingly one of these pots had an estimated height of only 92mm and appears to be the smallest Beaker recorded in Ireland or Britain (Fig. 5.9, ibid). The presence of numerous conjoining sherds from both vessels suggests these were deposited as complete pots. However, no other evidence for this form of depositional practice was detected at any of the other court tombs as most Beakers were represented by a few small sherds each (see Table 5.7). Of course, it is impossible to decipher whether this is due to the effects of later re-use and disturbance of the tomb or if the low sherd: vessel ratios is an accurate reflection of past depositional activity.

Indeed there are many limits to what can be known about the placement of Beakers in these tombs. No Beakers have been recorded in a secure closed deposit within a court tomb. Instead these predominantly occur in disturbed deposits that include artefacts ranging from the Early Neolithic to the Late Bronze Age. For example, the aforementioned Beaker pots from the eastern gallery of the Ballyglass court tomb were found within a layer that included human bone, Middle Neolithic and Late Bronze Age pottery (Ó Nualláin et al. forthcoming). Similarly, at Barnes Lower, Co. Tyrone, an “undisturbed deposit” within one of the chambers consisted of a concentration of cremated bone in black soil along with a Middle Neolithic bipartite bowl, two burnt flakes, and four sherds of a Beaker (pot 2) (Collins 1966, fig 8:1–3; Herity 1987, 233). Thus, it is difficult to identify reliable associations between the Beaker pottery and human bone or particular finds recovered from the same chamber. This is particularly the case in the absence of radiocarbon dates for the burials.

Although human bone and Beaker pottery have been found in the same deposits in court tombs, there is no definite evidence for Beaker-associated burials within their chambers at present. However, cremated human bone from the court tombs at Aghanaglack and Ballyalton has returned radiocarbon dates ranging from 2300–2000 BC (Schulting and Murphy in prep). One of the chambers at Aghanaglack (Davies 1938, Herity 1987, 154) contained a few sherds of a Beaker and what was described in the original publication as a flint javelin (though this could be a flint dagger or a foliate knife). No other pottery with a currency overlapping with this radiocarbon date was recovered from the tomb and so it may be suggested that the deposition of the human remains at Aghanaglack was associated with the Beaker pottery. Perhaps, the best evidence for Beaker burial in a court tomb context comes from the exterior of the monument at Ballybriest, Co. Derry, where a stone-lined pit or cist that had been dug into the cairn of the court tomb contained the cremated remains of an adult male and at least eight sherds from a 'domestic' Beaker (Evans 1939, Fig. 5.10).
Further evidence for Beaker-associated deposition within court tombs is provided by the discovery of stereotypically Beaker objects within these monuments. Six barbed and tanged arrowheads have been retrieved from deposits within the interior as well as the cairns of four court tombs. Two Green Low types came from a layer that also produced an Early Neolithic Carinated Bowl within a chamber at Aghanaglack, Co. Fermanagh. Two Conygar Hill types were found in the cairn of the Ballyglass (large) court tomb, while another barbed and tanged example (of unknown type) and a hollow-based arrowhead were recovered from a ‘much disturbed fill’ in the front chamber of the smaller Ballyglass tomb (Ó Nualláin 1998). Another barbed and tanged arrowhead was found in the Creggandevosky court tomb, but its contextual details are unknown (Herity 1987, 132). A probable bracer was found in one of the chambers of a court tomb at Ballywholan, Co Tyrone (Kelly 1985). Although this stone object is now lost, its description as being red in colour with a perforation at either end and a plano-convex section certainly suggests that this is a Type A bracer (see Chapter Nine).

In the main, only Beaker sherds and projectiles seem to have been placed in court tombs. This suggests that the Beaker-associated deposition was quite circumscribed and type-specific in these contexts. While these artefacts may have been deposited in tombs as grave goods and may reflect the former location of Beaker burials, it is also possible that these artefacts represent some other form of ceremonial depositional practice. There is no definitive evidence to indicate that these deposits represent sepulchral activity, instead they may have served to mark ancestral places and maintain social relationships between local communities and their ancestors (see Section 5.10.3)

5.4 BEAKER DEPOSITION IN PASSAGE TOMBS

Although the best known Beaker-associated activity in Ireland has been found in what has usually been interpreted as a settlement context outside the monuments at Newgrange and Knowth, Co. Meath (see Chapter Three), Beaker pottery has only been discovered within three passage tombs in Ireland, all of which are at Knowth: Tombs 2, 15 and 17. A single sherd was found above the old ground surface within the passage of Tomb 2 and a further two sherds occurred immediately opposite its entrance (Eogan 1984, 308; see Fig 3.9). Beaker pottery was loosely associated with the poorly preserved Tomb 17 – one of the kerbstones (no. 8) had been removed in antiquity and the depression created by its removal contained six sherds from two vessels (Eogan 1984, 307).
Inside the passage of Tomb 15 at Knowth was a cist-like stone compartment - two sides of which were formed by a sillstone and two orthostats (Eogan 1984, 308-12). The compartment contained the cremated remains of an adult female and a child which have traditionally been regarded as a Beaker burial (Eogan 1984, Roche and Eogan 2001). However, recent radiocarbon dating of a longbone fragment from the adult yielded a Late Neolithic date of 2912–2877 BC (UBA-12683, 4265±24 BP) (Schulting et al. forthcoming).

Sherds of Beaker pottery were found close to the burial – some were stratigraphically associated with the bones, others were in the fill above it, but most of the sherds were just outside the compartment (Fig. 5.11). All of these sherds were derived from a near-complete ‘fine’ undecorated Beaker that appears to have been inserted as a complete vessel and to have been subsequently broken during the tomb’s destruction (Eogan 1984, 312). This is suggested by the fact that all the lower sherds were found to the east and all the upper sherds of the pot were found to the west (Eogan 1984, 311). The deposition of this Beaker just inside the passage of tomb 15 in association with an earlier burial of Late Neolithic date suggests that this vessel was deliberately placed there to fulfill a referential or commemorative function.

Despite the paucity of Beaker pottery and complete lack of evidence for associated burials from passage tombs, a relatively large number of Beaker objects including arrowheads, bracers and V-perforated buttons have been found in and around these monuments. Six of these buttons have occurred in association with four passage tombs: Carrowmore Site 49, Co. Sligo; Dowth, Mound of the Hostages and an unperforated example from Loughcrew Cairn R2, Co. Meath (Harbison 1976, 14). Another V-perforated button was found on the mountainside near the probable passage tomb known as Miosgán Meadhbhá at Knocknarea, Co. Sligo, though no further details about its provenance are available (Harbison 1976, 35). Monument no. 49 in the Carrowmore passage tomb cemetery comprised a central chamber that was surrounded by a boulder circle. This contained two burials (one cremated and one unburnt) that were associated with oyster shells, a V-perforated button and three sherds of reddish pottery (Wood-Martin 1888, 68; Harbison 1976, 14). A starshaped V-perforated button was found "in the sepulchral caverns during the excavations of the tumulus" at Dowth, Co. Meath (Wilde 1857, 122), while an unperforated jet button came from Cairn R2 of the passage grave cemetery at Loughcrew (Harbison 1976, 14).

Three V-perforated buttons were discovered within the chamber of the Mound of the Hostages passage tomb (Fig. 5.12). The exact context and associations of two of these are slightly ambiguous, but one example seems to have accompanied an Early Bronze Age burial (O’Sullivan 2005, 104-9). This anthracite button was found with a crouched
inhumation (Burial 18 - sex unknown) at the base of a pit dug into the original fill of the chamber where it rested on its left hand side with its head to the south-west (Fig. 5.12). This burial was also accompanied by a bronze awl and a Bowl (Food Vessel) that had been positioned beside its head, though the upper part of the skull was missing (O'Sullivan 2005, 107–110 and pers. comm.). Anna Brindley (2007, 249) has observed that this Bowl is of a late type dating from around 1980–1920 BC, though cremated human bone from the base of the pit produced a radiocarbon date (GrA 17719: 3760±50 BP) of 2393–1983 BC. Interestingly, this represents the earliest Early Bronze Age date for a burial from the Mound of the Hostages (see Brindley et al. 2005, 290).

A second anthracite button was found in the uppermost levels of a layer of “clean yellow clay” overlying Burial 18. This yellow layer was sealed by a stone paving upon which lay the disarticulated remains of another crouched inhumation (Burial 19 - adult of unknown gender) as well as unburnt bones from an adolescent, children's teeth and two skulls – one of which was full of cremated bone. A Bowl was also found in the corner of the pit beside the skulls and the upper half of another Bowl was also found within the pit at the same level as the inhumation burial. The location of the second button found within the yellow clay over Burial 18 but separated from Burial 19 by the stone paving suggests that this ornament had not accompanied Burial 19. It may originally have been deposited with Burial 18 and then been disturbed at a later stage – perhaps during the deposition of the yellow layer which may have been laid in preparation for the inhumation of Burial 19. However, given the disturbance over time by humans and animals, the evidence for the displacement of some of the human bones, the methods of excavation and recording employed at the time and the considerable time lapse between the date of excavation and the date of publication, there can be no certainty about the original associations of this button. It remains possible that the buttons may have accompanied earlier cremation burials contemporary with the main currency of Irish Beaker pottery such as that which was radiocarbon dated (see above), but these were subsequently displaced (accidentally or deliberately) during the insertion of the inhumations.

Bracers have been found in topsoil in proximity to three passage tombs. A (Type B2) bracer was found within 400m of Cairn K at Lough Crew, Co. Meath (Cooney 1987). Another example (Type A) was found in close proximity to the Carrowkeel passage tomb cemetery where it lay near the base of the peat that also covered some of the tombs (Harbison 1976, 24) and yet another (Type A) was discovered in topsoil 500m east of the passage tombs at Fourknocks along with a barbed and tanged arrowhead (Sutton A type) (King 1999, see Fig. 5.13). Arrowheads have occurred within three passage tombs: a hollow-based form was sealed by slip from the cairn of Site Z, the destroyed satellite
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passage tomb at Newgrange (O’Kelly et al. 1978, 333), while two barbed and tanged types were on chamber floors: one (Green Low or Conygar) arrowhead was found in Slieve Gullion passage tomb, while another (Sutton Type A) came from tomb R2 at Loughcrew (Green 1980, 226). Although the deposition of the archery items found in proximity to passage tombs cannot be shown to be directly related to these monuments, the spatial associations shared by a number of these suggests that this was not simply fortuitous and that these deposits were focused on the vicinity of these megaliths.

Overall, then, passage tombs provided both a focus and a locus for Beaker deposition. As with court tombs, the nature of Beaker deposits in passage tombs seems to be highly restricted and deposition seems to have followed a highly codified set of practice. However, in contrast to other older megaliths, like court tombs, this seems to have largely excluded the placement of Beaker sherds within passage tombs. Instead, we see comparatively high numbers of artefacts such as V-perforated buttons and bracers that are generally only found in natural places (see Chapter five and six). The Killaha bronze flat axe discovered in a Beaker horizon sealed by collapse from the cairn of the tomb at Newgrange (O’Kelly and Shell 1979) can probably also be included as an example of this phenomenon (though see Section 3.2.2). Given the complete lack of evidence for Beaker-associated burials in these monuments, it seems unlikely that many (if any) of the artefacts were deposited as grave goods, instead these seem to have fulfilled a ceremonial function.

As discussed in Chapter Three, culturally-rich occupational debris seems to have been deliberately deposited at Knowth and Newgrange to emphasise particular aspects of these megaliths, particularly the entrance areas. Much of the Beaker deposition at passage tombs seems to have served to establish or maintain material connections between the users of the Beaker pottery and the past history of these important monuments. This activity appears to represent non-sepulchral commemorative interactions between the community of the living and the community of ancestors.

5.5 BEAKER DEPOSITION IN PORTAL TOMBS

Beaker finds from portal tombs are less common and their identification as funerary deposits is problematic: most of these have come from disturbed deposits within the interior. Beaker pottery has only been recovered from one Earlier Neolithic portal tomb: Poulnabrone, Co. Clare (Lynch and Ó Donnabháin 1994;). Its contents included the remains of at least 26 individuals (Lynch and Ó Donnabháin 1994), Early and Middle Neolithic pottery as well as two 'domestic' Beaker sherds which were identified by Eoin Grogan and a hollow-based arrowhead. The projectile was apparently associated with
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disarticulated human remains (Lynch 1987). Ten radiocarbon determinations from human bone produced dates ranging from c. 3880 to 1412 BC (Hedges et al. 1990), but none of these overlap with the currency of Beaker pottery and thus there is no certainty of association between the sherds and the human remains from the tomb.

Hollow-based arrowheads have also been discovered at two other portal tombs: Melkagh, Co Longford (Cooney 1997b), and Kiltiernan Domain, Co. Dublin (Ó Eochaidhe 1957). The Melkagh projectile was found during excavations conducted after the tomb had been badly damaged by land improvement works. This arrowhead was discovered in a spread of flat stones thought to represent the base of the cairn (Cooney 1997b, 219) and while how it ended up in this context is unknown, it may be speculated that it was deliberately inserted into the cairn. Partial excavation of the chamber at Kiltiernan, Co. Dublin, produced another hollow-based arrowhead along with three concave scrapers and one convex end scraper, and at least two pots of Middle Neolithic Impressed Ware (Ó Eochaidhe 1957).

Cremated human bone from two tombs — Ballyrenan, Co. Tyrone (Davies 1937) and Drumanone, Co. Roscommon (Topp 1962) — has produced radiocarbon dates indicating burial activity concurrent with the use of Beakers, though none of this pottery was found in either tomb. Cremated human skull bone from the distal chamber at Ballyrenan returned a date of 2281–2033 BC (UB-6706) (Kytmanov 2008). The only finds with which the cremated bone was definitely associated was an Early Neolithic Carinated Bowl (Davies 1937), though Early Bronze Age disc and fusiform beads were also present in the tomb. Cremated human bone from a disturbed position within the chamber at Drumanone produced a radiocarbon date of 2134–1905 BC (UB-6696: 3639±37 BP). There was also widespread Beaker-associated ‘settlement’ activity including pits and occupation spreads immediately around the portal tomb at Taylorsgrange, Co. Dublin (Keeley 1989; Lynch, R. 1998) which seems comparable to the Beaker deposits outside the Newgrange and Knowth passage tombs.

5.6 BEAKER DEPOSITION IN CISTS

Beaker pottery has been discovered within six cists in association with burials including those with or without associated cairns: Poulawack, Co. Clare, Gortcobies, Co. Derry, Knockmullin, Co. Sligo, Longstone Furness, Co. Kildare, Cappydonnell, Co. Offaly and Lyles Hill, Co. Antrim. All of these sites except Cappydonnell were excavated before 1950. Thus,
these suffer from many of the problems associated with the interpretation of older excavations (see above) and details about the nature of these burials is often lacking\textsuperscript{13}.

### 5.6.1 Poulawack, Co. Clare

The evidence for a Beaker association with many of these is not clear-cut. For example, at Poulawack, a kerbed cairn (revetted by two kerbs, see Fig. 5.14) containing seven cists and the remains of sixteen men, women and children was excavated by Hencken (1935). Radiocarbon dating of bone from these burials suggests that there were three main phases of activity at this monument spanning almost 2000 years (Brindley and Lanting 1991/1992, 16). This is thought to have begun with the creation of the central grave (Grave 8 and 8A) which has been interpreted as a Middle Neolithic Linkardstown-type cist (see Ryan 1981). Bone from this produced a radiocarbon determination dating to c. 3600 BC which supports this interpretation (Brindley and Lanting 1991/2, 13).

In the later 3\textsuperscript{rd} millennium, three cists (Graves 4, 5 and 6) were constructed and were later sealed beneath the cairn, when it was added to the monument (see Henken 1935, 202). One of these was a large cist (1m long by 1m wide) that had been divided into two compartments (grave 6 and 6a, see Fig. 5.15). One part (grave 6) of the cist contained a collective burial consisting of the cremated remains of an adult male and the unburnt bones of an adolescent and a child. Bones belonging to the adult male within the other compartment (6A; see below) were also found with these human remains. A bone from the adolescent returned a radiocarbon date of 2185–1772 BC (OxA-3263: 3600±65 BP) (Brindley and Lanting 1991/1992, 16). The other part of the cist (Grave 6A) contained the disarticulated unburnt bones of an adult male as well as some bones from the adolescent in the other compartment (6), some cremated bone and one sherd of Beaker pottery. Bone from the adult male produced a radiocarbon date of 2020–1686 BC (OxA-3262: 3520±60 BP) (Brindley and Lanting 1991/1992, 16). The excavator attributed the disordered state of the deposits within this large cist to the activity of rodents.

Also within this monument, Grave 4 was a rectangular cist located along the line of the revetment/kerb which was not present in this spot. It's capstone was missing and the excavator considered it to have been disturbed (Henken 1935, 203). It contained a small number of unburnt bones partially representing an adult (of indeterminate sex) and a

\textsuperscript{13} For example, all that is currently known about the Beaker associated burials from the cists at Knockmullin, Gortcobies and Cappydonnell is that these were cremated.
child that had been disturbed. One of these bones returned a radiocarbon date of 2560–2040 BC (OxA-3260: 3830±90 BP) (Brindley and Lanting 1991/1992, 16). Grave 5 was a rectangular cist overlying the original ground level and was located within the revetted cairn. It contained the unburnt bones of a child and an adolescent and one tiny sherd of reddish pottery of unknown type. The bone was radiocarbon dated to 2018–1682 BC (OxA-3261: 3490±60 BP) (Brindley and Lanting 1991/1992, 16). The radiocarbon dates from the unburnt human bone within these three cists, all of which seem to be broadly contemporary with the use of Beakers and the presence of the Beaker sherd within one of these graves suggest that they may well represent Beaker-associated activity; however the absence of more pottery raises questions about this assertion. Obtaining radiocarbon determinations from the cremated bone in Grave 6 could clarify this. The three other cists (Graves 2, 3 and 7) associated with this monument had all been inserted into the cairn after it was built and dated to c. 1600 BC (ibid).

5.6.2 Lyles Hill, Co. Antrim

Similar issues arise regarding whether or not the burial found with Beaker pottery at Lyles Hill was genuinely Beaker-associated. Here, a centrally located cist grave (that may have been disturbed) appears to have been sealed beneath a kerbed cairn (Evans 1953). The cist and cairn had been built over a pre-existing Neolithic hearth and “occupation area” consisting of a black layer that contained lots of burnt human and pig bone, stone beads, arrowheads, polished stone axe fragments, as well as Early and Middle Neolithic pottery. Outside the kerb of the cairn were three Early Bronze Age burials associated with Food Vessels (two Vases and a Bowl) and an encrusted urn. The central cist had a paved floor and two fills. The primary layer contained the cremated remains of a child as well as several sherds of Early and Middle Neolithic pottery, a hollow scraper, a leaf-shaped arrowhead or foliate knife, a quartz core and two rim sherds of a pot (Evans Vessel 90) originally identified as an unusual Food Vessel (Evans 1953, 10 and fig. 18, no. 90) but subsequently recognised as a Beaker (Apsimon 1969; Case 1961, 224). Eoin Grogan (pers. comm.) has identified this as a probable ‘domestic’ Beaker with ‘Rockbarton’ type features. Cremated human and red deer bone and a Beaker sherd (Evans 1953, fig. 18.87; Case 1961, 202; Case 1966, 168, Eoin Grogan pers. comm.) were found beside the central cist but within the cairn and the excavator suggested these had been disturbed from that grave.

Evans (1953, 46) had interpreted the cist and cairn as being contemporary with the Neolithic black layer under the cairn and considered the Beaker pottery within the cist to
be a later insertion. However M. J. O’Kelly (1956) argued that the construction of the cist and cairn represented a later phase of activity. He suggested that Evans had in fact excavated the in situ remains of earlier Neolithic activity which had only been preserved because of the later construction of a cairn over them (O’Kelly 1989, 56). O’Kelly’s interpretation is supported by the facts that the paved floor of the cist was clearly laid over the Earlier Neolithic deposit (Evans 1953, 8) and that this dark Earlier Neolithic layer only extended slightly beyond the cairn at which point it suddenly became much thinner (1953, 11). These two observations suggest that the central cist and cairn post-date the underlying Neolithic layer and that the survival of these earlier deposits in that location can be attributed solely to the imposition of the cairn over it.

The occurrence of the Food Vessel associated cists outside the kerb strongly suggests that the monument had already been built by the time those burials occurred c. 2100 BC. It seems very probable that the earlier Neolithic artefacts within the central cist are residual and the Beaker sherds are in a primary position in direct association with the cremation burial. Ultimately, dating of the cremated bone should be undertaken to test this hypothesis, but the character of this monument fits very well with other similar cairns that were constructed in the later third millennium and contain Beaker-associated deposits (see below).

5.6.3 Cappydonnell, Co. Offaly,

Similarly, a cist excavated on a multi-period site at Cappydonnell, Co. Offaly, was found to contain four fragments from a ‘fine’ Beaker vessel and fragments of cremated human bone radiocarbon dated to 2029–1887 BC (UBA 10189: 3589±30 BP) within its primary deposit (Tim Coughlan pers. comm.). This was sealed by another deposit containing three sherds and three fragments from a Vase of the Food Vessel Tradition. The excavator has suggested that the cist contents were heavily disturbed and it is difficult to discern whether the association between the Beaker fragments and the burial represents a deliberate deposit or something more fortuitous. Given the small size of the pottery, it could indeed be in a residual position within the cist and the radiocarbon date from the bone would be better matched with the date range of Food Vessels. It is also possible that the Beaker and Vase sherds may have been chosen to be deposited contemporaneously. There are many sites where Beakers and Vases have occurred together; the use of these ceramics types were interrelated and may have formed part of the same contemporary repertoire (see Section 5.10.2). Alternatively, the Beaker sherds may represent an heirloom.
5.6.4 Beakers and burials in cists

In total, including the less certain examples, a minimum number of seven Beaker-associated individuals can be identified from cists on six sites. These comprise three adult males, a probable adult female, an adolescent, and two children. Collective cremation burials appear to have been the dominant mortuary rite in this context. Only two burials — both at Poulawack — were unburnt and only one single cremation burial is known from Lyles Hill. The greatest number of Beaker-associated individuals within a cist was the four cremations and inhumations at Poulawack, Co. Clare (Hencken 1935).

A total minimum number of 11 Beaker vessels have been found in cists; however, most of these were found at Gortcobies, Co. Derry. This cist, which was within a cairn (Fig. 5.16), contained a deposit which yielded the remains of at least seven Beaker vessels including two almost-complete examples, a pygmy Bowl and cremated human bone. In contrast to Gortcobies, the other cists each contained the remains of only one Beaker vessel, each of which was represented by a few small sherds. The cists at Furness, Co. Kildare (Macalister 1928), and Poulawack Grave 6/6a, Co. Clare, both produced a single sherd. The cist at Lyles Hill contained only two Beaker sherds, four Beaker fragments came from the Cappydonnell cist, while the stone-lined grave at Knockmullin contained nine sherds. It seems that there was a custom of depositing a few Beaker sherds rather than vessels into cists, though Gortcobies represents a notable exception to this.

In keeping with the small quantity of Beaker pottery recovered from cists, the numbers of associated grave goods from this context is also quite low. Convex scrapers accompanied the Gortcobies burials, while the lithics in the Lyles Hill cist appear to be residual. The only particularly noteworthy Beaker-associated grave good was the fragmented bracer found at Furness, Co. Kildare, within a sub-megalithic cist marked by a massive monolith. This cist contained a flint flake, three fragments of the aforementioned bracer, a possible disc bead, three sherds of ‘domestic’ Beaker pottery14 and the cremated remains of two adults—a male and possible female (Macalister et al. 1913, Fig. 5.17).

14 In his catalogue of bracers and buttons, Harbison (1976, 7) stated that the Furness pottery and bracer was lost. He says "Lawrence Flanagan has suggested to me that they could equally have belonged to an undecorated rustic Beaker. Unfortunately the matter must remain undecided as the sherds cannot be traced; they would appear never to have reached the National Museum of Ireland and must therefore be regarded as lost." However, someone has written on this page of the Harbison book in UCD library -"Cock-up - last heard of at Forenaghts House". This statement would appear to be true as Eoin Grogan stayed at Furness (Forenaghts) House for a few days while he
Typical Beaker artefacts have been found in three aceramic cists. At Kinkit, a two-compartment cist grave contained the cremated remains of two young adults of indeterminate sex, a bone V-perforated button and a bone pin (Glover 1975, Fig. 5.18). Although details are very vague, an additional two buttons – presumably V-perforated – were recovered from a cist at Portanure, Co. Cavan, that was destroyed at the beginning of the 20th century (Glover 1975, 151; Waddell 1970, 110). Similarly fuzzy are the antiquarian accounts reporting a pair of gold discs from Ballyshannon, Co. Donegal, that were found with an inhumation burial in a cist, but in the absence of further information, it is difficult to assign this discovery to a particular date (Eogan 1994, 21). Overall, very few Beaker grave goods have been found in cists, but the bracer from Furness and V-perforated button from Kinkit provide some very rare examples of these objects occurring in a funerary context in Ireland.

Similar to Kinkit, Co Tyrone, or Grave 4 from Poulawack which was detailed above, there are other aceramic cists containing well-dated burials or displaying particular traits which suggest that these should also be regarded as part of the Irish Beaker complex. For example, excavation of the cairn at Moneen, Co. Cork, revealed a centrally located sub-megalithic cist that had been constructed upon an ‘old turf layer’ (O’Kelly 1952, 141; see Fig. 5.19 and 5.20). This layer apparently sealed a Beaker ‘settlement’ which comprised stakeholes, small pits, and areas of burning. The ‘turf layer’ is thought to have developed after the abandonment of the ‘settlement’. A charcoal rich spread containing two or three early Beaker pots (Case 1961, 228; 1993, 251; ApSimon 1986, 11; Brindley 2007, 373) as well as human skull fragments was also considered to be part of this pre-turf layer habitation. Oak charcoal from this deposit produced a radiocarbon date of 2560–2390 BC (GrN10629: 3960±60 BP) (Brindley et al. 1987/8). However, the stratigraphic relationship between the spread and the ‘turf layer’ seems to have been interpreted incorrectly. O’Kelly (1952, 141) declared that the deposit containing the skull-bones was “in and under” the ‘turf layer’, and also states that the skull bones and Beakers were “found in or below” the ‘turf layer’. All of this suggests that the pottery and bones must be conducted excavations there in the early 1980s and recalls being shown the pottery by then owner of Furness house - Pierce Synnott (1920-1982) before it was bought by Patrick Guinness. Eoin identified these as probable ‘Domestic’ Beaker. Although these sherds are currently “lost”, there is no reason to believe that they were not Beaker. Wrist-bracers are exclusively Beaker and have not been found in a primary association with any other pot-type. Although it remains possible that the bracer was deposited as a heirloom with a Collared or Cordoned Urn, this seems unlikely because those ceramics are normally deposited in graves as complete pots. Neither Macalister nor Abercromby who also looked at the Furness pottery would have considered these to be Beaker because until recently, there was very little awareness of the fact that Beaker pottery in Ireland and Britain can be plain without any decoration.
contemporary with the formation of the turf layer or that the stratigraphy may have been disturbed in this location.

The sub-megalithic cist contained the partial remains of two inhumations (an adult male and possibly an adult female) that were unaccompanied by any artefacts and which the excavator presumed to have been disturbed. Bone from one of these burials was radiocarbon dated to 2260–2140 BC (GrN-11904: 3755 ±30 BP) (Brindley et al. 1987/8). Cremated human bone was also found within the grave and this was interpreted as a secondary burial whose insertion was responsible for the disturbance of the two inhumations (O’Kelly 1952, 126), though evidence for such an assertion is completely lacking.

Given that this skull from the Beaker spread was not actually sealed beneath the ‘old turf layer’, it seems quite possible that it belongs to one of the two individuals within the cist. Indeed, although the cist is located at the centre of a kerbed cairn, the cairn may not have been built for some time after the creation of the cist (Brindley et al. 1987/8, 13) and so movement of material out of the cist would have been possible. At the base of the cairn, 12 sherds of late Beaker and sherds from two Food Vessels (probably Bowls) were found which the excavator considered to have been deliberately deposited during its construction (O’Kelly 1952, 128). Given the dating of one of the inhumed individuals within the cist, the presence of Beaker pottery in a layer pre-dating the cist and also at the base of the cairn, there is strong reason to believe that the deposition of at least some of the individuals within the central cist was associated with the use of Beaker pottery.

At Coolnatullagh, Co. Clare, a damaged cairn was partially excavated and found to be defined by a slab kerb that was held in place externally by a concentric drystone revetment (Eogan, J. 2002). A central cist contained the remains of three individuals: an adult inhumation, a child's scapula and a cremation deposit representing adult long and cranial bones, but this was not fully excavated (Eogan, J. 2002, 124). The adult inhumation returned a radiocarbon date of 2460–2140 BC (OxA–10530, 3835 ± 45 BP) (Eogan, J. 2002, 130). Two tiny of sherds of probable Beaker pottery were found in the cairn, and though there is nothing to indicate that these were directly associated with the cist burials (as the cist was only partially excavated), the radiocarbon date overlaps with the main currency of Beaker pottery and certainly pre-dates the use of Food Vessels.

This evidence cumulatively supports the suggestion by Humphrey Case (2004, 200), that aceramic burials in cists represent an aspect of Beaker-associated funerary practices in Ireland. However, it seems strange to regard these as such in the absence of accompanying Beaker type objects, particular pottery. Regardless of whether the label ‘Beaker’ should be
attributed to particular burials, evidence indicating the contemporary deposition of human remains in cists or cairns without any associated Beaker pottery or stereotypical Beaker artefact is highly significant. The evidence from settlement contexts suggest that Beaker pottery was used for daily activities throughout the country and that access to this was largely unrestricted (see Chapters Four and Nine). Despite the ubiquity of Beaker ceramics, a conscious decision seems to have been made by many groups to largely exclude Beaker artefacts of any kind but principally pottery from cist graves and from many other funerary contexts. This is a highly complex issue that is returned to briefly below and in more detail in Chapter Ten.

From this examination of cists, it can be observed that a specific form of cist displays a particularly strong association with the use of Beakers. These include the large cists from Gortcobies, Moneen, Lyles Hill, Furness, Ballynagallagh and Longstone Cullen all of which can be classified as sub-megalithic cists. These are always built above the ground surface from large slabs of rock and generally of quite a substantial size, with external lengths of 2m. These are much more similar to small megaliths than they are to the typically small sub-surface Early Bronze Age cist and they are generally considered to date from 2500–2300 BC (Cooney and Grogan 1994, 86). This is supported by the Beaker associations with the sub-megalithic cists at Moneen, Furness and Gortcobies which have been outlined above.

A number of other similar sub-megalithic cists have been found to contain burials. For example, at Ballynagallagh, Lough Gur, Co. Limerick (Cleary and Jones 1980), a sub-megalithic cist contained an adult inhumation which lay on a flat stone in a flexed position with the skull to the north (Cleary and Jones 1980, 6). Similarly, cremations were found in three of these cists under the cairn at Longstone Cullen, Co. Tipperary at Longstone Cullen, Co. Tipperary (Raleigh 1985, 17, Eoin Grogan and Helen Roche pers. comm.). However, all of these lack any grave goods and have not been radiocarbon dated. Hence, evidence confirming that these represent Beaker-associated constructions is lacking.

Significantly, some of these sub-megalithic cists monuments such as those at Moneen; and Gortcobies may be regarded as belonging to the wedge tomb tradition (Cremin Madden 1968, 13). The distinction between cists and wedge tombs is not always very clear-cut. For example, large cist-like structures occur within or at the termini of wedge tombs such as at Largantea, Ballyedmonduff, Lough Gur, Baurnadomeeny, Moytirra and Labbacallee see Fig. 5.1, 5.5 and 5.7). This is lack of division is also illustrated by small wedge tombs consisting solely of large cists, examples of which are common in the Burren, Co. Clare. There are many common aspects shared by sub-megalithic cists and wedge tombs – both often
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comprise a large cist within a cairn defined by a kerb. This is exemplified by the similarities shared by the Gortcobies cist and cairn and the Ballybriest wedge tomb (see Figs. 5.3 and 5.16). O’Kelly (1952, 123–4, 159) noted during the excavation of the cist at Moneen that it had wedge tomb affinities such as its construction from “double slab arranged in the double wall technique of wedge tombs”. Present evidence suggests that sub-megalithic cists can be viewed as part of a wider tradition of monument building in Ireland dating from the mid-third millennium BC which includes a range of architectural elements including large cists, cairns and defining kerbs, though radiocarbon dating is required to definitively confirm this.

5.7 Beaker deposition in ringditches

Beaker pottery has been discovered within ring-ditches on at least three sites: Kerlogue, Co. Wexford (McLoughlin 2002a), Gortcobies, Co. Derry (May 1947) and Harlockstown, Co. Meath (O’Connor 2005; Fitzgerald 2006). This analysis excludes the enclosures at Ballingoola (MacDermott 1949) and Rathjordan, Co Limerick (O’ Riordáin 1948), which appear to considerably post-date the Beaker pits and spreads that were spatially associated with both of these.

At Kerlogue, Co. Wexford, 60 Beaker sherds from six vessels (five ‘domestic’ and one ‘fine’), two thumbnail scrapers and a chert bead fragment were found in the uppermost fill of a penannular enclosure (8.8m in diameter) defined by a ditch with a southern entrance gap (see Fig. 5.21). Beside the ringditch was a subrectangular pit resembling a grave-cut and containing the fragmented remains of an almost complete Bowl though its upper portion was missing (McLoughlin 2002a). Though no human remains were found within this feature, it may have contained an inhumation that has not survived due to the acidic nature of the local soils. The single ‘fine’ Beaker is represented by two conjoining rimssherds (Roche 2004), while the five ‘domestic’ Beakers are represented by 52 sherds. The sherd: vessel ratio for these pots is quite low with the highest number being the 15 sherds deriving from a large Rockbarton pot (Vessel 11 – see Table 5.8). Though it is not possible to establish the level of truncation that has occurred on this site prior to excavation, there is no evidence to suggest that the Beaker pottery was deposited as complete or near complete vessels. Indeed, Helen Roche observed that some of the Beaker sherds are worn. Combined with the presence of a few sherds from multiple pots, this suggests that the Beaker sherds were probably obtained from an intermediate context comprising an aggregation of habitation debris to be deposited (see Chapter Four). The nature of their deposition within this monument contrasts sharply with the multiple
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Sherds from a single incomplete Food Vessel in the associated pit and seems very similar to the depositional practices exhibited within Beaker pits.

The security of the association of the Beaker pottery with the monuments at Harlockstown and at Gortcobies is a lot less certain. At Harlockstown, Co. Meath, a ringditch (25 m in diameter) enclosed two crouched inhumations in stone-lined graves with almost intact Bowls. One of these skeletons was radiocarbon-dated to 2120–1870 BC (Wk-16290), while the primary fill of the enclosure was radiocarbon-dated to 1960–1690 BC (Wk-16288) (O'Connor 2005; Fitzgerald 2006). The upper fill of the ringditch contained a single sherd of Beaker pottery and a thumbnail scraper. However, this upper deposit is thought to have formed long after the primary use of the monument which would make the Beaker sherd residual. Beaker-associated pits and other features were found in the vicinity and this sherd could have been disturbed from those contexts during later phases of activity on the site.

At Gortcobies, Co. Derry (May 1947), Beaker pottery was found in a pit sealed under the mound of a ringbarrow. This pit contained cremated bone, sherds from a Bowl and a single Beaker sherd. The pit contents had been disturbed by the later insertion of a Collared Urn. Given the presence of just a single Beaker sherd in this context, it is doubtful whether the original deposition of this was connected with the cremated bone or the construction of the ringbarrow. The most likely scenario may be that the remains of some earlier form of activity involving Beaker and Food Vessel pottery was disturbed near the end of the Early Bronze Age, when a Collared Urn and a burial were deposited and the ringbarrow was probably constructed.

Clearly, there is little evidence to link Beaker deposition with the construction or use of earthen burial monuments and the discovery of Beakers within the fills of the ringditch at Kerlogue seems quite exceptional. Beaker sherds do not seem to be strongly linked to funerary activity at any of these monuments. In each case, particularly at Kerlogue, the Beaker deposits resemble those found in pits and seem to consist of occupational debris. It is interesting to note that the Beaker pottery was associated with Bowls on all three of these sites and the relationship between Beakers and Bowls are examined in more detail below.

5.8 Beaker deposition in pit graves

There does not seem to be any examples of typical Beaker pit graves in Ireland, but a small number of pits have been found to contain both Beaker pottery and human bone, some of
which were detailed in Chapter Four. However the identification of any of these as Beaker burials is often highly problematic. In many cases, the strength of association between the Beaker sherds and the bone is quite poor. In others, the bone occurs in small quantities or it has been identified only as probably or possibly human.

At Carnmore 5, Co. Louth, the poorly preserved remains of a cairn sealed a large rectangular pit containing an intact Bowl and unidentifiable cremated bone (Bayley 2005). Seven highly fragmented and poorly preserved sherds from a Beaker were found in an upper fill of this pit and two small sherds from a possible Beaker/Bowl hybrid were discovered in the cairn material (Grogan and Roche 2005). A number of cist burials surrounded the cairn, four of which produced Bowls. So, although the Beaker sherds occurred in a funerary setting, the location and condition of these sherds suggests that they were in a residual position and that their presence there may owe more to chance.

Similar occurrences were discovered during the excavation of an Early Bronze Age cemetery at Moone, Co. Kildare (Hackett 2010). A single Beaker sherd was found in the fill of a grave containing a single crouched inhumation that was accompanied by a Bowl, a chert scraper and a flint blade. Unsurprisingly, bone from the burial returned a radiocarbon date of 2200–1960 BC (SUERC-24981, 3685 ± 30 BP). Another sherd of Beaker pottery was found in the fill of a pit cut into the grave of an aceramic crouched inhumation, bone from which produced a radiocarbon date of 2280–2030 BC (SUERC-24984: 3745 ± 30). A further two Beaker sherds from two separate vessels were found to be associated with an inverted Vase Urn containing a single cremation burial dating from 1940–1680 BC (SUERC-25364: 3480 ± 50). All of the Beaker sherds may represent residual materials that were accidentally incorporated into these burials. However, there was no evidence for other Beaker activity on the site and it remains possible that these sherds were deliberately deposited, perhaps as heirlooms (see Chapter Four). This suggestion may be supported by the recurring discovery of a few Beaker sherds with Bowls in funerary contexts (see below). Either way, the presence of the Beaker sherds in association with Bowls of the Food Vessel tradition suggests that the use of these different ceramics was related in some way.

At Gortnacargy, Co. Cavan, ten extended inhumations with their heads to the west were found in pit graves containing sherds of Beakers and Bowls (O Riordáin 1967). Although a small number of sherds — 53 in total — were found in the graves, the majority (103 sherds) were actually found in surface deposits. This suggests that the sherds may have been accidentally incorporated into graves of much later date and the excavator has suggested that the cemetery had been cut into a habitation (O Riordáin 1967, 63). None of
the inhumations have been radiocarbon dated, but the available evidence suggests that the burials and the pottery are not contemporary.

Excavation of a cairn circle (Site K) at Piperstown, Co. Dublin, revealed a centrally located pit underneath the cairn (Rynne and Ó hÉailidhe (1965). This pit containing a token deposit of a cremated adult male and a small flint flake. Charcoal from this cremation was radiocarbon dated by Kim Rice (forthcoming) and returned a determination of 2537–2343 BC (UB-7825: 3958±37 BP). While there is no doubt that this represents a burial, there is nothing other than its date to indicate that it had any relationship with the use of Beakers. This discovery is highly significant because it suggests that burials were being deposited in a range of contexts from 2500–2200 BC, but that Beaker pottery was deliberately excluded from these.

Another aceramic burial was discovered within the truncated remains of a partially stone lined sub-rectangular grave (1.55m by 1.20m by 0.35m) at Mell, Co. Louth, in proximity (60m) to a Beaker-associated occupation spread (see Chapter Four). The grave contained a prone west–east inhumation of a female adult (head to the west) accompanied by animal bone and two convex scrapers (see Fig. 5.22). Bone from the skeleton has been radiocarbon dated to 2490–2200 BC (Wk-17463, 3894±50 BP). The position of the skeleton at Mell with its head to the west is partially consistent with the pattern of positioning for female Beaker burials in Scotland and Yorkshire whereby these were placed on their right sides and orientated to the west (Shepherd 1989, 79; Tuckwell 1975). This in combination with the radiocarbon date and the occurrence of 491 sherds from 38 Beaker vessels including a polypod bowl on the same site suggests that the burial at Mell was conducted by Beaker users who were aware of Beaker burial practices in northern Britain but who chose not to include a pot in the grave.

As detailed in Chapter Four, unidentified cremated bone has been found in association with Beaker pottery within 15 pits on 15 sites and cremated human bone has been recovered from seven pits. However, in many cases, it is uncertain whether these should be regarded as burials either because the identification of the bone as human is not definitive or the quantity of the bone is so small as to raise questions about whether or not it is the product of ostensibly sepulchral activity. Perhaps, the most clearcut example of a Beaker-associated pit burial in Ireland comes from a stone-lined oval pit at Monadreela, Co. Tipperary, containing many fragments of cremated human bone, 110 sherds from at least 10 Beakers, a large quantity of hazelnuts and acorns and a small polished stone axe (see Fig. 4.4 and 4.7; Richard O’Brien and Joanne Hughes, pers. comm.; Grogan and Roche 2006a). However, the large number of pots occurring in this pit suggests that the
deposition of this material may relate to something other than the funerary. Another two examples were excavated at Corbally, Co. Kildare (Purcell 2002, 33), where one pit produced two sherds from a Beaker pot, a thumbnail scraper and highly fragmented burnt bone, while a second pit contained 18 sherds from two Beakers, cremated bone and a barbed and tanged arrowhead. In both cases, the fragments of bone were too small to allow them to be identified as human, however it is tempting to interpret the arrowhead as a grave good.

Overall then, there is very little evidence for Beaker-associated pit graves in Ireland and certainly there are no examples of the Beaker graves commonly found in southern England. While Beaker pottery has been found in association with definite and possible human bone, the character of these deposits suggests that they did not serve an ostensibly sepulchral purpose and may represent the remains of ceremonial activities.

5.9 COMPARATIVE ANALYSIS AND DISCUSSION OF RESULTS

Overall then, including pit graves, a total of 1520 sherds representing 189 Beakers have been recovered from a total of 53 funerary and/or megalithic sites (see Table 5.9). Clearly, it is difficult to make a distinction between sepulchral and ceremonial activity in many of these contexts because of the fuzzy nature of the available evidence. However, no such division may have existed in the Final Neolithic (see below); therefore, it seems best to treat all the Beaker deposition in megaliths and the other contexts detailed in this chapter as belonging to a broad spectrum of activity. However, there is so much uncertainty about the nature of the pits containing large amounts of Beaker pottery and small quantities of definite or probable human bone that it seems better to omit these from any further quantitative analysis in this chapter (these were considered alongside all other pits in Chapter Four). The overall amount of pottery from funerary and megalithic contexts was greatly influenced by the large quantities from these pits, exclusion of which gives a total of 697 sherds representing 92 Beakers from a total of 38 sites.

5.9.1 Comparing the deposition of Beakers in all funerary contexts

30 of these 38 Beaker-associated ceremonial and funerary sites are megaliths, 13 represent Beaker-associated constructions in the form of wedge tombs and the remainder (17 examples) comprise earlier Neolithic monuments that have produced Beaker-associated deposits from secondary contexts. Court tombs represent by far the most
Beaker-associated deposition in funerary and megalithic contexts

common (14 examples) of these, with Beaker pottery only being recovered from two passage tombs and one portal tomb. Beaker pottery has also been recovered from six cists and two ringditches (see Table 5.9). Clearly, neither earthen burial monuments such as barrows nor pit graves formed a major aspect of mortuary practices here.

Despite the more common discovery of Beakers in court tombs than any other megalith, only 103 sherds have been found within these. Though this far exceeds the miniscule amounts of sherds from passage and portal tombs, it pales in comparison to wedge tombs which have produced the highest number (509 sherds). Unsurprisingly, the remains of only one vessel were found in a portal tomb, while only two vessels were discovered within passage tombs. Similarly small numbers of vessels were retrieved from ringditches and cists. By far the largest quantities come from wedge tombs (51 vessels). Significantly, court tombs contained a minimum of 19 Beaker pots even though they produced far fewer sherds than wedge tombs (see Table 5.9). This seems to be directly reflective of the particular depositional practices associated with wedge tombs which were very different to those displayed in any of the other contexts.

The differing depositional treatment of Beakers in various settings is clearly demonstrated by comparing the number of sherds per vessel in each context type. The number of sherds per Beaker in wedge tombs is generally much higher than any of the other funeral or megalithic contexts. While vessels represented by only a small number of sherds were often found in wedge tombs, these regularly occurred alongside Beakers comprising multiple conjoining sherds. Some of these appear to have been deposited as complete or near complete pots (see Section 5.2.1). There are a few exceptional examples of multiple parts of one pot being placed in a court tomb (at Ballyglass) and of the deposition of a whole pot in a passage tomb (at Knowth). However, the majority of Beaker pottery recovered from non-wedge tomb contexts is generally represented by a few sherds from a single vessel; these are often fragmentary and worn (see Table 5.10).

In summary then, Beaker pottery was predominantly deposited in funerary and megalithic contexts as sherds rather than as complete pots and the condition of some of these sherds suggests that they have been obtained from an intermediate context comprising a collection of sherds that may have been fractured for quite some time. The occurrence of such sherds in these funeral and ceremonial contexts greatly resembles the deposition of sherds within pits and spreads on settlements. A notable exception to this is provided by the Beaker ceramics from wedge tombs which were regularly deposited as both sherds and pots. Unlike the other monument types, there is little evidence to suggest that the
Beaker-associated deposition in funerary and megalithic contexts

pottery in wedge tombs (with the exception of Lough Gur) had been broken for some time and it may be speculated that they were made especially for burial in these megaliths.

5.9.2 Comparing the deposition of non-ceramic artefacts

There is much diversity in the deposition of typical Beaker artefacts within these funerary and megalithic contexts and the identification of many of these as grave goods is highly doubtful. In the case of wedge tombs, although these have produced the best evidence for Beaker burial, lithic debitage are the objects most commonly found in direct association with Beaker pottery in this context. Seven barbed and tanged arrowheads have come from these monuments, but it is unclear whether these were actually deposited with burials (Section 5.2.3). Other typical Beaker objects such as bracers are completely absent from wedge tombs and the only definite Beaker-associated grave good is the bone pin that accompanied the female single inhumation at Labbacallee (see Section 5.2.2).

In contrast to wedge tombs, we see the deposition of typical Beaker objects in and around passage tombs and also in court tombs and cists, albeit to a lesser extent (see Table 5.9). Six barbed and tanged arrowheads and a probable bracer have been discovered within five court tombs (Section 5.3). Six V-perforated buttons have been discovered in four passage tombs; these monuments have also produced three Beaker arrowheads and their immediate environs have yielded three bracers (Section 5.4). The total numbers of grave goods from cists is rather low, but this context has produced some rare examples of Beaker objects occurring in association with Beaker pottery and/or human remains such as the aceramic cremation with a V-perforated button at Kinkit and the cremation with Beaker sherds and a bracer at Furness (Section 5.6).

5.9.3 Comparing Beaker-associated burial practices

A total of 40 Beaker-associated individuals — 16 unburnt and 24 burnt — have been recovered from 17 different sites (see Table 5.11), primarily wedge tombs (nine sites) and cists (seven sites). 80% (32 of 40) of these burials — 18 cremations and 14 inhumations — have been recovered from wedge tombs. Five burnt and two unburnt burials have been found in cists, some of which have been covered by cairns. In some cists, the burial and the pottery share a rather tenuous association. Beaker-associated human remains have not been recovered from passage tombs, portal tombs or court tombs, although one such
cremation burial was found in a cist-like pit dug into the cairn of one court tomb (see Table 5.11).

Collective burial predominates in both wedge tombs and cists, though there is some evidence for successive individual burials and for single burials within cist-like chambers within wedge tombs. Clearly Beaker-associated cremations outnumber Beaker-associated inhumations in every context in which they occur. Some of the Beaker-associated human remains seem to have undergone a long series of different transformative treatments after death, but before their final deposition. This is indicated by the Labbacallee inhumation which was buried after excarnation (see Section 5.2.2), as well as evidence for the manipulation of human remains including the skull at Moneen (see Section 5.6.4) and the disarticulated bones within the cist at Poulawack (see Section 5.6.1). There does not appear to be many age or gender-related aspects to Beaker mortuary practice. Based on the available information, 11 of the 16 inhumations are adults (four male and four female), and there are no unburnt juveniles or adolescents. Ten of the 24 cremation burials are adults (five male and five female) and two are juveniles.

Overall then, it is clear that there is a greater body of evidence for Irish Beaker-associated mortuary activity than has previously been recognised. While the quantity of known Beaker burials is far less than that from subsequent stages of the Early Bronze Age, an increase in evidence for funerary deposition certainly occurs with the appearance of Beaker ceramics in Ireland (see Carlin and Brück forthcoming). These Beaker-associated inhumation and cremation burials are predominantly found in wedge tombs, but also occur in cists and pits (Contra Brindley 2007, 328). However, very few contain anywhere near the range or number of objects that are often found with British Beaker burials (though see Section 5.11.2). Indeed, very few stereotypical Beaker objects occur in sepulchral contexts in Ireland and these were rarely deposited in association with Beaker pottery. Accordingly, there is a clear lack of association between these objects and Beaker ceramics within this setting.

Although a few single inhumations do occur at this time, the classic Beaker burial appears to be completely absent (though see Section 5.10.2). It is interesting to note that there are a small number of aceramic inhumations and cremations in cists and pits with radiocarbon dates that fall within the date range of 2500–2200 BC, such as that found at Mell, Co. Louth, and Piperstown, Co. Dublin. It remains possible that these represent a form of Beaker mortuary tradition that involved the exclusion of Beaker pottery. Importantly, the radiocarbon dating of single inhumations like that at Mell indicate that it
is no longer possible to maintain the traditional position that there is no evidence for such burials before 2150 BC (e.g. Brindley et al. 1987/8, 16; Brindley 2007, 373).

In this regard, it may be significant to note that there are over 27 examples of crouched inhumations in cists without grave goods (Grogan 2004b, 62). Many of these occur in cemeteries alongside Bowl burials and hence are presumed to be contemporary with those, but this assumed rather than proven. The small number of burials radiocarbon dated to the beginnings of the Early Bronze Age (2500–2200 BC) in Ireland is commonly thought to reflect the paucity of burial evidence from this period. However, this may simply be a product of the dating strategies employed in the analysis of Early Bronze Age burials which tend not to radiocarbon date aceramic inhumations occurring in cemeteries. Radiocarbon determinations are generally only obtained for these when they occur as isolated single graves. The findings of this chapter suggest that the earliest Bronze Age inhumations in Ireland were aceramic and date from 2400–2200 BC, but the full extent of this will remain unknown until dating methods change.

5.10 UNDERSTANDING DEPOSITION IN MORTUARY AND MEGALITHIC CONTEXTS

The deposition of Beaker material in sepulchral and megalithic contexts in Ireland represents a range of diverse practices involving the use of various monuments. The paucity of classic Beaker artefacts from each of these contexts provides a common thread between them. On the rare occasions that aceramic artefacts are found in these contexts, these are rarely securely associated with either burials or Beaker pottery. Overall, it is clear that objects commonly found with Beakers elsewhere in Europe (see Sections 5.11.1–2), are rarely found in either a funerary or megalithic setting in Ireland. This raises interesting questions about the significance of the deposits in these contexts and the meanings of Beakers on this island which will be addressed in Chapter Ten.

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15 Often, budgetary constraints prevent more than a few radiocarbon dates being obtained for an Early Bronze Age cemetery. To achieve best value for money, dates are usually only obtained for those burials with associated grave goods because these will improve/build our typo-chronologies for these artefacts.
5.10.1 The highly selective and codified nature of these depositional practices

The paucity of Beaker artefacts with burials in Ireland suggests that there was a shared set of rules regarding how and where objects could be deposited. For example, large numbers of objects such as bracers have been found in Ireland, especially in natural places (see Chapters Seven and Nine), but these are almost totally absent from graves. Shared conventions seem to have largely prevented the deposition of aceramic Beaker artefacts in the funerary sphere. This is evidenced by the unaccompanied burials such as those at Mell and Piperstown dating to the Beaker period. This is also illustrated by the paucity of grave goods from wedge tombs, even though these contain the greatest number of Beaker burials. All of this suggests that depositional practices in funerary and megalithic contexts in Final Neolithic Ireland were highly codified. It may be the case that Beaker pottery and/or other Beaker objects were used in funerary rituals but these were not then placed in the grave, possibly suggesting that the deposition of the Beaker objects was not permitted or was not necessary for a successful ritual to be conducted.

Further evidence for the existence of a grammar which prohibited the association of certain objects with others in particular contexts is visible in the different depositional practices associated with court tombs and passage tombs. Beaker pottery occurs relatively frequently in the former but other typical Beaker objects do not. In contrast, quite a number of typical Beaker artefacts come from passage tomb contexts, but the pottery rarely occurs. The paucity of Beaker ceramics combined with the presence of these objects within passage tombs seems all the more remarkable given the extent of the Beaker-associated activity immediately outside some tombs such as at Newgrange and Knowth (see Chapter Three).

5.10.2 Crouched inhumations and Food Vessels

There is no evidence to indicate that stereotypical crouched single inhumations with accompanying Beaker grave goods were a feature of mortuary practices in Ireland from 2500–2200 BC. It was not until c. 2150 BC to 2000 BC when the currency of Beakers was beginning to wane that single inhumation burial practices occurred in significant numbers in Ireland (see Chapter Eight). These were associated not with Beaker pottery, but with new ceramics known as Bowls and Vases of the Food Vessel tradition (Brindley et al. 1987, 16; Brindley 2007, 250 and 373). With the advent of Bowls and Vases in Ireland (c. 2000–1900 BC), we see a dramatic increase in the number of single inhumation burials with
grave goods and the development of a more coherent mortuary tradition (Waddell 1990, Brindley 2007, 249). These burials often occur within small groups of between 10 and 15 burials in cists or pits, either in flat cemeteries (Mount 1997a) or placed under round barrows and cairns, or into natural and manmade mounds (Eogan, J. 2004).

Despite the absence of Beaker pottery from single graves containing inhumations, marked resemblances can be observed between Irish Bowl burials and Scottish Beaker burials (Waddell 1974, 35). Both traditions share the common practice of east-west oriented inhumation, often placed within a cist, with the pot deposited by the head (Fig. 5.23, Case 2004a, 195-7; fig. 4). Similarities can also be noted in accompanying grave goods which include boars’ tusks; bronze knives, awls and bangles; and beads and buttons of jet-like materials. In northern Britain, these items often appear with Late Beaker burials containing Needham’s Weak-Carinated (2005, 188) and Case’s Group B (1995; 1993; 2001, 369) Beakers. In Ireland, most of these items have rarely if ever been found with Beaker pottery and the only ceramic association shared by V-perforated buttons is with Bowls. The same is true for the earliest form (flat and riveted) of bronze dagger (Type Corkey a.k.a. Butterwick).

In contrast to Britain, only a very small amount of Later Beaker pottery is found in Ireland (see Chapter Eight) and Bowl burials formed the Irish equivalent of the British later Beaker mortuary tradition. The pinnacle of the Irish Food Vessel tradition was certainly contemporary with the apex of the British Beaker burial ritual (Needham 1996, 128). It appears that Food Vessels were an Irish innovation that largely replaced Beaker pottery towards the end of the third millennium BC (Case 2004b, 375; Brindley 1995; 2007). It has long been argued that the emergence of this new ceramic and its associated practices in Ireland was strongly influenced by Beaker traditions (Case 1995a, 23, Waddell 1976, 286, Apsimon 1969, 37; Harbison 1976, 20; Harbison 1975, 112).

Unlike Beaker pottery which is commonly found in settlement and non-funerary contexts (see Chapters Four and Nine), these new Food Vessels, particularly Bowls, are rarely found in ‘domestic’ contexts or in association with other contemporary pottery types (Fig. 5.24, Brindley 2007, 52). On rare occasions, Bowls are found with Beakers, but this predominantly occurs within a sepulchral arena. Vases, on the other hand, are found more regularly on ‘domestic’ sites where they are often discovered together with Beaker ceramics (Carlin 2005a). This suggests that Bowls — unlike Irish Beakers — were considered special purpose funerary vessels whose use was restricted outside of the mortuary context. Bowls appear to have been a completely new ceramic form designed specifically to accompany inhumation burials and function as the Irish version of British
funerary Beakers, while Vases and Beakers performed both 'domestic' and funerary roles in an Irish context. Significantly no Bowl-associated inhumations have been found in wedge tombs; instead these only occur with cremations in that context (see Section 5.2.4). This may indicate that while earlier inhumations in wedge tombs represent an effort to establish a collective form of social relationship with the dead, the development of Bowl-associated individuals represent a decline in concern with the larger corporate group.

5.10.3 Comemorative deposition in older megaliths

Given the apparent absence of human remains from the majority of the Beaker-associated deposits in secondary contexts within earlier Neolithic megaliths, it is highly questionable whether much of this activity was related to contemporary mortuary practices. The nature of the deposition in both court tombs and passage tombs certainly suggests otherwise. The Beaker deposits in the former seem to have mainly comprised sherds of pottery similar to those found in pits in settlement contexts (see Chapter Four). These sherds do not seem to have been broken in situ within these tombs. Instead it seems that they may have been specially acquired from an aggregation of occupational debris (see Section 5.2). The deposition of Beaker occupational debris at the entrances to passage tombs as well as the placement in and around these monuments of objects like V-perforated buttons that are rarely found in settlement or funeral contexts (see Chapters Three, Four, and Seven) is not indicative of funerary activity. These deposits have a very referential character and they portray a strong concern with the past. This is exemplified by the placement of the Beaker pot beside a Late Neolithic burial in the passage tomb at Knowth.

The deposition of artefacts in or around these ancient communal monuments seems to represent offerings that fulfilled a sacrificial, ceremonial and/or commemorative function. These were probably viewed as ancestral burial places containing the remains of the original representatives or founders of that group (Fokkens 1999). Beaker pottery may have been deposited in these tombs as gift exchanges between the communities of the living and the ancestors to maintain and represent people's entitlement to occupy that place (see Fokkens 1999, 38-41; Bradley 2007, 60). These deposits may also reflect offerings that were made to ancestors to ensure the positive well-being of the community (Fokkens 1999, 38; in press). These collective burial monuments physically symbolised the timeless relationships of the group to each other, to the place they inhabited and to their ancestors (Fontijn 2008, 94; Fokkens and Arnoldussen 2008, 9). The associated depositional ceremonies probably served to highlight people's membership of a local community that belonged to that specific area and had their own sense of who they were
Beaker-associated deposition in funerary and megalithic contexts

(Fokkens in press). It may be no coincidence that court tombs were preferentially selected for the deposition of Beaker pottery as these seem to represent the first monuments to have been built by early settlers in many areas (c. 4000–3600 BC) (see Cooney et al. 2011; Smyth 2010, 14; Ó Nualláin et al. forthcoming; Kytmannow 2008, Tables 7.2–3). Deposits at these megaliths may have been seen as offerings to the original founders of the community and owners of the land.

Significantly, the introduction of Beaker pottery sees a considerable increase in depositional activities at earlier megaliths compared to the low numbers of Grooved Ware-associated objects found in secondary contexts in earlier Neolithic tombs (Carlin and Brück forthcoming). This seems to indicate a rebirth of the earlier Neolithic tradition of sherd deposition in that context (see Case 1969a, 1973). This heightened interest in Neolithic tombs amongst Beaker-using communities may represent a concern to redefine and assert their local identity in the context of the wider inter-regional interactions occurring in the second half of the third millennium BC (see Chapter Ten). Alternatively, it might reflect a deliberate attempt to mask radical social transformations by appealing to aspects of the past that people were familiar with. However, the strong evidence for continuity and the lack of indicators of widespread social changes in Ireland at this time militate against this (see Chapter Ten, Carlin and Brück forthcoming).

5.10.4 **Wedge tombs and cists as Beaker burials**

There seems to have been very little emphasis on the deposition of Beakers for sepulchral purposes in many of the contexts which have been examined in this chapter. However, a major exception to this is represented by wedge tombs, and to a lesser extent, cists, which provide the best evidence for Beaker burial in Ireland. While Beaker-associated human remains have only been detected in nine wedge tombs, their chambers seem to represent one of the only spaces in which it was occasionally acceptable to deposit Beaker pottery with burials. These megaliths are also the only context in which intact vessels were deposited. While near-complete pots have been found in association with both collective and individual burials including cremations and inhumations in a primary context, accompanying grave-goods are rare. These comprise lithic debitage, scrapers and occasionally arrowheads, but classic Beaker artefacts like bracers are totally absent (see Section 5.2.3).

The burial practices associated with cists are very similar to those in wedge tombs and it has been argued above that these two types of monument form different aspects of the
same tradition (see Section 5.6.4). However, cists predominantly contain collective cremations and most of the burials within them are either aceramic or are only associated with one or two Beaker sherds. While these monuments were almost certainly not a focus for the deposition of Beaker pottery, they do provide some exceptionally rare instances of the inclusion of Beaker objects as grave-goods, such as the bracer at Furness and the V-perforated button at Kinkit.

The available evidence suggests that burial in wedge tombs and cists was restricted to a very small proportion of the overall population. The normal treatment of the dead accorded to the majority of the population during the Beaker period rarely left an archaeologically recognisable trace and those burials that we do find reflect special treatment (Fokkens in press). This brings us back to the point made in Chapter Four that the archaeological record is a direct reflection of cultural intent (Bradley 2003, 6-12; Bradley 2005a, 208-9). The Beaker burials that we find are generally a product of highly selective and intentional acts of deposition which served to negotiate and reproduce social relations and cultural ideals (see Needham 1988, Pollard 2002, 22, Fontijn 2002). Based on this, it can be concluded from the small number of burials known from this period – despite the dramatic increase in Beaker sites identified over the past 15 years – and the lack of artefacts present in a mortuary context that the funerary arena was rarely chosen as a venue in which to emphasise the values associated with people’s use of Beaker materials.

The inclusion of only a small section of the population within wedge tombs and cists indicates that these were not household or family burial places (see Fontijn 2008, 94). However, that is not to suggest that the burials in these locations represent high status or wealthy individuals. Instead, the collective burial of multiple people in a cist or tomb suggests that a shared group identity was established or emphasised through this mortuary activity. The deposition of the deceased with other human remains may have served to depict a particular form of communal ties between that person and the collective dead (see Thomas 1999, 162). The size of the stones present within wedge tombs and many cists indicates that that a considerable effort on the part of a group was required for their construction. The creation of these monuments and the deposition of materials (human or otherwise) within them imply a strong concern with the communal expression of shared identities (Cooney and Grogan 1999, 93; Thomas 1999, 162).

The collective burial of these bodies in communal monuments suggests that they were specially selected representatives of the local corporate group (see Fokkens 1997, 369, van der Beek and Fokkens 2001, 307). These people had been chosen by the community of
the living to become ancestors or to interact with the ancestors on their behalf and in so doing, to maintain social relationships between them and their ancestors (Thomas 1999, 162). The funeral ceremonies associated with these depositions probably involved the construction of a particular form of idealised identity for the dead that emphasised the mutual identity and values of the local group (Fontijn 2008, 94-102).

From 3000 BC, a considerable hiatus in the construction of megaliths continued until wedge tombs and sub-megalithic cists suddenly started to be built c. 2500 BC (see Schulting et al. 2008, 13). The abrupt beginning of wedge tombs seems to signify the occurrence of key social changes at that time. Whatever these were, they would seem to have been intimately linked with the adoption and use of Beaker pottery and associated objects. The context and radiocarbon dating of these deposits suggests that the creation of wedge tombs represents a Beaker-associated re-invention of an essentially Neolithic tradition of megalithic tomb construction in Ireland. The architecture of these new megaliths seems to have been inspired by older megaliths (e.g. the court tomb like design at Largantea (Herring 1938, 173) and some wedge tombs seem to copy details from passage tombs, such as a circular kerb and cairn. However, wedge tombs seem to represent a new category of place that was formed to enable the expression of particular social relationships between the living and the dead. It may be the case that the length of the interval between the final burials in earlier megaliths and the start of the Beaker period necessitated the creation of new ancestors and ancestral spaces in certain places (Fokkens in press).

5.11 BEAKER FUNERARY AND MEGALITHIC DEPOSITION IN ITS WIDER EUROPEAN CONTEXT

To more fully understand Beaker-associated depositional practices in a funerary and megalithic setting, it is necessary to compare these with contemporary Beaker-associated mortuary activity in Britain and Europe. This assessment will inform us about the extent to which the Irish evidence reflects ideas or approaches relating to burial that were introduced from elsewhere in tandem with Beaker pottery, as well as the degree to which Beaker funerary practices in Ireland represent a local response to the arrival of such novelties. Due to the absence from Ireland of the crouched single inhumation accompanied by Beaker pottery that is so typical of Central and Northern European mortuary activity (e.g. Strahm 1995; Turek 1998; Müller 2001; Czebreszuk 2003; Vander Linden 2004), no attempt will be made to contrast the Irish evidence with that from those
regions. Instead, this will focus on funerary practices along the Atlantic façade and those known from Britain.

5.11.1 Comparisons with Atlantic European funerary practices.

The discovery of Beaker materials in megalithic tombs in Ireland has contributed to the view that Beaker-using communities along the Atlantic façade exerted a strong influence upon the development of the Beaker phenomenon in Ireland (e.g. Herity and Eogan 1977, 117–122; Burgess 1979; Mercer 1977; Needham 1996, 128; Case 2004b; O’Brien 2004, 565; see Chapter Two). Some strong similarities certainly do exist. In Portugal, Spain, northwestern and southern France, Beaker-associated single graves are very rare. Instead, collective inhumations were the main form of Beaker mortuary practice and these are predominantly found in earlier Neolithic monuments, particularly megalithic graves (Salanova 1998a; 2004, 71; 2007; L’Helgouach 2001; Guilaine et al. 2001 and Vander Linden 2006a, 85; 2006b, 319; 2007a, 186). For example, over half of all French Beakers were found in earlier Neolithic megalithic tombs which are predominantly located in the western half of France (Salanova 2003b).

Despite these similarities, Beaker-associated mortuary practices along the Atlantic façade are actually very different to those in Ireland. The almost exclusive emphasis on inhumation in France, Spain and Portugal contrasts strongly with the predominance of cremations on this island. Whereas the Beaker deposits in secondary contexts in Neolithic megaliths in Ireland do not seem to be of a funerary nature, those along the façade are unquestionably associated with the deposition of human remains. In Ireland, Beaker-associated burials are almost totally restricted to primary contexts within purpose-built wedge tombs and cists. There is no evidence for the construction of new forms of megaliths on mainland Atlantic Europe at this time (Salanova 2007, 214). For example, in those parts of France where collective burials were deposited in megaliths, these all occur in pre-existing monuments including passage tombs and gallery graves (Salanova 2003, 2007, in press). While wedge tombs have been compared to allées couvertes, these French megaliths were built during the Late Neolithic and the Beaker deposits within these are in a secondary position (Salanova 2003b, 385–6; 2007, 214).) Although the practices associated with allées couvertes or their other equivalents on mainland Europe may have influenced Irish Beaker depositional practices in similar contexts, it seems unlikely that wedge tombs represent an indigenous response to the European practice of reusing Neolithic tombs because the deposits found within wedge tombs are so different to those found in megaliths on the continent.
While it is accurate to say that just like in Ireland, aceramic objects belonging to the Beaker ‘package’ such as tanged copper daggers and bracers are rarely found in burial contexts along the Atlantic façade (Salanova 2004), the reality is that in regions like southern Portugal and northern France, this is due to the small number of these objects in those regions (ibid, 73) and, compared to Ireland, many items from the Beaker assemblage were regularly found together with burials and Beaker pottery in megaliths. In these coastal regions, these objects and Beaker pottery are almost exclusively recovered from funerary contexts. For example, there are 121 sites with Beaker finds in Brittany: almost all are burial contexts and 81% are pre-existing megalithic tombs (Salanova 2004, 66; Vander Linden 2006a, 85). This contrasts strongly with Ireland, where large numbers of these Beaker artefacts have been found (see Chapter Nine), but these were deliberately excluded from burial settings and a clear separation was consistently maintained between Beaker pottery and daggers or bracers in all contexts.

At first glance, it would appear that the deposition of aceramic burials in Ireland is paralleled in some of these regions. In areas such as the Paris Basin in north-eastern France, contemporary individual and collective burials have been found in graves with grave goods excluding the Beaker pot (Chambon and Salanova 1996; Salanova 2004, 66–69, fig. 4; 2007, 213–217). Among the 400 collective burials known in this region, only 10 have contained Beakers (Salanova 2007, 217). Similarly, only six out of the hundreds of megaliths in Alentejo, Portugal, have contained Beaker pottery (Salanova 2007). The burials within many of these tombs often lack any grave goods, even though they have been radiocarbon dated between 2500–2000 BC. These burials have been found in areas where very few Beakers are known, leading Laure Salanova (2007, 217) to hypothesise that the Beaker ceramic was rejected in these regions. However, Ireland is quite different because Beaker pottery has been found in large quantities across the island and this only seems to have been excluded from certain contexts (see Chapter Four).

In many ways, the main similarity between Ireland and funerary deposition along the Atlantic façade is the occurrence of Beaker-associated deposits in earlier megalithic tombs, but this is not unique to these regions and Beaker pottery is also regularly found in such contexts in Denmark and northern Germany (Vander Linden 2006a, 46). Although different to Irish Food Vessel burials, perhaps the greatest similarity between mortuary practices along the Atlantic Façade and Ireland is represented by the contemporary development of regionally distinctive traditions of single inhumation with accompanying grave goods that echoed the customs of the classic Beaker burial (Salanova 2004, 73). For example, in Brittany, Early Bronze Age graves comprise cists containing individual burials which were succeeded by Armorican Tumulus culture burials. These graves comprised a
barrow that covered a wooden structure containing single burials accompanied by items from the Beaker package such as tanged copper daggers and bracers made from amber or gold (Needham 2000; Salanova 2004, 73). Similarly at the same time in Alentejo, Portugal, single graves containing bracers, daggers and undecorated vessels also start to appear at the beginning of the Bronze Age (Salanova 2004, 74).

5.11.2 Comparisons with Beaker funerary practices in Britain

The Irish manifestation of the Beaker phenomenon has traditionally been considered to be very different to that of Britain (O’Brien 2004, 565, Burgess 1979, Case 1995a, 19, Thomas 1991, Needham 1996, 128, Cooney and Grogan 1999, 87, Case 2004b). One of the main reasons for this is the presence of Beaker pottery with typical Beaker objects in funerary contexts in Britain, most notably accompanying the stereotypical Beaker crouched inhumation within single graves (Clarke 1970; Bradley 2007, Carlin 2011). Although the Beaker inhumation seems to be absent from Ireland, when we conduct a more detailed comparison of the Irish and British Beaker-associated funerary record, it becomes clear that mortuary practices on both these islands are far more similar than has been recognised.

There is a growing awareness that British Beaker-associated mortuary practices are much more diverse and complex than previously assumed (Gibson 2004; Needham 2005). It is now known that there are very few Beaker burials dating to the earlier phase of Beaker usage (c 2500/2400–2250 BC) in Britain. These rare examples are very uniform and display a restricted use of the classic assemblage including Beakers and bracers that were faithful to European Beaker practices (Needham 2005, 171 and 207). It remains unknown if other forms of burial were practiced at this time. However, Alex Gibson has argued that the characteristic crouched inhumation is atypical of British Beaker-associated mortuary practices which actually comprised a highly diverse mixture of collective, individual and token burial as well as excarnation, inhumation and cremation (Gibson 2004, 176). There are also a large number of contemporary inhumation and cremation burials that contain no artefactual material and can only be dated by radiocarbon dating (Harrison 1980, 85; Gibson 2004). All of these various forms of burial have been recovered from a wide range of contexts including secondary deposits in long barrow ditches and in megalithic tombs (Gibson 2004, 183).

Significantly, it is not until c.2200 BC that Beaker-associated funerary deposition becomes widespread throughout Britain (Needham 2005, 171; Sheridan 2007a, 99; see Chapter
Eight). At this time (c. 2250–2150 BC) — referred to by Stuart Needham (2005, 171) as a ‘fission horizon’ — British Beaker pottery and its associated artefacts changed in tandem with a marked increase and diversification in Beaker mortuary practices. Various burial traditions developed, each of which was attached to different Beaker pot types (Needham 2005, 205-07), though the importance of the Beaker pot to the burial rite also seems to have waned at this time (ibid). These hybridised Beaker funerary practices occurred in large numbers across the island, including those areas such as Cornwall (Jones 2005, 31; Jones and Quinnell 2006), parts of Wales and the Peak District (Wilkin 2010), as well as east-central and northeastern Scotland (see Sheridan 2007a; 2008a; Ashmore 2004, 132; Needham 2004, 239; Wilkin 2009; Curtis and Wilkin forthcoming) where Beaker burial, particularly in its classic form had previously been lacking (see below). These British developments were contemporary with the beginnings of Food Vessel burials in Ireland, which seem to have fulfilled a very similar role in burial practices as the recently hybridised British Beakers (see Sections 5.10.2 and 5.12).

In Cornwall, Beaker burials do not appear until 2200 BC and these mainly comprise cremations (Jones 2005, 31; Jones and Quinnell 2006). In the Peak District, these were also an apparently late adoption (Wilkin 2010, 19). Beaker burials do not occur in northeastern Scotland until after 2300 BC (Ashmore 2004, 132; Needham 2004, 239) and these rarely contain any stereotypical Beaker grave-goods other than pottery (Wilkin 2009, 19). For example, out of 110 burials, only one grave — at Culduthel — contained a bracer (Neil Wilkin pers. comm.) and one other — Tavelty, Kintore — contained a copper dagger (Ralston 1996). Similarly, in the Moray Firth region of Scotland, Beaker burials are not scarce, but very few of these seem to pre-date 2200 BC (Curtis and Wilkin forthcoming). In east-central Scotland, very few Beaker burials occur at all and single burial practices were not adopted in considerable numbers until 2200 BC in association with Food Vessels (see Wilkin 2009; Curtis and Wilkin forthcoming).

As in Ireland and mainland Europe, a number of Neolithic tombs in western and northern Britain were reused in the mid/late 3rd millennium BC for a variety of depositional practices that included the burial of Beaker-associated cremation and inhumations (Henshall and Wallace 1964; Burl 1984; Woodham and Woodham 1957; Case 2004a, 196; Gibson 2004, 183; Bradley 2000b, 221–4). For example, Beaker pottery has been recovered from chambered tombs at Dyffryn Ardudwy (Powell 1973) and Carreg Coetan Arthur (Barker 1992) in Wales; Howe, Orkney (Shepherd 1986, 9); Dalineum, Nether Largie South cairn and Achnacreebeag, in Argyll (Richie 1997, 72 and 76); Kilcøy South, Highland (Bradley 2000b, 223); and Callanish, Lewis, Western Isles. In other parts of Britain, where large stone tombs are lacking, Beaker burials are recovered from secondary
contexts within non-megalithic funerary monuments such as long barrow ditches (Gibson 2004, 183).

The deposition of sherds of Beaker pottery and fragments of a two-holed bracer (Powell 1973, Fiona Roe pers. comm.) inside the portal tomb — a distinctively Irish form of megalith — at Dyffryn Ardudwy, Gwynedd, in western Wales may suggest strong connections between communities on either side of the Irish Sea. This bracer was broken just like so many of the Irish two-holed examples are (see Woodward and Roe 2009) and was unlike British examples which are generally four-holed (see Chapter Nine). A similarly fragmented two holed bracer was also found on the sea-shore at Broadford Bay, Isle of Skye, western Scotland, in close proximity to a chambered cairn of the Hebridean group. It is thought that this may originally have been placed within the tomb but was subsequently thrown out at a later date (Henshall1972, 484-5). Parallels can be drawn between these two British discoveries and the occurrence of bracers in one court tomb and within the vicinity of passage tombs in Ireland.

Although wedge tombs are unique to Ireland, Beaker-associated monuments which may be analogous to these were also being constructed in Scotland at the same time (Case 2004a). Richard Bradley's (2000b, 2005) investigations of recumbent stone circles in north-east Scotland, and Clava cairns near Inverness have demonstrated that these monuments were Beaker-associated constructions dating from the second half of the third millennium BC that may represent the northern Scottish counterparts of Irish wedge tombs (Bradley 2007, 174-5). Indeed recumbent stone circles and Clava cairns have been found to contain Beaker-associated cremation burials and also seem to share the same NE-SW alignment common in wedge tombs and to have replicated aspects of older megaliths (Burl 1970; O’Brien 1999, 82; Phillips and Watson 2000; Bradley 2000b, 220–31). It seems that shared customs of monument building were a feature of communities that were based in Ireland and northern Britain but were linked by the Irish Sea. These constructions seem to reflect regional funerary and megalithic traditions rather than European Beaker-associated introductions (see above, Sheridan 2008a).

The parallels between Beaker funerary practices in Ireland and those in east-central and northeastern Scotland seem to reflect the strong connections between these regions (see Chapter Ten). The Moray Firth’s position at the northern end of the Great Glen with its links to the Atlantic via the Kilmartin area and the location of two natural routeways in the form of the Firth of Forth and Firth of Tay leading from east-central Scotland to the Atlantic via the North Sea suggests that both east-central Scotland and the Moray Firth region were particularly well disposed to contact with western Scotland and Ireland (see
Beaker-associated deposition in funerary and megalithic contexts

Curtis and Wilkin forthcoming, Needham 2004; Cressey and Sheridan 2003, 80). This is exemplified by discoveries such as that at Seafield West, near Inverness, where a burial with a distinctively Irish bowl was located next to a second burial containing a bronze dagger made from Irish copper and a second Irish bowl (Cressey and Sheridan 2003).

From this brief review of European mortuary practices, it can be seen that it is Britain, particularly the western, southwestern and northern parts of that island where cremation is more common, which displays the greatest similarities with Ireland. It is also clear that a scarcity of early Beaker burials, a complete lack of those in the stereotypical form and the absence of a coherent Beaker-associated mortuary practice is not unique to Ireland. Approaches to Beaker burials varied greatly from region to region across Europe and the uniformity of Beaker burial practices have traditionally been overstated.

Based on the repeated co-occurrence of objects such as bracers, V-perforated buttons or tanged copper daggers with Beaker pots in graves in certain parts of central and northwest Europe, it has been argued that these objects formed a coherent funerary assemblage often referred to as the 'Beaker package' (e.g. Shennan 1976; 1986). However, throughout western Europe, the classic Beaker assemblage is rarely found together in the same grave. For example, burials in France are generally accompanied by one or two pots but ornaments or weapons are rarely found with these (Salanova 2001, 99). Many components of the Beaker package are commonly absent from burial contexts - only four graves have contained a dagger, bracer and arrowhead: Wallers (France), Lunterne (Holland), Fuente Olmedo (Spain) and Amesbury (England) (Salanova 2007, 218). In Ireland, there is a distinct lack of associations between Beakers and these objects in the funerary sphere. Comparison with European burial practices suggests that the Irish evidence is entirely characteristic of the enigmatic mix of highly diverse (mortuary) customs involving very homogenous material culture over a wide geographical area that represents the Beaker complex (see Vander Linden 2007a, 185-6) in Atlantic Europe. The implications of this will be considered in further detail in Chapter Ten.

5.12 Irish funerary practices were a peculiarly local response to the Beaker phenomenon

The mortuary rites conducted by Beaker users in Ireland reflect diverse interactions with communities in other regions and comprised the adoption of some new elements as well as the adaptation and rejection of others. Quite a number of developments occurred in this arena at the same time as the introduction of Beaker pottery. These include an
increased emphasis upon deposition in funerary and megalithic contexts, the reintroduction of inhumation burials, as well as the construction and use of wedge tombs and cist graves. However, much of the character of these practices seems to reflect a peculiarly local response to the ideas associated with the Beaker phenomenon. For example, a conscious choice seems to have been made throughout Ireland not to place Beaker objects in funerary contexts and to only occasionally deposit Beaker pottery with burials.

People on this island were probably aware that Beaker pottery and other Beaker objects were being deposited in specific ways in funerary contexts elsewhere, but they chose not to directly replicate this. Instead, they adopted those aspects that fitted with their pre-existing cosmology in a manner that was strongly influenced by traditional practices. For example, cremation was the dominant mortuary practice in the Irish Neolithic and this continued to be the case in the Early Bronze Age and beyond (see Kinnes 1992, Cooney 1992; Mount, 1995, 107) despite the brief florescence of inhumation between 2200 and 1900 BC. This long-standing cultural tradition may have constrained the adoption of Beaker-associated inhumation burials.

As part of these developments, we see the reinvention of a number of traditions which had not been practiced since the start of the Late Neolithic, c. 3000 BC. The long standing custom of depositing occupational materials in various megalithic tombs was reborn (see Sections 5.10.3) and the Neolithic practice of building these megalithic monuments was re-imagined with the construction of wedge tombs (see Sections 5.10.4). Beaker-associated deposition within old or newly built megalithic contexts indicates the continuation of a strong concern with the expression of communal identities (see Chapter Ten). This is amply illustrated by the collective burials found within wedge tombs, as well as the deposition of collective settlement debris within court tombs (see Section 5.10.3–4).

Perhaps the clearest expression of an indigenous response to the ideas associated with Beakers is the sudden increase in inhumation burials and the deposition of pottery in the form of Irish Bowls with these. As argued above (Section 5.10.2), these seem to represent the Irish version of the British later Beaker mortuary tradition. Although, a small number of earlier inhumations are known, there appears to have been a resistance to some aspects of this practice, including the deposition of Beakers alongside these skeletons. The development of the Bowl appears to have enabled the much more widespread acceptance of the recently adopted funerary practice of single inhumation in pits or cists. This can be seen within the context of the upsurge, diversification and regionalisation in Beaker funerary practices in Britain (see Section 5.11.2).
The nature of these various indigenous responses to contact with the Beaker phenomenon means that there is little evidence (with the exception of Bowl burials) to directly link particular Beaker objects with specific individuals or for any form of accentuation of individuals in the funerary realm. This raises important questions regarding the generally accepted doctrine that the spread of the Beaker phenomenon represents the emergence of an ideology of the individual and the development of Europe's first hierarchical societies, in which status was attained and represented by the competitive exchange and display of exotic goods. This is a point that will be returned to at the end of the thesis (see Chapter Ten).
6 BEAKER-ASSOCIATED DEPOSITION AT TIMBER CIRCLES AND EMBANKED ENCLOSURES IN IRELAND
CHAPTER SIX - BEAKER-ASSOCIATED DEPOSITION AT TIMBER CIRCLES AND EMBANKED ENCLOSURES IN IRELAND

6.1 INTRODUCTION

There is much evidence for Beaker-associated ceremonial practices in Ireland which in many cases, seems to have been spatially focussed on a wide range of pre-existing ceremonial foci. Indeed, the well-known Beaker-associated deposits at Brú na Bóinne seem to have resulted from the continuation of ceremonial activities in those locations (see Chapter Three, Five and below). New evidence suggests that ceremonial deposition persisted at some Late Neolithic timber circles, after the introduction of Beaker pottery. Despite these discoveries, approaches to Beakers in Ireland have remained fixated on the apparent richness of Beaker-associated settlement evidence and of the corresponding paucity of evidence for funerary activity (e.g. Case 1995a, 19; Needham 1996, 128). As a consequence, Beaker-associated ceremonial practices have received very little attention and are poorly understood.

This chapter comprises an examination of the occurrence of Beaker pottery and other typical Beaker objects in ceremonial contexts. However, many aspects of ceremonial activity are not included in this chapter as they are examined elsewhere. Beaker deposition in pits and spreads is shown in Chapter Four to sometimes display ceremonial qualities. Similarly, the deposition of Beaker objects in natural places almost certainly had a ceremonial aspect but this is examined in Chapter Six. The placement of Beaker objects in megalithic contexts is discussed in Chapter Five, even though this may be more directly related to ceremonial rather than sepulchral practices. Much of the Beaker activity from Newgrange and Knowth is discussed in Chapter Three in the context of traditional understandings of settlement in Ireland because this is how the discoveries from those sites have traditionally been interpreted. The ceremonial aspects of deposition at these locations are examined towards the end of this chapter. Of course, all of these various ‘types’ of deposition form part of a spectrum of interlinked social practices that are best understood in relation to each other. These are considered as different aspects of a single depositional framework in Chapters Nine and Ten.

The present chapter is focused primarily upon the deposition of Beaker materials at timber circles and earthen enclosures. The relationship of the Beaker activity at these various locations to the history of each place and the activities that had previously been
conducted there will also be considered. Particular attention is paid to the nature of Beaker deposits in terms of their frequency, location and manner of occurrence within these different contexts. The type, quantity and condition of the associated artefacts are assessed. In the case of timber circles, the taphonomy of the features and deposits containing Beaker pottery are studied to discern the stage in the use-life of these monuments at which the Beaker materials were deposited. These considerations lead to an enhanced understanding of the activities involved in Beaker-associated ceremonial practices in Ireland and the meanings that these actions and objects held for those concerned.

A more detailed analysis of the deposition of the pottery is conducted to reveal as much information as possible about the events and meanings associated with its final use. This includes an assessment of the total number of Beaker pots and sherds in each context. The number of sherds per vessel and their condition are examined where possible. In the case of Paulstown, Co. Kilkenny, and Newtownbalregan 5, Co. Louth, this is based upon the original analysis of those ceramic assemblages by Eoin Grogan and Helen Roche (2009a, 2005b), while in the case of Armalughey, this is based upon the ceramic report by Julie Lochrie and Alison Sheridan (2010). All other ratios were assessed by the present author.

It was necessary to search through the published and unpublished accounts of findings from the various excavations to gather as much information as possible about the Beaker artefacts and the deposits in which they were found, so that they could be considered in relation to each other (Chapter One). In the case of newer excavations, artefacts and ecofacts had to be re-integrated firstly into the single context into which they occurred and then considered at the broader contextual levels of features and sites. For each site, all relevant information had to be interrogated to insure that the Beaker deposits were secure and that the association of objects within them was genuine. In all cases, it was necessary to re-evaluate the findings from the excavations and to propose new ideas about the sequencing, dating and interpretation of the evidence from these sites.

6.2 BEAKER DEPOSITION IN TIMBER CIRCLES

Beaker pottery has been found within the postholes of at least two Late Neolithic timber circles on two sites in Ireland: Paulstown, Co. Kilkenny (Elliot 2009), and Armalughey, Co. Tyrone (Dingwall 2010). To this may be added a total of four other probable examples of this phenomenon excavated at Newgrange (Sweetman 1987) and Donacarney Great (Antoine Giacometti pers. comm.), both in Co. Meath; Newtownbalregan 5, Co. Louth
(Bayley 2009b); and another probable example from Paulstown. Beaker pottery was also spatially associated with three timber circles at Knowth, Newgrange and Ballynahatty.

6.2.1 Beaker deposition at post-circle A, Paulstown, Co. Kilkenny.

Three separate timber circles (A, B and C), each approximately 5m in diameter and surrounding rectangular post settings were excavated at Paulstown, Co. Kilkenny (Elliot 2009). Beaker pottery occurred in the postholes of one of these: post-circle A. A total of 11 Beaker-associated pits - representing the greatest number of these found on any site in Ireland - were also found in the vicinity of these structures (see Chapter Four). Post-circle B was situated 1m to the northwest of post-circle A while Post-circle C was located 10m to the northeast of the latter (Fig. 6.1). These three structures are all very similar in shape and size to typical Grooved Ware associated timber circles (see Fig. 6.2) such as Knowth (Eogan and Roche 1997, fig. 21), Kilbride, Co. Mayo (Cotter 2006), or Whitewell, Co. Westmeath (Phelan 2007, 349–50). Although no Grooved Ware was recovered from this site, radiocarbon dating suggests that the construction of the three timber circles at Paulstown was broadly contemporary with those Late Neolithic examples (see below).

A total of 424 sherds from at least 62 Beakers were discovered during the excavations at Paulstown (Grogan and Roche 2009a), but most of this (340 sherds from 51 vessels) came from clusters of pits rather than from the timber circles. Indeed the overwhelming majority of this - 309 sherds derived from 37 vessels - came from just two pits that also contained beads (see Section 4.2). The postholes of post circle A produced a total of 69 sherds representing 11 ('fine' and 'domestic') Beaker vessels. Only a small amount of pottery — two sherds, two fragments and three crumbs — was found within the features associated with structure B. Most of these were residual sherds of Early Neolithic Carinated Bowl and none of them were identified as definite Beaker (ibid). Similarly, only four sherds and 102 crumbs of pottery were recovered from the features associated with Structure C. Due to the size and worn condition of these, it was not possible to identify these more precisely, although a single sherd was recognised as probable Beaker pottery (ibid).

Post-circle A comprises a ring of 20 evenly spaced postholes that encircle a rectangular arrangement of four internal postholes and displays evidence for a southern entrance that may have been flanked by a façade (Fig. 6.3). The postholes were quite substantial in size, averaging 0.3m in diameter and approximately 0.4–0.5m in depth. Post-shafts indicating the former location of timber posts as well as packing material that would have supported
these were recorded within many of these features. It can be inferred from the size and shape of the post-shafts that these posts comprised upright vertical timbers with an average diameter of 0.21m and may have been up to 2.5m in length.

The regular, straight sides of some of the post-shafts suggest that these posts decayed in situ; however, there is also evidence to suggest that the timbers were extracted from some of the other postholes. Six of the 20 postholes (C126, C176, C139, C126, C142 and C194) from the ring and two of those forming the internal square arrangement (C80 and C161) did not contain post-pipes or packing material. This indicates that, in some cases, posts were removed from their holes or their remains were dug out, probably after their decay. The irregular shapes of the post-voids within some other postholes also clearly indicate the removal of timber uprights from these (Fig. 6.4). In total, the posts appears to have been deliberately extracted from at least ten of the 20 postholes forming the external ring (C129, C58, C62, C176, C139, C126, C142, C361, C364, C165, and C194) and three of the four internal square arrangement (C80, C161 and C51) of postholes (see Fig. 6.3). After removal of the timbers, the postholes were backfilled. In some cases, a deposit appears to have been placed directly into the void created by the extraction of a post, while in others, both the post and packing material seem to have been removed and then replaced with a new deposit.

Six radiocarbon dates were obtained from a range of construction and abandonment contexts within four of the postholes (C180, C364, C176, C124) forming the external ring of post-circle A. Three samples were analysed from three separate contexts within a posthole (C180) which displayed a well defined narrow vertical post-pipe suggesting that its post had rotted in situ. Oak charcoal from the clay packing material at the base and sides returned a date of 2862–2579 BC (UBA 15438: 4115±24 BP). Ash charcoal from the lower fill of the post-pipe was radiocarbon dated to 2577–2474 BC (UBA 15431: 4015±24 BP), while hazel charcoal from the upper post-pipe fill produced a date of 2855–2501 BC (UBA 15436: 4087±25 BP). These three determinations indicate that this posthole was dug before 2474 BC at the latest, but probably prior to 2501 BC.

The sloping and curved sides of the post-pipe within posthole (C364) clearly indicate that this hole had once contained an upright timber which had subsequently been extracted. The void created by that removal was backfilled with dark brown silty clay containing pieces of burnt clay/daub. Elm charcoal within the deposit filling the post-pipe produced a radiocarbon date of 2465–2286 BC (UBA 15433: 3875±24 BP). This suggests that this material was deposited in the posthole sometime after 2465 BC and that the timber circle was being deconstructed by this stage.
A posthole (C176) contained a single deposit that yielded five pieces of flint debitage, 19 Beaker sherds and ash charcoal which returned a date of 2573–2467 BC (UBA 15437: 3989±27 BP). This posthole is thought to have been redug resulting in the removal of any post-pipe or packing material and then backfilled with a Beaker-associated deposit towards the latter stages of the timber circle’s use-life. If this charcoal is genuinely associated with the Beaker activity rather than being residual from the Late Neolithic, then it represents quite an early date for Beaker pottery in Ireland and for the placement of closing deposits at Paulstown (see Chapter Eight).

While there is no clear evidence for the extraction of a post from posthole (C124), the presence of Beaker pottery within its post-pipe suggests that a void must have been present in order for these sherds to have been placed there. This post-pipe contained 31 sherds from four Beakers, a flint blade, a piece of debitage and a convex end scraper, carbonised seeds and hazelnuts, as well as a cremated human rib fragment which returned a radiocarbon date of 2617–2471 BC (UBA 15430: 4017±28 BP). It is difficult to decipher whether this bone is representative of Late Neolithic or Beaker–associated activity.

A total of 64 lithics (both flint and chert) were recovered from the external ring and the square setting of posts (C58, C62, C176, C139, C124, C45, C142, C74, C370, C80, C51, C161 and C49). These comprised six natural chunks, two cores, 28 pieces of debitage, 17 flakes, seven blades, two convex end scrapers, a knife, a quernstone and a rubbing stone. Carbonised plant remains including hazelnuts and seeds were recovered from four of the postholes (C124, C51, C370, and C180), while a small amount of unidentifiable burnt bone was found in one posthole (C139) and a human rib fragment occurred in another (C124).

A total of 69 abraded sherds representing 11 Beakers (Nos. 3–4 and Groups II–X) came from the fills of eight postholes (C58, C62, C124, C129, C142, C139, C176 and C361) (Grogan and Roche 2009a; see Fig. 6.3). Two postholes (C58 and C142) contained a single Beaker sherd each (see Table 6.1). Small amounts of between three and six sherds (representing the remains of single vessels) were each recovered from three postholes (C361, C62 and C129). Larger quantities — 19 sherds representing two vessels and 14 sherds from three different vessels — were found within two of the postholes (C176 and C139), while the highest number — 31 sherds derived from four Beakers (see Table 6.2) — was discovered in posthole (C124).

Most of the Beaker vessels from the timber circle are represented by only a few sherds, none of which refit indicating that these ceramics are exceptionally incomplete and very fragmented (Grogan and Roche 2009a). The majority of the 11 identified vessels from post-circle A are represented by fewer than four sherds (seven examples) and two of these
vessels comprise only one sherd, while three examples consist of six or seven sherds (see Table 6.2). The highest number of sherds per vessel is 10 and only one example of this occurred. A total of 17 'fine' Beaker sherds were too fragmented to be traced back to a particular vessel (ibid).

The pottery mainly consists of small sherds that are worn or heavily abraded as in the case of those found in postholes C176 (Vessel 4), C124 (Group III), C62 (Group VI) and C139 (Groups VII-X). This suggests that there was a considerable time lapse between the original breakage of these vessels and their final deposition and that the contents of the postholes represent partial assemblages that were obtained from another context. This is supported by the differential condition of artefacts within many of the postholes such as the occurrence of lightly worn and much worn sherds together in the same context, as well as burnt and unburnt lithics within features that show no evidence for burning. The occurrence of Beaker materials within the postholes of post-circle A may have resulted from the deliberate deposition of materials derived from an accumulation of rubbish. Indeed the contents of the postholes consisted of worn pottery, carbonised plant remains and knapping detritus, all of which certainly could represent habitation debris.

The greatest number of artefacts — 64 Beaker sherds and 16 lithics — was discovered in the postholes forming the northeastern sector of the post-ring (see Table 6.1 and Fig. 6.3). Three postholes (C139, 124 and 176) in this area each contained far more pottery than any of the other features that comprised the structure. The posthole (C124) containing the greatest number and range of artefacts (see above) was located directly opposite the entrance. Another posthole (C126) was right beside it, but contained absolutely no finds, this suggests that the occurrence of such a culturally rich deposit in the posthole (C124) opposing the circle's entry point was not the result of a random or natural process. A much smaller number of artefacts were found in the other sectors: southeastern quadrant — 10 sherds and eight lithics; northwestern quadrant — one sherd and 19 lithics; southwestern sector — three sherds and two lithics. A far clearer difference in depositional practices within the timber circle emerges when one contrasts the structural postholes on the eastern side which produced a total of 74 sherds and 24 lithics to the western side where a total of four sherds and 21 lithics were discovered.

Six abraded sherds and 10 fragments from a Beaker were retrieved from a posthole (C129) forming the eastern part of the structure's entrance. While, lithics including debitage, a flake, a knife, a rubbing stone and two quernstone fragments came from the four posts forming the internal square setting. The quantities of objects recovered from these features were not so large as to suggest that these formed the main focus of
deposition within the structure. However, the location of cultural deposits in postholes forming the entrance, the internal four-post element and also in the rearmost posthole directly opposite the entrance replicates the Grooved Ware associated depositional patterns observed at many other timber circles (Carlin et al. forthcoming) such as the well known example from Knowth (Eogan and Roche 1997). The strong depositional focus on the northeastern sector in post circle A at Paulstown has not yet been noted elsewhere, but the reproduction of Grooved Ware associated depositional practices seems highly significant and will be discussed in further detail below (Section 6.4).

Significantly, most of the Beaker pottery — seven out of 11 vessels and the lithics (54 out of 61) — occurred in postholes where the posts had definitely been removed and subsequently backfilled (see Table 6.1 and Fig. 6.3). No artefacts were recovered from the packing fills of any of the postholes; this suggests that the detritus did not enter these features during construction. If cultural debris had been in the vicinity during the timber circle’s erection and became accidentally incorporated into the postholes, then these artefacts would almost certainly have also entered into the packing contexts, rather than just into the fills of the post-pipes (Carlin forthcoming). Most of the postholes that show no evidence for secondary alterations produced no finds, conversely almost all of those that had been obviously modified were found to contain artefacts (see Table 6.1 and Fig. 6.3). Thus, it appears that the Beaker pottery and the lithics from the timber circle were all found within secondary contexts that were deposited either during the extraction of the post or the removal of its decaying stump (Carlin forthcoming). Radiocarbon dates from these contexts suggest that these deposits post-date the original use of the building which was probably constructed sometime before the appearance of Beakers in Ireland (see above). These Beaker-associated deposits seem to have been placed within the original structural postholes of post circle A at Paulstown as part of ritualised acts of abandonment or commemoration.

6.2.2 Beaker deposition at the Armalughey timber circle

Beaker pottery was discovered during the excavation of a multi-phase timber circle at Armalughey, Co. Tyrone (Dingwall 2010; Carlin 2010). This timber structure comprises two concentric post circles: an inner ring (8.5m in diameter) of 21 evenly spaced large postholes and an outer ring (with a diameter of 15m) of 24 large shallow pits. Each of the pits in the outer ring contain the post-pipes of four posts (see Fig. 6.5). Attached to the outermost circle is an elaborate southeastern entrance defined by two radiating lines of similar postpits that are joined at their termini by a line of large intercutting postholes to
form an outer façade. The innermost ring of posts encircles an internal square setting of four very large and deep pits (C13299, C13694, C13272 and C13217) that display evidence for a complex sequence of backfilling and recutting representing several phases of activity (see Fig. 6.6). Some sherds of Middle Neolithic Carrowkeel Ware were retrieved from some of features including a few of those forming the inner and outer rings. Grooved Ware pottery occurred in the inner and outer ring as well as the entrance façade of the timber circle. It was also found within the most north eastern of the four large pits (C13299) forming the internal square setting.

Analysis of the exact chronological sequence of activity at Armalughey is still being conducted and it remains to be concluded whether or not the two concentric rings of posts were contemporary. However, there is some stratigraphic and artefactual evidence that has enabled me to make some deductions regarding the structural progression of this monument. The rearmost pair of large pits (C13299 and C13272) forming the internal four post setting were cut into shallow pits containing Middle Neolithic Carrowkeel Ware (see Fig. 6.5). These two features may reflect an early phase of activity which seems to be related to the construction of the timber circle in this location. These two Middle Neolithic pits strongly resemble the features curiously labelled as ‘annexes’ which were found in the exact same positions within the timber circle at Knowth, Co. Meath (Eogan and Roche 1997). Those ‘annexes’ seem to represent earlier pits that were deliberately recut to become post-pits for the timber circle (although this is not how they were interpreted at the time, see Post-pit 1 and 4 in Eogan and Roche 1997, 116, fig. 25). Barrie Hartwell (2002, 526) also identified Carrowkeel Ware in features at Ballynahatty which he considered to represent a possible early stage of that timber monument. Based on this, it seems that at Armalughey, the square arrangement of four large pits (C13299, C13694, C13272 and C13217) formed part of an earlier timber structure. Significantly, the inner circle of posts at Armalughey were dug into a pair of large sub-rectangular pits (C13313 and C13740) belonging to a previous phase of activity (see Fig. 6.5). These two pits share the same axial symmetry displayed by the arrangement of four large pits (C13299, C13694, C13272 and C13217) forming the large square setting inside the circles. This suggests that these six large pit-features represent the only surviving elements of an earlier timber monument comprising a four-post structure with a pit-defined entrance way. Such a ground plan would closely resemble the main surviving elements of Grooved Ware associated timber structures at Balgatheran, Co. Louth (Ó Drisceoil forthcoming, see Fig 6.2) and Kilmainham 3, Co. Meath (Whitty 2007) or Durrington 68 (Pollard 1995) and Durrington 70 in Wiltshire (Pollard et al. 2007). At a later stage, the original entrance to this six-post structure was transformed by the creation
of the inner ring of the later timber circle. It was probably at this time that the remaining four pits of that structure — which display evidence for multiple phases of re-use — were redug to form part of the next stage in the design of this monument. Indeed, these four large pits appear to represent the most enduring structural aspect of the site (see below).

It can be observed that various different architectural aspects of the monument received different treatments throughout the use of this structure, particularly towards the end of its life-cycle. All four of the posts within the pits forming the internal rectangular arrangement were extracted and then backfilled (see below). The presence of distinct and undisturbed post-pipes in the outer ring indicates that the outer circle was left to rot in situ (Dingwall 2010). Similar evidence suggests that some of the posts forming the inner circle were also left to decay while others were clearly dug out.

A total of 50 sherds derived from at least 12 Beakers were discovered within the timber circle. Only a small part of most of these pots was recovered from the excavated contexts. The Beaker pottery came from six features comprising the four large pits (C13299, C13694, C13272 and C13217) forming the internal square arrangement at the centre of the timber circle, an entrance posthole (C13165) from the inner ring and a small posthole (C13530) near the centre of the circle (see Fig. 6.5).

One of the postholes (C13165) forming the entrance to the inner ring produced a single Beaker sherd. This came from an upper fill that seems to have been deposited after the post within this feature had decayed or been extracted. A posthole (C13530) within the central interior of the inner ring contained five sherds (and 19 fragments) from at least two Beaker vessels, many of which were quite abraded. These were all found in the void (post-pipe) formed by either the decay or the removal of the post, along with a sherd of Middle Neolithic Carrowkeel Ware and three sherds of Late Neolithic Grooved Ware. A fragment of burnt pig bone from this deposit produced a radiocarbon date of 2760–2570 BC (SUERC-2078: 4105±30 BP) that seems to relate to the Grooved Ware associated activity in this location.

Most of the Beaker pottery (44 sherds derived from 10 vessels) occurred within the internal square arrangement of four large pits. One of these (C13272) contained four sherds from two Beakers that were recovered from an upper deposit that had clearly been deliberately backfilled after the removal of its post. Sherds from a Middle Neolithic pot were also found in this feature. A single Beaker sherd occurred in a backfilled upper deposit of the southeastern pit (C13694). The north eastern pit (C13299) had been re-cut and then filled in on a number of occasions (see Fig. 6.6). It is also clear from the verticality of the interfaces between the deposits in this feature that it had once contained a post that
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had subsequently been removed. A single Beaker sherd as well as five sherds from a Grooved Ware vessel were found in the uppermost deposit of this pit, along with charcoal which returned a radiocarbon date of 2660–2470 BC (SUERC-20796).

The majority of the Beaker pottery came from the south western pit (C13217) near the entrance. This appears to have contained a post that had been removed before the pit was subsequently backfilled and then recut at a later stage, to receive the Beaker deposit. This final deposit consisted of a dark charcoal rich fill that produced 34 Beaker sherds from at least five different vessels. The charcoal produced a radiocarbon date of 2290–2030 BC (SUERC-20768: 3750±30 BP). Although two of the Beaker pots were only represented by two sherds each, the other three vessels (nos 36-38) were large 'domestic' Beakers represented by 10 sherds each, many of which conjoined (Fig. 6.7).

The sherds from these three pots are far larger and represent a greater vessel percentage — as much as 15-20% of each vessel — than those from any of the other Armalughey Beakers (see Table 6.3). Nine of the 12 Beaker vessels are represented by fewer than five sherds, six of which consist of only one sherd (Table 6.3). All of these sherds are small, worn (and in some cases quite abraded), highly fragmented and none conjoin. In contrast, the three Beakers represented by multiple conjoining sherds, the edges and surfaces of these are uniformly well preserved and unworn, the breaks are clean and do not display any edge wear (Julie Lochrie pers. comm.). All of these sherds were exclusively from one side of each pot and included parts from the rim, neck and belly but not the base (Julie Lochrie pers. comm.).

These three exceptionally well preserved portions of Beakers appear to have been immediately deposited upon their breakage and seem to have been placed intact into the pit as larger pieces that only broke post-deposition (Julie Lochrie pers. comm.). It may even be the case that these Beakers were smashed specifically to be deposited within a hole that had been dug to receive these as part of a single sequence of acts. Their characteristics certainly suggest that there was something very different about the deposition of these pots. One of these is a Rockbarton type pot and it was noted in Chapter Four that these Beakers displayed far higher sherd: vessel ratios than other types of Beaker pottery recovered from pits and spreads. Interestingly, these three pots were found along with the remains of two other Beakers, each of which were represented by only two worn sherds.

Excluding these three unusually intact pots, the rest of the Beaker pottery was represented by only a few sherds each. This indicates that the amount of pottery deposited at Armalughey represents a very small proportion of what this assemblage would have
comprised before these vessels were broken. The pottery appears to form partial deposits that have been obtained from a larger aggregation of occupational debris where it would have been subject to abrasion. A substantial period of time may have elapsed between the fracture and final deposition of these ceramics and their highly incomplete and fragmented condition is consistent with some movement after breakage.

Significantly the Beaker pottery at the Armalughey timber circle was found in secondary rather than primary contexts. It appears to have been deposited into these features after their posts had decayed or been extracted and, in some cases, the original features seem to have been recut to receive these Beaker-associated deposits. This suggests that its deposition occurred during later phases of activity post-dating the main phases of use of the respective parts of the monument. In many ways, this mirrors the context of the Grooved Ware at this site which also appears to have been deposited at a late stage in the use-life of the building. This is an important point that will be returned to below.

Beaker deposition at Armalughey was largely focused upon the four large pits which represent its oldest element (see above), while the outer ring of posts appears to have been left untouched to rot in situ (see Fig. 6.5). Similar occurrences have been noticed at other Grooved Ware-associated timber circles such as Ballynahatty (Hartwell 1998) and Dunragit in Scotland (Thomas 2004). At the former, the outer ring of posts was left to decay, while the inner ring and the central four-posts was burnt down, dug up and then backfilled before being marked by low cairns of stones (Hartwell 1998, 41 and 2002, 529). There appears to have been a complex sequence of development of the monument at Armalughey. Different phases of building activity involved the repeated recutting and/or replacement of postholes as well as the remodelling of other components including the addition of the inner and outer ring.

The central four post-pits represent one of the few enduring architectural elements that were retained throughout this evolutionary process (Carlin 2010). The longevity of this rectangular arrangement may account for the decision to choose these features as the main focus for Beaker deposition. If this was the case, the Beaker deposits could represent a very deliberate attempt to create a link with or to commemorate the use-life of this particular monument and suggests a good knowledge of its history. Of course a cynic might argue that the sheer size of the four post-pits would have made them the most visible surviving component of the monument though this begs the question of whether or not posts would still have been present in these pits at this time.
6.2.3 Beaker deposition in the probable timber circle, at Newtownbalregan 5

A cluster of pits and postholes producing 166 sherds from 15 ‘fine’ Beaker vessels were excavated on a multi-period site at Newtownbalregan 5 (Bayley 2009b; Grogan and Roche 2005b). The postholes were interpreted by the excavator as the remains of a 'domestic' structure; however, the nature of the evidence is such that this seems unlikely. Beakers were rarely deposited in structural features (with the exception of timber circles) and, unlike at Newtownbalregan, postholes were never the main focus of deposition on occupation sites (see Chapter Three). Very few postholes in Ireland have produced Beaker pottery, while as many as five postholes at Newtownbalregan contained large quantities of Beaker sherds. The majority of Beaker-associated postholes found in a 'domestic' context contain three sherds or less, generally representing the remains of a single vessel (see Chapter Three). In contrast, four of the postholes at Newtownbalregan 5 produced far more than 10 sherds representing the remains of between three and nine vessels. One posthole contained 63 sherds from six different vessels, while another produced 59 sherds from five vessels (see Tables 6.4 and 6.5). While most postholes from non-timber circle sites displayed very low sherd: vessel ratios, the postholes at this site exhibited higher ratios with one posthole containing as many as 10 sherds from one pot.

The postholes at Newtownbalregan had straight vertical sides and flat bases. They are much wider (0.24–0.50m) in diameter and deeper (with an average depth of 0.50m) than the more ephemeral examples generally found in non-ceremonial contexts. In terms of their size, shape and contents, these features resemble the postholes from the other timber circle sites. Re-examination of the site plans has revealed a square arrangement of large posts, each of which is about 4m apart and parallels the four-post settings commonly found within Irish Late Neolithic timber circles (Fig. 6.8 and 6.2). Three of these posts all produced quantities of Beaker pottery ranging from 11 to 59 sherds. An additional two features that also contained multiple sherds may well represent the rearmost postholes of a timber circle that occur directly opposite the entrance (see Fig. 6.8) Though no clear entrance features were recorded at Newtownbalregan, the orientation of the axis of the four-post setting combined with the two aforementioned postholes suggest that this structure may have had a southeastern entrance as is generally the case with Irish timber circles. It seems quite probable that the postholes at Newtownbalregan represent the poorly preserved partial remains of a timber circle.

Grogan and Roche (2005b) observed that the pottery was of an unusually fine quality and in good condition with little evidence for heavy wear, yet the assemblage was heavily
fragmented with few refitting sherds. This led them to conclude that the assemblage suffered relatively little post-depositional disturbance and that the pottery was deposited in sherds. There is strong evidence to suggest that this material was in an intermediate context prior to its ultimate deposition notably the presence of several sherds from multiple different fragmented pots within many of the features. Indeed, sherds deriving from the same vessels were found in various postholes and this material connection suggests that their contents were obtained from the same source (see Table 6.5). The occurrence of highly fragmented but unworn potsherds suggests that these spent some time post-breakage but pre-deposition within an environment such as a midden that offered protection from the elements. Similarly burnt and unburnt, fresh and abraded lithics occur within the same contexts. Some of the worn flints suffered from post-use damage indicating that they had been exposed to the elements for some time before they were deposited, but this did not apply to all the lithics from the probable timber circle, thereby indicating that the wear occurred before deposition.

No post-pipes were detected within any of the postholes and the excavator suggested that the posts of the possible structure may have been pulled out. If posts had been pulled out of the postholes, then traces of the former post_shafts should still have been visible. Instead, most of the postholes contained a single homogenous fill and there was no evidence for any packing material. It is possible that during extraction of the posts, the entire original contents of the postholes were removed and then rapidly backfilled. Although confirmatory evidence is not available, this seems the most plausible interpretation of these features. It seems quite probable that a timber circle or similar ceremonial structure was constructed here and then demolished at the end of its use-life by removing the posts, redigging the postholes and deliberately filling these voids with occupational debris, possibly as part of an abandonment ritual.

6.2.4 Beaker deposition within the probable timber circle at Newgrange

A partially excavated monument at Newgrange was located 30m west of the main passage tomb mound (see Fig. 3.2, Sweetman 1987). 18 sherds deriving from at least six Beakers and other finds including convex scrapers, a portion of a decorated stone bowl and cremated cattle and pig bone were found within six of the many pits that formed part of two almost concentric arcs which are thought to form a pit/ timber circle approximately 20m in diameter (see Fig. 6.9). Although the features excavated here may indeed form a
structure such as a timber circle, the area of investigation was too restricted to be definitive about this and it remains possible that this may be a palimpsest representing multiple different and possibly unrelated phases of activity.

Sweetman (1987, 283) identified five large pits (Nos 1, 2, 8, 9 and 19) each of which contained charcoal-rich basal deposits that had been backfilled with sterile clay after their primary use. These pits were then re-dug to contain what Sweetman interpreted as posts. One of the large circular pits (no. 1) which appeared to have been re-cut to hold a post produced a Beaker sherd (no. 85), a round scraper, some "utilised flints", some burnt bone and charcoal that returned a radiocarbon date of 2577–2468 BC from its uppermost fill of a posthole (GrN-12828: 4000±30 BP) (Sweetman 1987, 286). A single Beaker sherd (no. 87) was found in another of the large pits (no. 2). Close to the central part of the base of another pit (no. 19), a “mass of charcoal and burnt bone” (cattle, pig) produced nine small sherds of very fragmented Beaker pottery (Sweetman 1987, 287).

Sweetman (1987, 287) also grouped the smaller pits (Nos. 3, 4, 5, 6, 7, 12, 13, 16, 17 and 18) together, some of which (including pits 4 and 17) seem to have been filled with debris and then re-used as postholes. For example, one of these pits (no. 4) contained five large sherds from a Beaker (Vessel 90, Sweetman 1987, fig. 4) that were found at varying depths along with burnt bone, burnt clay, as well as numerous stones that appeared to have been packing for a post (Fig. 6.10). A Beaker sherd (no. 98) was discovered near the top of pit 17, while another pit (no. 6) contained Middle Neolithic pottery (no. 92; Helen Roche pers. comm.), a stone bowl and charcoal that produced a radiocarbon date of 2565–2320 BC (GrN-12829: 3930±35).

The six Beaker vessels from these features at Newgrange were highly fragmented. The highest number of sherds from any one pot was quite low (five) and three of the six pots were represented by a single sherd. All of this suggests that these ceramics may have been obtained from an intermediate context for deposition within these features. If this material had been obtained from an aggregation of debris, one would expect to find multiple different vessels represented by only a few sherds each. However, there does not appear to be more than one vessel represented in any of these features and this may argue against the interpretation that the material was obtained from a larger collection. Unfortunately, Sweetman (1987) did not attempt any interpretation of how and when the Beaker materials became incorporated into these features.

Although the exact location of the Beakers within these features is not entirely clear, the available evidence does suggest that these sherds were recovered from secondary contexts within the pits. Most — if not all — of the Beaker pottery occurred within conical
re-cuts that were dug into pre-existing pits which the excavator interpreted as the remains of former posts (Sweetman 1987, 286). This begs the question of how the Beakers came to be present within these putative postholes. If these are postholes, then the most likely sequence of events is that after the initial phase of use of the pits, a post was inserted and then the entire space surrounding this was filled with packing clay. It seems unlikely that the artefacts within the post-shafts could have been deposited at this stage without at least some artefacts being incorporated into the packing clay, but this material was found to be completely sterile. It is most probable that the artefacts represent abandonment deposits that were deliberately placed into the voids created by the rotting or the removal of the posts. Another alternative explanation is that these conical re-cuts actually represent the redigging of the pits for depositional purposes. Either way, the important point is that the Beakers were deposited in secondary contexts that post-date the primary phases and most likely represent the final stages in the use-life of this probable monument.

6.2.5 Spatial associations between Beakers and timber circles

At Donacarney Great, small fragments of Beaker pottery were recently discovered to have been incorporated into the surviving elements of what appears to be a Grooved Ware-associated timber circle (Antoine Giacometti pers. comm.). However, given how recently this has been excavated, all current information is of a highly preliminary nature. Beaker pottery has also been found in spatial association with three Late Neolithic timber or pit circles at Knowth, Co. Meath (Eogan and Roche 1997); Ballynahatty, Co. Down (Hartwell 1998); and the large example at Newgrange (O’Kelly 1983, Sweetman 1985).

At Ballynahatty, part of a Beaker pot was recovered during excavations of the Grooved Ware associated timber circle complex, but its exact context remains uncertain (Hartwell 2002, 526). The Grooved Ware associated timber circle at Knowth was directly overlain by an extensive spread of culturally-rich occupational debris known as Concentration D which contained 2072 sherds deriving from at least 104 Beakers (see Section 4.3.3; Roche and Eogan 2001, 137; Roche 1995, 39). However, no Beakers were found within the underlying features forming timber circle, nor was any Grooved Ware discovered within the spread (Roche and Eogan 2001, 131; Eogan and Roche 1997, 223–260). Although there may have been a time-lapse in between these two phases of activity at Knowth, the complete absence of any Beaker deposition within the features forming this monument seems strange in comparison with the evidence from other sites like Armalughey or Paulstown (see below).
At Newgrange, a large pit circle located to the southeast of the main passage tomb was 70m in external diameter and consisted mainly of three concentric rows of pits with posts on the inside that enclosed the small passage tomb, Site Z (see Fig. 3.2). Only the western circuit and part of the interior have been excavated, but magnetic gradiometry and susceptibility surveys have revealed what appears to be the full extent of this pit circle as well as a number of distinct elements composed of regularly spaced, double and single rows of pits – some of which appear to form an elaborate entrance feature similar to that which leads from the wooden enclosure into the timber circle at Ballynahatty (Smyth 2009; Barton et al. in prep.).

Material from the partial excavations produced 13 radiocarbon dates ranging from 2865–2145 BC (Grogan 1991, 131). Pottery described by O’Kelly (1983, 18, 21), as “undecorated Beaker-associated bowls” were found in at least three of the pits. It has subsequently been recognised that O’Kelly’s ‘undecorated bowls’ are Grooved Ware (Roche 1995). Grooved Ware was also found within the interior of the circle in stakeholes and spreads of habitation debris (Roche and Eogan 2001, 129). No Beaker pottery was found in any of the pits forming the monument, but five sherds of Beaker pottery and flint flakes were recovered from a spread in association with “habitation evidence” comprising a stretch of stone paving, stakeholes and charcoal spreads, all within the interior of the enclosure (Sweetman 1985, 200–218).

One of the so-called “Beaker hearths” (no.2) cut one of the pits forming part of the circle (see Section 3.2.2; O’Kelly 1983, 18) although this did not contain any pottery. Beaker sherds were found overlying and outside the enclosure in the so-called “Beaker layers”: pottery concentration no.’s three, four and five (O’Kelly 1983, 18). While it is difficult to disentangle the Grooved Ware activity from that associated with Beakers at Newgrange, the occurrence of Beaker sherds in the horizon sealing the pit circle certainly suggests that the creation of the enclosure pre-dates at least some, if not all of the Beaker activity.

6.3 BEAKER DEPOSITION IN EARTHEN ENCLOSURES

Very few open-air earthen monuments in Ireland have been investigated and radiocarbon dating where carried out has been inconclusive (Stout 1991; Cooney and Grogan 1994, 87–91; Condit and Simpson 1998). Beakers have been found within the interiors of two: the embanked enclosure at Monknewtown, Co. Meath, and the embanked stone circle at Grange, Co. Limerick (Ó Riordáin 1951).
Beaker Pottery was discovered during the excavation of the embanked stone circle at Grange at Lough Gur, Co. Limerick, by Sean P. Ó Ríordáin (1951) along with Early Neolithic Carinated Bowls, Middle Neolithic globular bowls, Grooved Ware, Food Vessels, Cordoned Urns and Late Bronze Age coarse ware (Roche 2004, 115). Although originally considered to have been constructed in the Late Neolithic/Early Bronze Age (Ó Ríordáin 1951), it has been recently and convincingly argued by Helen Roche (2004) that this enclosure was actually built in the Late Bronze Age. Roche observed that the most recent pottery within the material forming the bank of the enclosure was of a type called Lough Gur Class II which is now known to be Late Bronze Age (see Chapter Two and Section 3.2.1). This bank played an essential role in supporting the circle of stones at Grange and all the evidence strongly indicates that the monument was built in one phase. Thus, she concluded that the Late Bronze Age pottery must date the construction activity (Roche 2004, 115).

A total of 1231 Beaker sherds, two Sutton type barbed and tanged arrowheads (Ó Ríordáin 1951, fig 3:6) and two hollow-based arrowheads (ibid, fig 3: 1 and 2) were recovered from the sockets of the orthostats, on the old ground surface under the bank and on the old ground surface under the aceramic yellow fill that was spread over the interior of the enclosure (ibid, fig 3; 32). Roche (2004, 115) commented that most of the Beaker sherds are tiny fragments that represent "protracted activity" and were largely recovered as residual artefacts within secondary contexts.

The embanked enclosure at Monknewtown, Co. Meath (Sweetman 1976), is generally dated to the Late Neolithic (Stout 1991; Condit and Simpson 1998; Cooney and Grogan 1999, 87-91), but no evidence relating to the dating of its construction was found during excavation (see Section 3.2.3). Investigations of this site resulted in the discovery of multi-period activity ranging from the Middle Neolithic to the Late Bronze Age (Roche and Eogan 2001, 135). 5000 sherds of Beaker pottery were recovered from the excavation, mainly from an extensive surface deposit of occupational debris (Sweetman 1976). However, this deposit also contained a mix of pottery spanning three millennia and the Beaker pottery may well have been found in a residual context.

While the exact relationship of the Beaker pottery at both Monknewtown and Grange remains unknown, it seems clear in both instances that large quantities of this ceramic were deposited above ground along with other contemporary materials. It seems very likely that these were placed in large artefact-rich surface deposits such as the well-known examples from Knowth and Newgrange (see Chapters Three and Four). These may well represent the remains of deliberately accumulated debris that was produced through large scale acts of consumption during social gatherings and feasts.
Beaker-associated deposition in ceremonial contexts

The above surface nature of these deposits enabled ongoing engagements with the material contained within them and this would have fulfilled various practical, social and ceremonial functions (see Section 4.5.3). Materials were retrieved from these aggregations for deposition in other contexts such as pits or megaliths. These deposits also served as physical reminders of past events and activities, and in doing so, may have demarcated particular locations as meaningful places. Given the long history of ceremonial activity at both Grange and Monknewtown, these seem to have been seen as suitable locations for such gatherings. Regardless of when these enclosures were constructed, these places held particular meanings for the people who deposited Beaker pottery there and seem to have been regarded as important spaces.

Overall then, there is no evidence to suggest a direct association between the construction or primary use of any large-scale earthen monuments and the use of Beakers in Ireland. The absence of definitive dating evidence for the construction of these monuments means that it is presently impossible to discern whether or not many of these monuments had even been built by the Final Neolithic. The occurrence of Beakers in these locations merely seems to represent one phase in a series of protracted activities and there is little that can be said with certainty about the Beaker-associated aspects of these discoveries. While the details of these will not be discussed any more, the interest in places of historical importance that is indicated by Beaker deposition at these and other enduring ceremonial foci forms part of an emerging theme that will be explored further below.

6.4 Comparative analysis of deposition at timber circles

Overall, then, 303 sherds from 50 Beakers have been recovered from two definite and four probable timber circles in Ireland. Other artefacts occurring in these deposits include convex end scrapers, a quernstone, a rubbing stone and a hammerstone, but lithicdebitage is by far the most common aceramic find. Notably, neither barbed and tanged arrowheads and other such typical Beaker objects nor human bone have been recovered from these contexts.

The smallest quantity of Beaker pottery (18 sherds from six vessels) from a timber circle came from the partially excavated example at Newgrange, while the largest (166 sherds from 15 vessels) came from the poorly preserved probable example at Newtownbalregan (see Table 6.6). The amount of Beaker pottery from individual postholes forming each of these structures varied greatly at each site. This ranged from postholes containing a single sherd (six examples) to those that contained more than 31 sherds (five examples) (see
Table 6. Similarly some postholes only contained the remains of one vessel (nine examples, five from Newgrange) while others produced sherds deriving from between four and six vessels (though four of these were at Newtownbalregan: see Table 6.8).

At least one posthole from each of these timber circles contained multiple sherds from numerous pots. At Armalughey, a post-pit produced 34 sherds from five vessels and at Paulstown, a posthole yielded 31 sherds from four vessels, while the largest quantity from a single feature was excavated at Newtownbalregan, where one posthole contained 63 sherds from six different vessels. A common aspect to the pottery from the postholes of all these timber circles is that many of the vessels are very incomplete and are represented by only a small number of highly fragmented and/or worn sherds, very few of which conjoin. The condition of these vessels (see above) suggests that they represent partial assemblages that were obtained from a larger aggregation of debris and that there was often a considerable time lapse between the original breakage of these pots and their final deposition. The presence of knapping debris, charcoal and carbonised plant remains along with the fragmentary ceramics suggests that in many cases, the deposits consist of occupational debris that was taken from a greater accumulation of material such as a rubbish pile.

Certainly, there does appear to be a selective aspect to the deposition of Beaker materials in timber circles. This is exemplified by the three exceptional Beakers that seem to have been smashed immediately before being placed in the post-pit at Armalughey. The exclusion of so many typical Beaker objects combined with the selection of habitation debris for deposition at all four monuments suggests that the social practices associated with these were quite circumscribed. This is also evident in the emphasis on depositing Beakers in certain locations within timber circles, but not others. This is most visible at Armalughey and Paulstown where deposition focused on places such as the entrance or rear of the structure, as well as the central four posts.

The deposition of Beaker material in timber circles also seems to be strongly related to pit deposition. The pits dug into the tops of the postholes often physically resemble the typical Beaker pits that were dug on what appear to be settlements (see Chapter Four). The activities associated with the formation of deposits in both contexts seem to involve the ritualisation of the ‘domestic’ as evidenced by their shared emphasis on the deposition of habitation debris that has been obtained from an intermediate context such as a midden (see Chapter Ten). Occasionally, a complex sequence of events involving the backfilling and recutting of deposits is evident in both pits and timber circles. Despite these similarities, pit deposition appears to have been considered as a distinct practice as it
followed a different set of rules that permitted the deposition of a much greater range and quantity of artefacts such as arrowheads, bracers, polypod bowls and polished stone axes, all of which seem to have been excluded from Beaker deposits at timber circle (see Chapter Nine).

6.5 **BEAKER DEPOSITION IN TIMBER CIRCLES IN A WIDER CONTEXT.**

The re-use of timber circles for Beaker deposition is not unique to Ireland and Beakers have been retrieved from at least 15 timber circles in Britain (see Gibson 2005, 670), including North Mains in Perthshire (Barclay 1983), Balfarg in Fife (Mercer 1981) and the Durrington Walls Northern and Southern Circles (Wainwright with Longworth 1971, 71–3; Parker Pearson *et al.* 2007, 631), many of which have also produced Grooved Ware. In keeping with the Irish evidence, Alex Gibson (2005, 68 and 75 and 105-6) noted that both Grooved Ware-associated and Beaker-associated artefactual deposition occurs in secondary contexts in most British timber circles such as the Durrington Walls Southern Circle, Woodhenge and North Mains; Mount Pleasant, Marden and Woodhenge. Beaker pottery was also found in later contexts at the Durrington Walls Northern Circle (phase II) and Southern Circle (Phase II) and at the Sanctuary where it mainly occurred in the later stone-holes.

Newly excavated postholes within the Southern Circle at Durrington Walls all displayed conical re-cuts that had been dug after the posts had rotted *in situ*. These re-cuts had been backfilled with deposits containing artefacts including Beaker pottery (Parker Pearson *et al.* 2007, 631; Richards and Thomas 1984, Thomas 2007, 148-51). Parker Pearson *et al.* (2007, 631) also argued that the Beaker sherds found in the bluestone holes at Stonehenge were introduced when these stones were pulled out. In Britain, many timber circles such as Balfarg and North Mains were reused for Beaker-associated burials or were directly replaced by Beaker-associated cairns as is the case for Oddendale (Gibson 2005, 75). This provides a notable contrast between Beaker activities at these monuments in Ireland and Britain. Yet this difference is unsurprising given the stronger association between Beaker pottery and mortuary practices in Britain compared to Ireland (see Section 5.11.2).

As well, as this, Beaker pottery was deposited in other older monuments or places with a long history of ceremonial activity such as the ditches of the henges at Durrington Walls and Mount Pleasant (Parker Pearson *et al.* 2004a; 2006a; 2007, 635; Bradley 2000a, 128), the Windmill Hill causewayed enclosure (Whittle *et al.* 1999), and the West Kennet long barrow (Case 1995b Bayliss *et al.* 2007a). In some cases, this has been interpreted as
closing activity that represents a break away from the past (Bradley 1998; 2000a, 220–31; 2005a, 100–6). In others such as Stonehenge, this is seen as a change in the use of the monument from a place associated with ceremony to one that is more related to funerary activity (Parker Pearson et al. 2006; Bradley 2007, 152).

New ceremonial monuments also seem to have been constructed in association with the use of Beakers in Britain such as the erection of Silbury Hill and possibly also the Stonehenge blue stones and the West Kennet palisade enclosures (Parker Pearson 2000, figs 17.4-5; Bayliss et al. 2007a; Parker Pearson et al. 2007). However no new ceremonial monuments appear to have been constructed in Ireland at this time, other than wedge tombs and cists, both of which seem to have also fulfilled a funerary function (see Chapter Five). Instead, ceremonial traditions seem to have largely continued from the Late Neolithic into the earliest Bronze Age (see below and Chapter Ten).

6.6 DIFFERENT POT, SAME PRACTICES

The absence of Beakers from any primary context within timber circles suggests that the deposition of this ceramic post-dates the original use of these structures which were most probably constructed before the appearance of Beaker pottery in Ireland. Instead, the original features that formed the monuments seem to have been modified at a late stage in their use to receive Beaker deposits. The timber posts appear to have been deliberately extracted from some postholes, while holes seem to have been dug into the tops of others, perhaps to remove rotting posts. In both cases, the voids created by these actions seem to have been immediately backfilled with Beaker-associated occupational debris. None of the Beaker deposits within the postholes appear to be the result of cumulative infilling. People seem to have deliberately placed deposits within the structural features during the dismantling of these older monuments. Perhaps the deposition of this material can be seen as ritualised acts of abandonment and/or commemoration of the past history of the monument.

A striking aspect of Beaker activity at timber circles is the extent to which they parallel and echo Grooved Ware practices. This Late Neolithic ceramic was also deposited after the construction of these monuments and generally after the posts had rotted or been removed. This generally involved the deliberate deposition of artefacts into eroding post-pipes or into pits cut into the top of the original postholes (see Gibson 2005, 66, 75 and 158; Parker Pearson et al. 2007, 631, Thomas 2007, Pollard and Robinson 2007). For example at Bettystown, Co. Meath, it seems that the posts were first removed and the
voids then packed with charcoal- and artefact-rich soils that included Grooved Ware sherds (James Eogan, pers. comm.). Similarly, at Balgatheran, Co. Louth, most of the posts had been removed and some posts had rotted in situ, before the post-pit voids were deliberately infilled with Grooved Ware pottery and lithics (Ó Drisceoil forthcoming). In many cases, this appears to represent the deliberate deposition of materials derived from the collective waste generated by ceremonial or feasting activity in association with the use of the monument before its destruction.

The spatial aspect of Beaker depositional activity at timber circles also seems to be derived from Late Neolithic practices. The largest concentrations of Grooved Ware have been found within the postholes that formed the entrance at many timber circles such as Bettystown, Whitewell, Kilbride and Scart (J. Eogan 1999, Grogan et al. 2007, Cotter 2006, Jonny Monteith pers. comm.). The importance of the entrance for Grooved Ware users is further indicated by the depositional emphasis upon this area at Wyke Down henge (Cleal 1991), Durrington Walls (Wainwright and Longworth 1971, 195) and Woodhenge (Pollard 1995) in Britain. For example, the Grooved Ware found in the entrance area at Wyke Down displayed the most complex decoration (Cleal 1991, 141–2) and the entrance to the earthwork at Woodhenge was demarcated by elaborate deposits of human bone and sherds of Grooved Ware with circular motifs (Pollard 1995). Examination of the distribution of artefacts within the Knowth timber circle revealed that deposition focused on the central postholes, the entrance area and the corresponding back posts (Roche and Eogan 2001, 127; see Eogan and Roche 1997, 220–221). The latter pattern was also detected at the Southern Circle at Durrington Walls, where a posthole at the rear of the building and directly opposite the entrance produced a large number of antler picks (Thomas 2007, 151). This spatial patterning is clearly echoed by the Beaker deposits at Paulstown and Armalughey. This parallels the observation made in a British context by Julian Thomas (1996, 212-22) that Beaker and Grooved Ware were both used according to the same set of rules at the Mount Pleasant timber circle.

It seems clear that Beaker depositional practices at these monuments represent a continuation of Grooved Ware traditions. If this is so, then the adherence to these Late Neolithic customs on sites such as Paulstown or Newtownbalregan where no Grooved Ware was found seems quite remarkable. Beaker pottery seems to have fulfilled the role of Grooved Ware at these timber circles, and respect for later Neolithic traditions seems to have been maintained to such an extent that it may have been deemed inappropriate for other novelties from the Beaker package to also be deposited. This would account for the exclusion of typical Beaker aceramic objects from these monuments. The manner in which Beaker-associated activity replicated Grooved Ware associated practices at timber circles...
suggests that the adoption of Beaker materials in Ireland may have been strongly influenced by pre-existing traditions (see Chapter Ten). It is also clear from this that Beaker deposition often displayed a strongly referential aspect and a deep concern for the past. This is very well illustrated by the way in which the Beaker deposition at Armalughey focused almost exclusively on the large central arrangement of four post-pits which represents the oldest element of that monument. Both of these points are discussed in more detail below.

Both Grooved Ware and Beaker ceramics occur in very similar contexts – both are mainly found in pit clusters filled with occupational debris, both were deposited (albeit to a much lesser extent in the case of Beakers) as part of more formal ceremonial activity at timber and pit circles and both are rarely deposited with burials (see Carlin and Brück forthcoming, also see Chapter Ten). Despite the strong evidence for the continuation of Late Neolithic depositional practices in tandem with the use of Beaker pottery, these two ceramics are rarely found in contextual association and there is almost no evidence to indicate an overlap in their use (see Chapter Eight). It seems that Beaker pottery rapidly replaced Grooved Ware and took on many of the roles previously associated with this Late Neolithic ceramic. In this regard, the adoption of Beaker materials in Ireland was strongly influenced by Late Neolithic traditions. This is particularly evident in the maintenance of the pre-existing emphasis on ceremonies for the living rather than the dead and in the continuation of shared communal practices such as the deposition of collective debris in timber circles.

6.7 **BEAKER DEPOSITION AS CELEBRATIONS OF PAST CEREMONIES**

A strong concern with the past in terms of places, people and practices is clearly indicated by the character of Beaker-associated deposits in secondary contexts in historic monuments such as timber circles and earlier Neolithic megaliths. Similar Beaker deposits also occur in areas with a long history of ritual activity such as Grange and Monknewtown as well as other sites at Brú na Bóinne. Despite the introduction of a suite of novel aspects of material culture, pre-existing ceremonial landscapes and monument complexes continued to be seen as important places. People had a strong sense of place and many Neolithic ceremonial foci endured and some seem to have functioned as loci for Beaker-associated ceremonies. It may be the case that new ceremonial monuments or centres were not developed in the Irish Final Neolithic because there was such an interest in ancestral traditions and places at this time.
This material engagement with the past represents a recurrent aspect of Beaker practices that links activity in both the funereal and ceremonial spheres and concomitantly blurs any divisions between them. Returning to the Beaker activity at Newgrange and Knowth in light of this, it does seem very likely that these monuments acted as foci for large-scale social gatherings which may have been connected with ceremonial activity. The refuse associated with these occasions seems to have been deliberately curated above-surface at these locations. Based on the evidence for a Beaker-associated engagement with other Late Neolithic timber circles, the spatial association between the Beaker pottery and the Late Neolithic timber and pit circles at Newgrange, Knowth and Ballynahatty is unlikely to have been merely fortuitous. Instead, the deposition of Beakers at these three areas probably referenced the Late Neolithic activities that had been conducted there. Importantly, in contrast to Britain, these references to the past were rarely of an overtly sepulchral nature. This point will be returned to in Chapter Ten.
7
BEAKER-ASSOCIATED DEPOSITION IN NATURAL PLACES IN IRELAND
CHAPTER SEVEN - BEAKER-ASSOCIATED DEPOSITION IN NATURAL PLACES IN IRELAND

7.1 INTRODUCTION

Beaker objects\(^{16}\) have been found in bogs in at least 18 instances, in rivers in seven instances, in dryland natural places in 13 instances, as well as in two caves\(^{17}\) and one lake. This chapter examines the character of the deposition of Beaker-associated artefacts in these natural places. The range, quantity and manner of deposition of artefacts in each of these types of places are examined and contrasted with each other. The depositional record for each of the various natural contexts is compared and patterning is identified. The results of this inquiry are contrasted with elsewhere in north-western Europe. An attempt is made to explain the reasons for the placement of Beaker objects in natural places.

To carry out this research, it was necessary to catalogue all the Beaker objects, their depositional contexts and to examine these in relation to each other. Pre-existing studies and catalogues of many Beaker objects have been conducted by others such as Harbison (1969 and 1976), Taylor (1980), O'Flaherty (1995), Eogan (1994) and Becker (2006); however, none of these explicitly set out to gain an understanding of Beaker depositional practices in natural places, particularly not from a contextual point of view. While information from these works was used, it was necessary to supplement this with further contextual details.

7.1.1 Problematic aspects of the study

It is unlikely that people in the Early Bronze Age viewed their world in terms of dichotomous relationships or maintained clear distinctions between nature and culture (see Bradley 2000a, 34-6). Accordingly, care is required to avoid projecting present-day concepts into the Early Bronze Age world when considering the ways in which those people structured their landscape. Nevertheless, the codified manner in which various kinds of objects were deposited in particular types of places informs us that past social

\(^{16}\) Beaker objects are defined in Chapter One

\(^{17}\) The rationale for including caves in this analysis is explained below
agents regarded natural places as a spatial category that was distinct from other contexts like monuments or settlements (see below).

Natural places are not timeless and so the present-day contexts in which objects have been found may be different from those in which they were originally deposited due to natural or manmade alterations to their receiving environments. Finds from wet or marshy, or boggy contexts might have been deposited on dry ground that subsequently became waterlogged or alternatively placed in lakes or pools that then became peat filled (Bradley 1990, 5). Conversely, finds from apparently dryland contexts might have been deposited in a wet environment that was later converted to dry land through drainage works (see Yates and Bradley 2010; Bradley 1990, 5).

Palaeoenvironmental investigations of findspots such as pollen analysis would be needed to ensure a proper understanding of the original depositional context of each object (ibid), but that is beyond the limits of this thesis. However, most of the objects found in wet contexts come from raised bogs that developed around 8000 years ago and so can be assumed to have been deposited in watery places (O’Flaherty 1995, 21). Indeed, the strong patterning present within the record in terms of the types of places in which certain kinds of artefacts occur suggests that the context of discovery for most objects in this study was very similar to their original context of deposition.

### 7.2 DEPOSITION OF BEAKER OBJECTS IN BOGS.

No Beaker pottery has been discovered within any bogs, yet many objects that commonly occur with this pottery elsewhere in Europe have been found in this context. It remains unknown whether the absence of Beaker pottery from these bogs reflects a choice on the part of the depositors or if pottery was deposited but has not survived due to the acidic nature of peat. Six wooden polypod bowls that mimic Beaker ceramic versions have been found during turf-cutting including the example from Tirkernaghan, Co. Tyrone, that has been dated (OxA-3013: 3960±100 BP) to 2870–2147 BC (Earwood 1991/2).

At least four bracers (representing almost half of all contexted bracers, see Catalogue 6) have been retrieved from bogs, two as isolated single finds at Ironpool, Co. Galway (Costello 1944) and at Carrowkeel Mountain, Co. Sligo (Watts 1960, 115; Harbison 1976, 24), while the other two occurred in a hoard at Corran, Co. Armagh, alongside two gold discs and several jet beads (Wilde 1857, 89; Case 1977b, 21). 25 (65%) out of the 38 V-perforated buttons from natural places have been discovered in bogs. A single button was found in Lurgan bog, near Dromore, Co. Down (Harbison 1976, 34: Munro 1902). A cache
of ten bone buttons was discovered ‘on a flagstone pavement’ in a bog/boghole at Skeagh, Co. Cavan, and another 14 stone examples were found in a bog at Drumeague, Co. Cavan (Harbison 1976, 15).

Anecdotal evidence suggests that numerous hollow-based and barbed and tanged arrowheads have been recovered as stray finds in peaty contexts. For example, barbed and tanged arrowheads were discovered in bogs at Sorne, Co Donegal (Beatty and Collins 1955, 117), Leitra, Co. Offaly, Tobertynan, Co. Meath (Lucas 1966, 8); Tankardsgarden, Co. Kildare, Gortrea, Co. Galway (Green 1980, 410-2) and Ballykilleen bog, Co. Offaly (Wilde 1861). Hollow-based arrowheads were discovered from deep within the blanket bog on Divis Mountain, Co. Antrim (Collins 1957), in boglands at Botera Upper, Co. Tyrone (Collins 1959), and another was found with a portion of its shaft at Kanestown Bog, Co. Antrim (Knowles 1885, 126-128). Unfortunately the total numbers of each type of arrowheads found in this context are unknown. This issue is clearly in need of further research, but that work is far beyond the remit of the present study (see Chapter One). A bowstave that returned radiocarbon dates of 2399–2042 BC was found in Ballybeg Bog, Co. Offaly (Murray 2004). Although this may not be a typical Beaker object, it does represent a piece of contemporary archery equipment that was deposited in the bogs. As such it may be seen as further evidence for the practice of bog deposition at this time.

Bogs represent the main context in which lunulae occur (see Chapter Nine, see Catalogue 8). At least 14 (54%) of the 26 examples from natural places including eight from four hoards and a further six single lunulae have been discovered in bogs. For example, a single lunula was found “under twenty feet of peat” near Enniskillen, Co. Fermanagh (Frazer 1897, 65), and a hoard of three folded lunulae were recovered from Banemore bog, Co. Kerry (Cahill 1983, 78–80). In addition to the pair of discs from the Corran hoard, another hoard comprising a single lunula and a pair of gold discs were found in a bog at Coggalbeg, Co. Roscommon (Kelly and Cahill 2010), which means that a minimum of four (40%) of the 10 discs from natural places have been discovered in this context.

At least six (50%) of the 12 copper daggers from natural places including five single finds from Blacklands Bog, Co. Tyrone (Harbison 1978, 333-335), Kilnagarnagh, Co. Offaly, Clontymore, Co. Fermanagh (Harbison 1969b, 7), Derrynamanagh, Co. Galway (Rynne 1972, 240-243) and Listack, Co. Donegal (Harbison 1969b, 8), as well as the example from the Knocknagur hoard have all been found in bogs (ibid, 7). At Knocknagur, Co. Galway, the hoard comprised a tanged copper dagger, three Lough Ravel thick-butted copper axes and three double pointed awls (Harbison 1969b, 10 and 19). More daggers have been recovered from bogs than from any other context (see Chapter Nine, see Catalogue 2).
Beaker-associated deposition in natural places

Significantly, bogs represent the context in which most copper metalwork including those objects — such as halberds and flat axes — with no evident Beaker associations have been retrieved (Becker 2006, O’Flaherty 1995). For example, this context has produced 50% of all 400 contexted flat copper axes including single finds and hoards (after Becker 2006).

7.3 DEPOSITION OF BEAKER OBJECTS IN RIVERS AND LAKES

By comparison, very few items have been recovered from rivers or lakes. A single lunula was found in a lake (Becker 2006, 212). Five decorated gold bands were discovered in a stream-bed that formed a tributary of the River Erne at Belville, Co. Cavan (Cahill 2005a, 267). Four copper daggers (33% of 12) were retrieved from three rivers: the River Shannon at Shannonbridge, Co. Offaly, and at Jamestown, Co. Leitrim, and the River Skene, Co. Meath. Two early stone battleaxes were found in the River Shannon (Simpson 1990). This pattern is consistent with the low proportion of contemporary metalwork such as copper axes found in rivers and lakes (Becker 2006), particularly the earlier Lough Ravel type, of which less than 10% were found in these contexts and none were in hoards (Schmidt 1978, 319-20).

7.4 DEPOSITION OF BEAKER OBJECTS IN DRYLAND NATURAL PLACES

It was not just wetland natural locations that were regarded as suitable places to receive deposits of particular types of objects. People also seem to have chosen to place certain Beaker-type artefacts in topographically distinctive natural dryland contexts. At least two (16%) of the 12 copper daggers from natural places have been recovered from a dryland context. Both were found within a rock crevice at Whitespots, Co. Down, in a hoard that also included a thick butted copper axe (Case 1966, 162; Harbison 1969b, 7 and 18).

A minimum of 11 (42%) out of the 26 lunulae deposited in natural places have also been found on dryland. Six lunulae occurred in two hoards within dry natural contexts. A group of four was retrieved from a spread of gravel at Dunfierth, Co. Kildare (Eogan 1994, 34), and another two were found together under a boulder at Rathroeen, Co Mayo (Taylor 1970, 70; Cahill 2005b, 57). Six lunulae were discovered as single finds: one came from a quarry, another three came from fields and two examples were found on mountains. The two lunulae from mountains were found at Trillick, Co. Tyrone, and at Trenta, Co. Donegal; both of these and another example from a field at Carrickmore, Co. Tyrone were also found under boulders (Frazer 1897).
At least six out of the ten sundiscs to have been retrieved from natural contexts come from dryland contexts. All of these were found in pairs on present-day agricultural land at Cloyne, Co. Cork (Cahill 2005a, 329), Kilmuckridge, Co. Wexford (Cahill 1994), and Tedavnet, Co. Monaghan (Eogan 1994). The pair from Cloyne was found while ploughing (Cahill 2005a, 329) and those from Tedavnet were discovered under the roots of a tree (Cahill 1983, no.6).

A (minimum) total of 13 (34%) out of 38 V-perforated buttons have been discovered in two apparently dryland natural locations, both of which were mountainsides. A single stone specimen was retrieved near the possible passage tomb known as Miosgán Meadhbha at Knocknarea, Co. Sligo (Harbison 1976, 35), and a cache of 12 stone buttons were found at Ballyboley Mountain, Co. Antrim (Wood-Martin 1895, 534). It is unfortunate that no further contextual details are available for these and it remains possible that they were deposited within blanket bog and not within a dry context at all, though it is equally possible that the blanket bog might have formed later.

Three bracers have dryland findspots, yet these were all discovered as unstratified objects within topsoil and it is impossible to detect whether these originally had a different depositional context that they were subsequently disturbed from. The same problem affects arrowheads of which there are many from dryland contexts, but it is difficult to discern if these have been derived from a manmade context such as a spread and brought up to the surface in the course of ploughing or other such agricultural activities.

Overall, it would seem that although a few objects of different types do occur in natural dryland contexts, these seem to represent a small proportion of the total number of each object-type (see Chapter Nine) and thus, deposition in non-watery places appears to have only occurred occasionally. This is partially in keeping with the general patterning evident in the deposition of contemporary metalwork, particularly objects such as copper axes that were recovered as single finds. However, roughly half of all the contexted copper axes that were found within hoards come from dry places such as the rocky crevice containing the Whitespots hoard described above (based on information from Becker 2006).

It may be the case that some of these objects in dryland places were deposited with the intention of retrieving them at a later stage. However, it is problematic to make the assumption that objects from dryland were intended for retrieval while those from wetter contexts were not. In fact many of these objects may have been deposited and then retrieved at intervals over a sustained period of time as part of an ongoing cycle (see Section 7.8).
7.5 DEPOSITION OF BEAKER OBJECTS IN CAVES

Beaker pottery has only been found within two cave/rock shelter sites: Oonaglour Cave, Co Waterford (Dowd 2004, 164), and a natural rock-shelter at Caherguillamore, Co. Limerick (Hunt 1967). At Oonaglour Cave, four sherds of Beaker pottery were recovered from disturbed strata within the cave. At the latter site, a deep deposit contained a mix of artefacts from different periods including two ‘domestic’ Beakers, as well as two Middle Neolithic vessels, a probable Late Bronze Age pot, the unburnt remains of 13 individuals and eight disc beads. Unfortunately, it is not currently possible to discern any secure associations between the Beaker pottery and the burials or the beads. At least one of the skeletons — a crouched inhumation in a pit containing a Globular bowl — dates to the Middle Neolithic. Some sherds from one of the two Beakers were also found with a convex scraper on a shelf in the cliff above the burials.

7.6 COMPARATIVE ANALYSIS OF DEPOSITIONAL PRACTICES IN NATURAL PLACES

Overall, it is clear that deposition of Beaker objects in ‘natural’ places was a feature of the Irish earliest Bronze Age and that these practices appear to have followed particular rules. For example, the remains of only four Beaker vessels have been found in natural locations, all of which came from just two caves. This suggests that Beaker pottery was rarely deposited in natural contexts and was totally excluded from all other natural locations including bogs, rivers and lakes. In contrast, the range and quantity of artefacts from these natural places indicate that these were regarded as appropriate places to deposit aceramic Beaker objects (see Table 7.1).

7.6.1 Wet versus dry

Quite a few objects of different types occur in natural dryland contexts including two copper daggers, six gold discs (60% of 10), at least 11 lunulae and 13 V-perforated buttons. However, the greater range and quantity of Beaker artefacts found in wetlands including four bracers, 25 buttons, 10 daggers, five gold head ornaments and 15 lunulae indicates that — with the notable exception of gold discs — wetlands were preferentially selected for depositional purposes (see Table 7.1–7.3).
7.6.2 Bogs as preferred repositories

Most of the deposition of Beaker objects in watery places seems to have occurred in bogs. Only a small number or range of objects comprising four copper daggers, two early stone battleaxes and gold head ornaments have been retrieved from rivers (see Table 7.2). An even more limited assemblage is represented by finds from lakes, and caves (see above, see Table 7.2 and 3). In contrast, bogs seem to have received deposits of almost every kind of Beaker object except Beaker pottery and gold head ornaments (see Section 9.9). A far greater number of objects including bracers, buttons, daggers and lunulae have been retrieved from bogs than any of the other wet or dry natural places (see Table 7.2). Some objects such as bracers that occurred in bogs have never been found in other natural places. Indeed, bogs represent the context in which most copper daggers, buttons and lunulae have been found in Ireland (see Chapter Nine).

While, it may seem that there was a tendency to deposit some Beaker objects like daggers in rivers, closer examination of this phenomenon suggests that this activity represents a later chronological development that may post-date the main currency of Beakers. No early copper daggers (Type Knocknagur) have been found in rivers at all. In fact bogs represent the only known contexts in which these simple tanged blades occurred, apart from the example from the Whitespots hoards which was found with a Listack dagger. Significantly, the four daggers that have been found in rivers were actually of this slightly later type (Listack), which were tanged and riveted (see Chapter Nine). It has been previously observed that an increase in emphasis on river deposition occurs in the Early Bronze Age c. 2100 BC (Needham 1988, 230 and 241, Becker 2006, 85) and the Listack daggers may well fit into that pattern. No gold objects have been retrieved from rivers apart from the five bands found in a stream-bed that formed a tributary of the River Erne.

7.6.3 Patterning in single finds and hoards

Single finds of Beaker objects were retrieved from bogs, rivers, lakes and natural dry places; however, hoards have only been found in dryland places and bogs (see Table 7.4). Seven of these grouped deposits were retrieved from the former, while nine were discovered in the latter. Hoards of buttons, daggers, discs and lunulae occurred in both settings, though bracer hoards have only been found in bogs. Significantly, these hoards are predominantly one-type only, thereby indicating that it was important to maintain a separation between these various kinds of objects. Only four hoards containing various Beaker object types such as the discs and lunula in the Coggalbeg hoard have been
discovered. Three were found within bogs at Corran, Coggalbeg, and Knocknagur, while just the one dryland example from Whitespots is known (see above). Some objects such as bracers and tanged copper daggers were over-proportionally deposited as single finds, while other objects were predominantly deposited within hoards such as V-perforated buttons and gold discs. The latter of which only been found in pairs.

7.7 IDENTIFYING DEPOSITIONAL PATTERNS

Overall, the deposition of Beaker objects in natural places followed particular rules. People chose particular types of natural places, most often bogs but also dryland contexts such as mountains, to deposit Beaker objects. They also avoided depositing these objects in other natural places such as rivers or lakes. There are recurrent patterns of association and exclusion with specific objects being deposited in a restricted set of locations in a particular manner, e.g. as single finds or in hoards. The uniformity of the patterning present within the record is such that it is difficult to interpret this evidence as the product of random acts. Instead these deposits seem to represent the residue of a coherent set of highly structured depositional practices.

Significantly, the patterning present in the deposition of Beaker objects is mirrored in the treatment of contemporary copper metalwork such as halberds and axes. Like most aceramic Beaker objects, both copper axes and halberds are mainly found within bogs. In hoards, these generally occur within axe-only or halberd-only hoards, though these are mostly recovered as single finds (after Becker 2006; O'Flaherty 1995). Importantly, the low number of these larger items from rivers suggests that the absence of smaller ornaments from rivers is unlikely to be related to the poor recovery circumstances associated with this type of context.

Overall, it would appear that the placement of objects in natural places, particularly bogs, was an important social practice in the earliest Irish Bronze Age. We know from previous chapters that most of these aceramic Beaker objects such as daggers and bracers were rarely if ever deposited in funerary, settlement or other ceremonial contexts. Thus, it seems that people preferred to place these objects in wet environs than to bury them in graves. The deposition of these items in natural places formed part of a system of highly codified practices, whereby objects were being treated in accordance with set of principles that were almost universally adhered to (see Chapters Nine and Ten).
7.8 **Retrievable vs Irretrievable Deposits**

Traditional understandings of deposition in natural places have been criticised for reading the past in excessively utilitarian or economic terms (see Fontijn 2002). Recent studies of deposition have moved beyond the simplistic idea that deposits from wet contexts were permanent and therefore represent ritual activity, while objects from dry places were retrievable and so can be seen as purely functional (see Needham 2001, 287-288; O’Flaherty 1995, 37). There is increasing recognition that not all wetland deposits were intended to be totally irretrievable. In particular, bogs characteristically comprise a unique mixture of both wet and dry conditions and so any objects deposited at the edges of drier areas would have been readily retrievable (Yates and Bradley 2010), particularly to those who were familiar with the local terrain. Rivers and lakes seem to represent the most secure and enduring contexts in the archaeological record from which objects could not be retrieved (Needham 2001, 287–288), though even this would have depended upon a range of factors such as how deep or fast-flowing, a particular part of a specific river may have been.

Very few Beaker objects have been discovered in any rivers or lakes, perhaps suggesting that permanent disposal was not the main intention of contemporary depositional practices. Instead, aceramic Beaker objects were mainly deposited in bogs and these may have been viewed as an appropriate depositional context precisely because of the ways in which they facilitated the recovery of items (see Becker 2008, 13–14). Some Beaker items may have formed active deposits that were accessible and alterable and may even have been added to or taken from, over time (Needham 2007, 280). Some gold artefacts of the period including discs, basket-shaped ornaments and lunulae show evidence for having been rolled and unrolled (Cahill 2005b). Lunulae such as those from Carrickmore, Co. Tyrone, may still have been rolled up when found (ibid). This suggests that these objects had a long use-life and may have been repeatedly hidden within and retrieved from suitable contexts such as bogs (Cahill 2005b; Becker 2008, see Chapter Nine). When necessary, these could have been resurrected for use in particular ceremonies and their recovery may have formed a part of these ritual activities (cf. Dickins 1996, see Chapter Nine).

7.9 **Were Boglands Special Places?**

The range and quantity of Beaker objects from bogs, many of which are rarely found in any other context, suggests that this practice cannot simply be explained by the fact that bogs were good places to hide and retrieve items. People structured the physical landscape in
which they dwelt and imbued it with meanings in accordance with their cosmology (Fontijn 2007, 71; Needham 2007, 284). Just as certain spaces would have been socially defined as suitable locations for settlement or burial activity, so too were other parts of the landscape — mainly bogs — deemed to be apposite locales for the deposition of specific Beaker objects in particular ways (cf. Bradley 2000a: 53; Fontijn 2002). Bogs seem to have held a special significance for people in the Earliest Bronze Age and to have represented a particular category of place within the social landscape of the contemporary population.

Boglands are situated in transitional zones where the wet meets the dry and may have been perceived as symbolic spaces that were on the margins of the cultural landscape or slightly beyond the humanly modified environment (Bradley 2000a; Fontijn 2002, 265; Fontijn 2007, 76). While boglands were probably engaged with routinely as part of everyday life (see O'Sullivan 2007; Stanley 2003), the only evidence for contemporary activity in these wetland zones comprises the deposition of aceramic objects and the construction of brushwood pathways, platforms and trackways such as the well-known example at Corlea 6, Co. Longford (Raftery 1996, 71–7). Beaker-associated ceramics, settlements, megaliths or ceremonial monuments are predominantly found in higher and better-drained places and are almost totally absent from boggier areas such as the central lowlands (see Chapter Nine). Evidence for funerary activity in these wetlands is also absent and no Early Bronze Age bog burials are known from Ireland (O'Floinn 1988). All of this suggests that bogs were not humanly altered in the same way as drier parts of the landscape were at this time (O'Sullivan 2007, 170).

Supernatural properties may have been attributed to natural features occurring at the edge of the humanly constructed world such as hilltops, rivers and bogs (see Bradley 2000a). These places seem to have served as both a barrier and/or a conduit between people and the sacred world and represented appropriate contexts for human dealings with the gods/supernatural (Fontijn 2002, 265). The deposition of objects in these places may represent human interaction with the other world of gods and ancestors (Larsson 2001).

Tracks leading across bogs represent Early Bronze Age routeways which seem to have physically connected different groups and probably acted as conduits for the exchange of some Beaker objects to different parts of Ireland. The deposition of particular kinds of objects at these locations may represent the demarcation of natural gateways along routes (Cowie 2004, 253). Bogs may also have served as natural boundaries between different
social groups and objects may have been deposited along these borders as means of
demarcating the physical boundaries of the community (Cowie 2004, 252–3).

In an Irish context, it has been argued that objects used during Iron Age kingly
inauguration ceremonies were deposited on tribal boundaries as a demonstration of the
king’s sovereignty and as gifts to the gods to ensure the future well-being of the people
(Kelly 2006, 30). It has been suggested that these borders were enduring places that had
also received deposits of Early Bronze Age objects such as lunulae (Ibid, 30). However, it
remains unclear whether the contexts in which Beaker artefacts were deposited were
regarded as tribal boundaries at that time or if later boundaries were simply drawn here
because of the suitability of these locales for that purpose.

All of these hypotheses beg the question of why so few Beaker objects have been found in
rivers compared to bogs, as these would also have represented both boundaries and
routeways. A far closer study of the landscape context of Beaker deposits in natural places
including paleoecological analysis of their original receiving environment is required to
gain a better understanding of how bogs were being used at this time. That is beyond the
remit of this study.

7.11 DEPOSITION IN BOGS AS A STRATEGY FOR LIVING

It does seem certain is that the depositional practices that have been outlined here had a
place-making effect that socialised the natural world by imbuing it with significance. The
deposition of Beaker objects was strategically selective and reflects the ideological values
of the time, as well as the meaningful choices made by people as part of a wider practical
strategy for dealing with the world around them (see Brück 1999a; Needham 1988, 2007,
279; Fontijn 2002). A particular effort seems to have been made to keep many classic
Beaker items in Ireland spatially and contextually separate from each other during their
deposition, as well as from other local or everyday objects.

We have already seen in previous chapters (Four, Five and Six) that stereotypical aceramic
Beaker objects like daggers or bracers, gold discs and buttons have rarely, if ever been
found in funerary or settlement or other ceremonial contexts. Instead, these objects seem
to have been deliberately deposited (either temporarily or permanently) at the edges of
manmade landscapes. It may be the case that at least some of these were being stored in
locations away from normal activities and then retrieved for specific rituals. These
important objects were removed from society, either temporarily or forever in a very
circumscribed fashion. Bogs with their unique mixture of wet and dry land that created
isolated and inaccessible places may have been particularly well suited for facilitating this process of keeping things separate.

The deposition of Beaker objects in natural places can be seen as an exchange with the supernatural in much the same way that these same objects were placed in graves as gifts from the community to the ancestors elsewhere in Europe. This would have enabled people to express their understanding of their links to the supernatural. Such a process of exchange would have served to imbue these objects with meanings, values and identities that were significant to that society (Fontijn 2002). One such outcome from these depositional transactions may have been the communication of particular social values relating to the best ways to conduct one’s existence.

7.12 The Deposition of Beaker Objects in Natural Places in Its European Context

I will now attempt to place the practice of depositing Beaker objects in natural places in Ireland within its wider European context. Elsewhere in Europe, most Beaker objects have been found in funerary contexts (Strahm 1995; Turek 1998; Müller 2001; Czebreszuk 2003; Vander Linden 2004; Salanova 2004, 66; Vander Linden 2006a, 85). As a result, the deposition of Beaker objects in natural places in Europe has not received much attention and has only been examined as part of studies into the deposition of metalwork in a few countries (where it rains a lot!) such as Holland and Scotland (Marc Vander Linden pers. comm.). As of yet, the occurrence of Beaker objects in natural places has never been analysed with the specific aim of gaining a better understanding of Beaker-associated practices and this situation is very much in need of attention. As a result of the lack of information on this topic, this comparative section is necessarily impressionistic. Obviously, a study of such depositional practices in other countries is far beyond the remit of this study, all I could do was skim the existing literature and rely upon informal contacts.

Based on the information available, there is very little evidence that the deposition of Beaker objects in natural places was a feature of social practices in other regions, though there are a few rare examples of it. A hoard comprising copper axes and a palmella point was discovered in the River Loire at Trentemoult (Harrison 1980, 112). In France, a few copper daggers and bracers have discovered as chance finds (Briard and Roussot-Larroque 2002). Palmella points are the only Beaker object that are frequently recovered as single finds from natural places (Laure Salanova pers. comm.) and these are often found
in caves. Unfortunately, exact numbers of such artefacts from each type of context in France are not available, but it is clear that most of these are predominantly found in a mortuary setting.

The deposition of early metalwork in hoards in natural places is well-known in Scotland; this was almost exclusively associated with axes and halberds in the northeast of the country (Cowie 1988, 13–19, Needham 2004, 234-9; Henshall 1968). The Migdale hoard was found in a dryland location within a weathered joint of rock on a hill contained ornaments such as V-perforated jet buttons, basket-shaped earrings, and tubular beads that mainly occur in a funerary context in Britain (Cowie 1988, 19; 2004, 251). However, this deposit is highly unusual in a British context.

In the Netherlands, most early copper and bronze artefacts were deliberately deposited in rivers and swamps and only a small proportion occur in the few known Dutch ‘rich graves’ (Butler and Fokkens 2005, 384). Other contemporary objects were also deposited in natural places such as a wooden bow dating from 2500 BC which was found in peat near Onstwedde (Butler and Fokkens 2005, 390). Flint daggers were items of exchange that form part of the Beaker complex and occur in graves in Holland, Denmark and Sweden (Sarauw 2008, Butler and Fokkens 2005, 386). However, some of these have been found in hoards in both dry and wet natural places including bogs near to the flint quarry from which they had been sourced in Denmark (Sarauw 2008). Perhaps the best parallel for the practice of depositing Beaker objects in natural places is provided by the Danish evidence. In Denmark, early Beaker gold sheet ornaments such as lunulae and copper flat axes were predominantly deposited in dry natural places, though some of the gold items have been found in bogs (Vandkilde 2005a, 25-7).

So then, it seems that Beaker objects were rarely deposited in natural places and there is no evidence for any practices that directly match those from an Irish context. The range and number of these ornaments being placed in bogs in Ireland and the highly structured nature of this sets Beaker-associated depositional practices in Ireland apart. These do not seem to have been introduced to Ireland in tandem with Beaker objects and instead seems to represent an indigenous practice (see Chapter Ten).

Overall, it seems that supra-regional aceramic beaker objects were mainly deposited in bogs in Ireland and that it was important to people to keep these objects separate from each other and from their settlements as well as their funerary monuments. The reasons for this behaviour, the meanings of it and the ideological considerations that may lie behind these practices are considered in Chapters Nine and Ten.
THE DATING OF THE BEAKER PHENOMENON IN IRELAND
CHAPTER EIGHT - THE DATING OF THE BEAKER PHENOMENON IN IRELAND

8.1 INTRODUCTION

While there is a general consensus that Beaker pottery was first made in Ireland c. 2450 BC and that this continued to be used for a period of roughly 500 years until c. 2000 BC (Case 1995a; 2004b; Brindley 2004, 334-5; 2007, 301), the exact dating of the Irish Beaker complex remains poorly understood (Brindley 2004, 334; 2007, 250). There has been no concerted attempt to use radiocarbon dating to refine the chronology of the Beaker phenomenon in Ireland. This is in stark contrast to Britain, where extensive programmes of radiocarbon dating, as well as the analysis of these dates and their associations have been conducted (e.g. Kinnes et al. 1991; Needham 2005; Sheridan 2007a; Bayliss et al. 2007b; Parker Pearson et al. 2007).

In this chapter, I examine the radiocarbon dates that have been obtained from materials in contextual association with Beaker pottery to present an evidence-based interpretation of the chronology of the Beaker phenomenon in Ireland and to provide a chronological platform for the findings of this thesis. Only determinations associated with Beaker pottery are considered because there are so few reliable dates for other Beaker objects. While this analysis is primarily focused on the dating of this complex as a whole, I also make some observations about the dating and duration of the particular forms of depositional practices that have been discussed in the other chapters. Although I propose date ranges for broadly earlier and later forms of Beaker pottery, I do not intend to provide a discussion or analysis of the dating of specific types of Irish Beaker pottery. This would require detailed examination of the form and decoration of these ceramics and that is not possible within the confines of this thesis.

8.2 PROBLEMS WITH DATING BEAKER DEPOSITS IN IRELAND

The Irish manifestation of the Beaker phenomenon is not particularly amenable to accurate radiocarbon dating. In Britain, complete vessels regularly occur in closed short-life settings such as graves (Clarke 1970; Needham 2005) that are suitable for highly accurate radiocarbon dating. However, in Ireland, Beaker pottery generally occurs as sherds in non-grave assemblages within pits or spreads containing materials derived from
an accumulation of occupational debris (see Chapter Three and Seven). Many of these contexts do not seem to represent secure well-defined short-life contexts. The taphonomy of the dateable materials found in these features is seldom clear-cut and it is often impossible to conclusively demonstrate that the contents of these pits and spreads were freshly generated. Thus, it is difficult to achieve certainty regarding the strength of association between the dateable materials and the pottery, even though they have been found together.

Although Beaker pottery has been found with burials in wedge tombs, these represent open structures in which deposits may have accumulated over centuries. These were also subject to extensive periods of re-use during which their contents may have been disturbed (Brindley and Lanting 1991; O’Brien 1999). Consequentially, the degree of association between artefacts and human remains from these tombs is equivocal (see Chapter Five). Overall, circumstances currently militate against any precise understanding of the chronology of the Beaker-associated cultural horizon in Ireland. The situation is exacerbated by the existence of several plateaux in the relevant parts of the calibration curve around 4000 BP and 3700 BP. This means that calibrated radiocarbon dates for such determinations display long ranges of probability and tend to bunch together, thereby making it difficult to detect short-term chronological changes (see Brindley 1995, 4; 1999a, 30; Needham 1996, 124; Müller/van Willigen 2004, fig 2; Gibson 1986, 31).

### 8.3 Methodology and Date Selection Criteria

Despite all the aforementioned problems, our understanding of the duration of the Beaker phenomenon in Ireland can be refined. To do this, I collated a total of 78 radiocarbon determinations from materials that were associated with Beaker pottery regardless of their varying levels of suitability. To objectively and rigorously differentiate the dates of higher quality from those that were problematic, I adopted the selection criteria used by Alison Sheridan (2007a) in her critical review of Scottish Beaker-associated radiocarbon dates. Decisions about the overall trustworthiness of each date were made based upon the quality of the dated sample and the strength of association between the sample and the pottery (Waterbolk 1971). As Anna Brindley (2007, 23) observed: "the reliability of a radiocarbon date depends not only on the quality of the sample material and on the chemical pre-treatment in the laboratory but also on the degree of association of the sample to the archaeological event/material for which a 14C age is being processed".
In the current study, the sample quality was determined to be excellent if the dated material had a short own-life (e.g. hazelnuts, cereals, bone or short lived charcoal such as hazel, alder, willow, pomoideae), was a single-entity sample that had been determined since the mid-1980s, displayed a standard deviation less than ±100 and was not noticeably contaminated (see Ashmore 1999; McSparron 2008; Sheridan 2007a, 93-4). Samples displaying an insufficiently-close association with the Beaker pottery that it was supposed to date were labelled as ‘insecure’. Where there is a reasonably good chance that the pottery and the dated material were genuinely contemporary, these were determined to be ‘reasonable’. Samples were rarely unequivocally closely associated with Beaker pottery and assessing the strength of association proved difficult.

Most of the radiocarbon dates in this study come from materials within pits, even though it has been shown that most of these pits were dug and then immediately filled, at least some of the artefacts within these deposits may have been derived from another context (see Chapter Four). As a result, the degree of association between the dated material and the pottery from pits is questionable. Unfortunately, pit contents represent the closest approximation to short-term closed Beaker deposits in Ireland and are a key context for the explication of the development of the Beaker phenomenon in Ireland. Ultimately, any assessment of the strength of association between the sample and the object it was found with or any appraisal of the mechanisms by which the sample came to be in its context are very much a matter of interpretation. My approach to this has been to work on the principle that if the sample and the Beaker pottery are found in the same fill of an undisturbed pit and if no obviously earlier or later materials have been found in the pit, then it can be assumed that this represents a short term deposit whose contents can regarded as contemporaneous and therefore displays a reasonably good strength of association.

After each radiocarbon determination had been assessed in terms of sample quality and strength of association, the dates were then qualitatively grouped into three categories labelled ‘Highest quality dates’, ‘Medium quality dates’ and ‘Low quality dates’ in accordance with their compliance with these selection criteria. The ‘Highest quality dates’ category consists of all high quality single-entity samples with short own-life that are reasonably closely associated with the dated material. Only 25 dates from 20 different locations met these requirements: 16 of these are from pits, two are from above-surface deposits, one is from a burnt mound, another is from a posthole and five are from human bone recovered from wedge tombs. A total of 13 were obtained from short-life charcoal, five were derived from human bone, another four from animal bone, two from hazelnut
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shells and one from carbonised residue adhering to the inside of a Beaker (Tables 8.1 and 8.3).

The 'Medium quality dates' category comprises a total of 36 radiocarbon dates from Beaker-associated deposits on 20 sites that conform to the medium quality criteria. These meet many of the same standards as the high quality dates; however, there are possible doubts about either the strength of association or the own-age of these samples. These samples have been sourced from a range of different contexts: 14 dates are from pits, eight come from wedge tombs, seven are from spreads, two are from postholes, and one each comes from a burnt mound deposit, a cist and a stakehole. A total of 22 of these radiocarbon determinations were obtained from charcoal, nine were derived from human bone and five from animal bone (see Table 8.4).

Both selections of dates come from features that are highly characteristic of the wider body of evidence for Beaker pottery deposition in Ireland and can be seen as genuinely representative of the Irish Beaker phenomenon. All of these determinations have been calculated using the calibration curve of Reimer et al. (2004) and the computer program OxCal (v4.1.7) (Bronk Ramsey 1995; 1998; 2001, 2009). The calibrated date ranges cited in the text are presented at two sigma (95% confidence levels).

The dates belonging to both the highest and medium quality datasets meet the minimum criteria for these to be considered as reliable radiocarbon determinations. For the purposes of analysis, both of these will be examined together to create as large a dataset as possible; however, the highest quality dates will also be considered separately and results from the examination of both will be compared. Using OxCal, I produced a graph showing the calibrated ranges of each of the highest quality Beaker-associated dates and another similar graph for the full set of medium and high quality Beaker dates. Examination of these calibrated dates and their display of these in graphs suggests that Beaker pottery first began to be used in Ireland at some time after 2800 BC and that this ceased before 1800 BC (see Tables 8.3 and 8.4, see Charts 8.1 and 8.2). However, this finding is not particularly informative, nor is it wholly credible.

8.4 Bayesian Modelling, its Advantages and Limitations

An increasing awareness of the informal and subjective nature of 'eyeballing' sets of dates has corresponded with a growing appreciation of the ability of Bayesian statistical analysis to achieve higher precision chronologies (Bayliss et al. 2007b, 8-9). As mentioned above,
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the problematic shape of the calibration curve for the latter half of the third millennium BC results in calibrated radiocarbon dates with high probability ranges. As a consequence, these dates falsely indicate that the archaeological event to which they are related started earlier, ended later and lasted longer than they actually did (Bayliss et al. 2007b, 5). Bayesian analysis takes account of the statistical scatter caused by the error margins inherent in radiocarbon dates in a rigorous manner that utilises an explicit statistical methodology (ibid).

For this reason, I have conducted Bayesian analysis on both sets of Beaker-associated radiocarbon dates in OxCal v4.1.7 to propose a more refined date range for the duration of Beaker pottery in Ireland. Based on the belief that all these determinations randomly reflect the complete distribution of dates from a single coherent phase of activity in Irish prehistory, the mathematical distribution of these dates in relation to the calibration curve was analysed using the 'phase' tool in OxCal to constrain their probability ranges. From these results, OxCal then offered its best estimates of the true span of activity represented by the dates that I entered into the model (Bronk Ramsey 1995; 1998; 2001, 2009). By using other tools like 'span' and 'duration', it was possible to query how long this phase may have lasted and when it began. These modelled dates will be referred to in italics to distinguish these from unmodelled calibrated radiocarbon dates.

Alison Sheridan (2007a, 96-8; 2008a, 62) has succinctly highlighted the potential pitfalls involved in the application of Bayesian statistical analysis. In particular, she has criticized the fact that the results of Bayesian modelling is largely determined by the subjective assumptions that are made about sets of dates, especially those relating to the uncertainties represented by the start and end of a given phenomenon (Sheridan 2007a, 98). Such postulations are quite problematic because of the many known and unknown archaeological uncertainties about the duration of any cultural trend. With this in mind, it is important to state that the results of this analysis are only interpretative estimates, which are liable to change as more dates are obtained and added to the model (see Bayliss et al. 2007b, 9). Notwithstanding this note of caution, it can be assumed — based upon what we currently know — that the date ranges from the modelling of the high quality dates are indeed representative of the duration of use of Beaker pottery in Ireland.
8.6 BAYESIAN MODELLING: THE DATING OF THE IRISH BEAKER PHENOMENON

Bayesian modelling of the highest quality dataset — based upon the assumption that the available sample is representative — indicates that we can have a 95.4% confidence in the suggestion that the deposition of Beaker pottery in Ireland broadly began between 2604–2473 BC and ceased between 2196–2022 BC (see Charts 8.3, 8.5 and 8.7). A very similar estimate is provided by modelling both the higher and medium quality dates together: this analysis proposes that the use of Beaker pottery generally started between 2595–2496 BC and ended between 2183–2047 BC (see Charts 8.4, 8.6 and 8.8). Use of the query 'First' and 'Last' tools in OxCal for the highest quality dataset estimates that the very earliest date for the use of Beaker pottery is 2580–2468 BC and the very latest date is 2204–2052 BC.

The start and end dates predicted by Bayesian modelling for the currency of Beaker pottery in Ireland is strongly corroborated by the archaeological evidence. The earliest high quality Beaker-associated dates in Ireland are represented by radiocarbon determinations from Faughart Lower (2850–2460 BC: Beta 217946; 4030±50 BP and 2860–2470 BC: Beta 217947; 4070±50 BP); Dunboyne 3 (2570–2340 BC: Beta-241273; 3960±40 BP); Mell (2470–2290 BC: WK-17457; 3906±33 BP); and Curraheen 1 (2580–2200 BC: Beta-171422; 3920±70 BP). Each of these was contextually associated with sherds from continental-style Beakers that were decorated with All-Over-Ornament or All-Over-Cord (see Fig. 8.1). These form part of a small group of vessels which display the earliest stylistic elements known to occur on Beaker pottery in Ireland and are thought to represent the first components of this tradition to appear on this island (see Section 9.2.1; Case 1993, 248; Brindley 2004, 334; Grogan and Roche 2010, 36). On the continent, this style of All-Over-Ornament pottery is considered to have been in use c. 2450 BC (Brindley 2007, 300) and these form part of a limited group of Beakers appearing in Britain at an early date during the 25th century BC (Sheridan 2007a, 96 and 99; Needham 2005, 179; Clarke 1970; Lanting and Van der Waals 1972). This certainly accords with the results of the Bayesian analysis which suggests that these pots were being deposited in Ireland by 2473 BC.

The youngest high or medium quality Beaker-associated radiocarbon dates in Ireland are almost certainly represented by the determinations from Ballybriest (2139–1830 BC: GrA-13273; 3630±50 BP) and Caherabbey Upper (2135–1914 BC: UB-7237; 3642±38 BP). Bayesian analysis reported that these determinations had a poor level of agreement (e.g. below 60%) with the rest of the modelled Beaker dates (see Charts 8.3 and 8.4, Tables 8.3 and 8.4), thereby suggesting that they may represent statistical outliers and that they should not be modelled as belonging to the same phase as all the other Beaker-associated dates. However, given that the two determinations in question represent the very tail end
of the Beaker phenomenon in Ireland (see below), it is to be expected that they would be inconsistent with the rest of the model and their inclusion is entirely justified by the archaeological evidence.

Both of these dates were contextually associated with stylistically later (Case’s (1993) Style 3 and (2004b) Group B2) Beakers (Hurl 2001; McQuade et al. 2009; Grogan and Roche 2010; 33, see Section 9.2.1). In Ireland, pottery of this kind is currently considered to date from 2000–1950 BC (Brindley 2004, 334; 2007, 250 and 300; Case 1995a, 23, 2004b; 375). In a British context, ceramics of this type have been variously categorised as Northern and Southern Beakers (Clarke 1970); Group B Beakers (Case 1995a; 2004b) as well as Long-necked, Short-Necked and Weak-Carinated Beakers (Needham 2005), where radiocarbon dating has shown that these appeared after 2250 BC (Needham 2005, 188, 191, 195; Sheridan 2007a, 99; Wilkin 2009; Neil Wilkin pers. comm.; Curtis and Wilkin forthcoming). All of this strongly corroborates the Bayesian modelled estimate that the deposition of Beakers in Ireland had ceased by the latter half of the 21st century BC. By implication, this suggests that late style Beakers appeared and disappeared earlier in an Irish context than previously thought: these were probably only in use for a short duration between 2200 and 2050 BC.

Utilising the query ‘Sum’ in OxCal provides summed probability ranges representing an estimate for the frequency distribution of the dated events in a given phase (see Bayliss et al. 2007b, 11). In this case, the generation of summed probability distributions for both high and medium quality radiocarbon determinations for Beakers in Ireland offers a graphic display of the spread of these dates. A visual examination of these simple summed probability distributions suggests that Beakers appeared in Ireland quite suddenly c. 2450 BC and gradually disappeared c. 2050 BC (see Charts 8.9 and 8.10). Most of the dates (19 out of 29 from the ‘Best dates’ dataset) fall between 2400 and 2200 BC and it is clear that this period represents the main floruit of Beaker pottery in Ireland. This is entirely consistent with the fact that only a small number of continental-styled or late-styled Beakers have been found on this island (see Section 9.2.1); the majority of Irish Beaker pottery displays a typical Bell-Beaker S-shaped profile, but with simple formal horizontally arranged zonal ornamentation (see below and above; also see Case 1993, 248; Grogan and Roche 2010, 36; Brindley 2004, 334; Grogan and Roche 2010, 36). Pottery of this kind can be classified as belonging to Clarke’s European Bell Beaker, or his Wessex/Middle Rhine types (1970); Stages 2 and 3 in Lanting and van der Waals (1972) scheme for the development of British Beakers (Brindley 2004, 334); and Case’s (1993, 1995) Style 2 which are considered to date from c. 2450–2200 BC.
The Irish production of Grooved Ware seems to have ceased quite suddenly c. 2450 BC as it was quickly replaced by Beaker pottery (Carlin and Brück forthcoming; Carlin et al. forthcoming). Although there is nothing to suggest that Grooved Ware continued to be used as late as it is claimed in southern Britain (Garwood 1999, Needham 2005), there is much evidence for continuity over the course of this transition in Ireland (see Carlin and Brück forthcoming). Late Neolithic practices such as the deposition of pottery in pits or in the postholes of abandoned timber circles were sustained, but with Beakers fulfilling the roles previously occupied by Grooved Ware (see Chapters Six and Ten). Despite the similarities in terms of the types of contexts in which these two ceramics occur, Grooved Ware and Beaker pottery have only occurred on the same site on 16 occasions (representing 16% of all Grooved Ware and 8% of all Beaker sites in Ireland) and have only been found in direct contextual association on three of these. Overall, there seems to be very little archaeological evidence for a sustained overlap in the duration of these two traditions. This argues in favour of the rapid development of Beakers in Ireland suggested by the Bayesian analysis.

Utilising the query ‘Span’ in OxCal on both the high and medium quality datasets provides a best estimate for the span of activity associated with the deposition of Beaker pottery with 95.4% confidence of 282–492 years for the former and 327–502 years for the latter (see Charts 8.11 and 8.12). This corresponds with Anna Brindley’s (2007, 328 and 250) suggestion that Beaker pottery was current for approximately 300 years before Bowls of the Food Vessel tradition began to be made c. 2160 BC (see Chapter Five). As stated above, the summed probability distributions indicate that the main currency of Beaker pottery in Ireland occurred from 2400–2200 BC and that the use of this ceramic steadily declined from 2200 until it disappeared completely c. 2050 BC. This is certainly borne out by the strong indications for an overlap between the creation of Irish Food Vessels and a small number of late style Beakers which post-date the stereotypical form of this pottery in Ireland.

The typo-chronological evidence suggests that Beakers continued to be used for a short duration after the advent of Bowls and were still present, at least in the minds of those making pottery, when Vases of the Food Vessel tradition appeared c. 2020 BC (see Brindley 2007). This is indicated by the overlap in design traits shared between Beakers and Food Vessels such as the inturned necks of Bowls, the extended necks of Vases, broad zonal geometric patterns, especially filled chevrons, lozenges, cross-hatching and dense fingernail impressions (Case 2004b, 375; Gibson 2007). Indeed, Brindley (2007, 251) observes that the use of cross-hatching as a decorative fill on both late Beakers and late
Irish Bowls indicates that Beaker pottery was still being made once in a while between 2000 and 1900 BC. In a Scottish context, there is much evidence for hybridisation between Beakers and Food Vessels around the end of the third millennium and for some time afterwards (Sheridan 2007a, 99).

Beakers and Food Vessels have been found together on at least 30 sites. Significantly, Beakers and Bowls have been found in close association within the chambers of wedge tombs including Largantea, Co. Derry (Herring 1938), Cashelbane, Co. Tyrone (Davies and Mullin 1940, 151), and Kilhoyle, Co. Derry (Herring and May 1937). This is not to suggest that these were deposited contemporaneously, but rather that only a small amount of time elapsed between the sequential deposition of these different ceramics. In some of these tombs such as Aughrim, Co. Cavan (Channing 1993), these two ceramics have been found together in association with human bone in primary contexts, sealed beneath layers associated with the secondary re-use of the tombs (Brindley 2007, 51). This suggests that there was a short period during which the use of these ceramic traditions overlapped. Ultimately, the modelling conducted here indicates that by 2000 BC at the very latest, Beaker pottery ceased to exist as a recognisable entity that was distinct from Food Vessels - the insular ceramic that completely replaced it in funerary, settlement and ceremonial contexts. The overall currency for Irish Beaker pottery seems to span from the 25th century to c. 2100/2050BC.

**8.7 DATING BEAKER-ASSOCIATED DEPOSITIONAL PRACTICES.**

Ideally any examination of Beaker-associated radiocarbon dates in Ireland would encompass an examination of the chronology of the various forms of depositional practices that formed part of the Irish Beaker phenomenon. Unfortunately, due to the small number of suitable radiocarbon dates from each of the various contexts and the nature of the Beaker-associated depositional record, particularly the lack of secure well-defined short-life contexts containing datable materials that were genuinely associated with Beaker artefacts, it is very difficult to chronologise the various forms of Beaker depositional practices (see Section 8.2). For example, most of the Beaker finds from earlier Neolithic megaliths have been discovered in poorly dated contexts that were excavated prior to 1950 (see Chapters Two and Five). These artefacts have mainly been found in disturbed deposits that include materials ranging in date from the Early Neolithic to the Late Bronze Age, and so it is usually impossible to identify reliable associations between dateable materials and particular finds.
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Many of the same problems affect the dating of Beaker deposits in cists, most of which were discovered during older excavations and are exceptionally poorly dated (see Section 5.6). Furthermore, with the exception of Beaker pottery, most stereotypical Beaker objects were deposited in natural places such as bogs without any associated dateable materials (see Chapter Seven) and so the dating of this practice is entirely dependent upon typological comparisons with similar objects from dated contexts in Britain or elsewhere. While these typological approaches inform our understanding of the date-range of particular objects, they are less suitable for refining our understanding of the duration of Beaker-associated deposition in natural places. Despite all these problems, it is still possible to make some broad-scale observations about the duration of various Beaker-associated depositional practices.

8.7.1 The duration of Beaker deposition in pits

Most of the radiocarbon determinations in this study come from pit contexts, including the earliest and some of the latest dates associated with Beaker pottery in Ireland (see Tables 8.3 and 8.4). They also contain various earlier and later styles of Beaker. Based on this, it seems that Beaker-pit deposition seems to have practiced from the very start of the Beaker phenomenon in Ireland, c. 2460 BC and to have continued until c. 2100 BC. However, most of the radiocarbon determinations seem to pre-date 2200 BC, thereby suggesting that this practice was at its peak between the years 2450 and 2200 BC, after which the deposition of Beakers in pits began to wane. This is supported by the very small amount of stylistically later Beaker pottery dating from 2200 to 2050 BC from pit contexts (see Section 8.6).

8.7.2 The duration of Beaker deposition in spreads

Only six radiocarbon determinations meet the minimum standards necessary for inclusion in this thesis, all of which pre-date 2200 BC. Due the small size of this dataset and the formation processes associated with surface deposits such as spreads and middens which generally contain deposits of derived materials that were aggregated at various different stages and contain assemblages of unknown time-span (see Section 8.2), it is imprudent to attempt to propose a fine-grained start or end-date for this practice. However, most of the Beaker pottery recovered from secure chronological contexts within spreads and middens is of stylistically earlier variety including some continental-type and Irish-style vessels.
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(see above, see Section 9.2.1) and this suggests that the practice of collecting occupational debris in surface deposits may have been en vogue from an early stage. The paucity of late-style Beakers from these features suggests that this practice declined c. 2200 BC.

8.7.3 The duration of Beaker deposition in wedge tombs

Bayesian Modelling has been used to suggest that the construction of wedge tombs began abruptly c. 2450 BC (Schulting et al. 2008, see Section 5.2.4). The available radiocarbon dates from wedge tombs suggest that the deposition of Beaker pottery in association with human remains inside these megaliths began at this time and continued until c. 2050 BC (see Brindley and Lanting 1991, 25; also see Table 5.4 and Charts 5.1 and 5.2). This is supported by the presence of stylistically early Beakers dating broadly from c. 2450–2200 BC (e.g. Clarke’s E and W/MR, Case’s Group A) at Moytirra, Largantea and Cashelbane and later styles (e.g. Case 2004b Group B2, Clarke’s 1970 N and S groups) of Beaker pottery dating from 2200 and 2050 BC at Ballyedmonduff, Largantea, Loughash Giants Grave, Ballybriest and Carriglong (see Table 5.5). While both Beaker-associated inhumations and cremations seem to have been deposited broadly contemporaneously, it was observed in Chapter Five that later forms of Beakers have only been found in tombs containing cremations. This suggests that while Beaker-associated cremations continued to be buried in wedge tombs until c. 2050 BC, the placement of unburnt burials with Beaker pottery in these monuments ceased c. 2150 BC, at which stage, these began to be buried in small rectangular cist and pit graves and were accompanied by Irish Bowls, rather than Beakers.

8.7.4 The duration of Beaker deposition in timber circles.

Beaker pottery has only been found in definite association with a timber circle on two sites at Paulstown, Co. Kilkenny (Elliot 2009), and Armalughey, Co. Tyrone (Dingwall 2010). In both cases, the Beakers were found in secondary contexts within the postholes of timber circles that had been constructed in the Late Neolithic (see Section 6.2). Just three radiocarbon determinations of suitable standard have been obtained from Beaker-associated deposits within these monuments. The two dates from Paulstown of 2617–2471 BC (UBA 15430: 4017±28 BP) and 2573–2467 BC (UBA 15437: 3989±27 BP both suggest that Beaker materials were placed in timber circles at an early stage in the development of the Beaker complex in Ireland; however, the date of 2290–2030 BC (SUERC-20768: 3750±30 BP) from Armalughey suggests that this form of deposition was
also practised at a later stage. Ultimately, very few conclusions can be drawn from such a small dataset, though the absence of late-styled Beakers from any definite or probable timber circle in Ireland may suggest that the deposition of Beakers in these monuments had ceased by 2200 BC.

8.8 THE DATING OF THE BEAKER PHENOMENON IN IRELAND COMPARED TO BRITAIN

The Beaker phenomenon in Ireland has not been the subject of intensive targeted dating programmes such as those conducted in Britain and as a consequence, there has been reliance upon the British sequencing to understand the chronology of events in Ireland. However, the results of the analysis conducted here indicate a number of notable differences between the dating of Beaker pottery in Ireland and Britain.

In his widely accepted scheme, Stuart Needham (2005) proposed that the development of the Beaker phenomenon in Britain can be understood as a three-step process. The first stage lasted from 2500/2400–2250 BC during which time Grooved Ware was still in use but Beakers were quite uncommon and greatly resembled their continental counterparts. This was followed by a pinnacle phase (c. 2250 and c. 1950 BC), which Needham (2005, 171, 205) refers to as a ‘fission horizon’. At this time, continental-style pots were adapted to create new regional forms of Beaker that became widely used throughout Britain. In conjunction with this transformation, the range of Beaker-associated artefacts also changed, while Beaker burials become much more frequent and diverse. The last phase dating from 1950–1750 BC consisted of more radical changes to the form of Beaker pottery and its eventual decline in use.

There are a number of key differences between the Irish evidence and Needham’s model. In Ireland, Grooved Ware pottery rapidly disappeared and the insular hybridisation of Beaker pottery seems to have occurred very soon after the first appearance of continental style pots, before 2400 BC (see Case 1993, 265; Grogan and Roche 2010, 36). While it is difficult to provide hard evidence for this, very few of these early continental Beakers are known in Ireland, but almost all of them have been found in contextual association with Irish-styled Beakers. Some of the deposits containing both types of Beaker have produced some of the earliest Beaker-associated radiocarbon dates on this island. For example, the early radiocarbon date of 2850–2460 BC (Beta 217946; 4030±50 BP) came from a pit deposit at Faughart 6, Co. Louth (Hayes 2007), which contained sherds of AOC Beaker, as well as sherds from pots that are entirely typical of well-known Irish examples from
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Newgrange and Knowth, Co. Meath, and Lough Gur, Co. Limerick (Roche and Grogan 2006). Similarly, the pit deposit at Dunboyne 3, Co. Meath (O’Hara 2008), which produced a radiocarbon date of 2570–2340 BC (Beta-241273; 3960±40 BP) contained sherds from an AOO Beaker and five other classically Irish-styled Beakers (Grogan and Roche 2007b). Notwithstanding the possibility that the assemblages in these pits are of unknown timespan and that the strength of association between these various pot-types may be open to question, (see above), it does seem that continental style Beakers were rapidly replaced by other forms of Beaker pottery.

Here in Ireland, the floruit of Beaker use dates from 2400–2200 BC, whereas very few acceptable British Beaker-associated radiocarbon determinations pre-date 2200 BC (Needham 2005, 171; Sheridan 2007a, 99). Instead, the currency of Beakers in Britain reaches its pinnacle just after 2200 BC, at the same time as Food Vessel usage began in Ireland. Irish Beakers were in decline by this time and the Irish Bowl had just been created to fulfil a very similar role in burial practices as the recently hybridised British Beakers (see Chapter Five). Ultimately Beakers in Ireland completely disappeared c. 2000 BC, while these apparently continued to be produced until c. 1800 BC in Britain.

While there are clear differences in the chronology of this phenomenon, none of this actually indicates that Beakers were brought to Ireland any sooner or spread throughout this island earlier than in Britain. When comparing Beaker-associated radiocarbon dates from these islands, it is important to remember that these have predominantly been obtained from very different types of context and that this has strongly influenced the patterning present in the dates. British Beaker dates have almost exclusively been obtained from mortuary contexts (Bayliss et al. 2007a, 50), yet there are very few Beaker burials known to date from between 2500 and 2250 BC (Needham 2005, 171 and 207). It remains possible that Beaker ceramics were used by at least a few generations in Britain before the adoption of the single inhumation rite (see Parker Pearson et al. 2007 634-5). This implies that the paucity of early Beaker burials in Ireland might not be that different from Britain after all. Another corollary of this is that the evidence for Beaker-associated activity between 2500-2250 BC in Britain might appear much greater than currently thought if the dates for British Beakers from contexts such as pits and spreads were given more attention.
CHAPTER NINE – THE CONTEXT AND DEPOSITION OF BEAKER OBJECTS IN IRELAND

9.1 INTRODUCTION

The previous chapters have examined the deposition of a wide variety of Beaker objects in terms of the manner of their occurrence within each of a number of contextual categories, including settlement (Chapters Three and Four), funerary and ceremonial settings (Chapters Five and Six), as well as natural places (Chapter Seven). This chapter offers an alternative perspective on the depositional treatment of Beaker objects by characterising each of these artefact-types in terms of the complete range of contexts in which they occur. This also includes an examination of their spatial distributions. Such an approach reveals additional information about the highly selective and codified deposition of each type of Beaker object in Ireland.

The objects that feature in this chapter include Beaker pottery, polypod bowls V-perforated buttons, bracers, tanged copper daggers, lunulae, gold discs, bands and basket-shaped earrings, as well as stone battle axes (see Chapter One). A distinction is maintained between hoards and multiple finds: the latter category is considered to comprise a set of objects which have been found together but (unlike most hoards) may not have been the product of a single depositional act. Where it is informative to our understanding of the treatment and function of Beaker objects, subjective observations on use-wear and references to relevant work by other scholars are made (see Chapter One).

9.2 BEAKER POTTERY: CONTEXT AND DEPOSITION

In the course of this study, synthesis of all the available information has revealed that at least 21772 sherds derived from a minimum of 1245 Beaker pots have been recovered from a total of 219 sites in Ireland. This excludes the 25 sites where ceramics have been found in a residual or uncontexted position.
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In Ireland, Beaker pottery generally occurs in a highly fragmentary condition which impedes the identification of their original form or style (Brindley 2004, 335; Needham 2005, 179). The duration of use represented by many assemblages is unknown and therefore it has proved difficult to devise typo-chronological schemes for the development of Beaker pottery in Ireland (Brindley 2007, 250). However, some broad observations can be made.

Only a small number of continental-styled Beakers with classic All-Over-Ornament or All-Over-Cord are known from Ireland and these are thought to represent the earliest Beaker pottery to have been introduced to this island (Case 1993, 248; Brindley 2004, 334; Grogan and Roche 2010, 36). Instead, most of the Beakers found here exhibit a typical Bell-Beaker S-shaped profile, with have generally rounded or pointed rims, and simple formal horizontally arranged zonal ornamentation (see Fig. 9.1; Case 1993, 248; Grogan and Roche 2010, 36; Brindley 2004, 334; Grogan and Roche 2010, 36). These combine elements of the early Atlantic tradition as well as more north-western European and British influences to form a hybridised style that seems to have developed at an apparently early stage (Case 1993, 265; 1995a, 14 and 23; Grogan and Roche 2010; Brindley 2004).

Humphrey Case (2004b, 375) observed that early Irish Beaker pottery displays a wider and richer set of international contacts than Beakers from Britain. However, it is important to note that the cross-pollination of western Maritime Beaker and eastern Corded Ware traditions seems to have occurred (most probably in present-day northern France) before any or many aspects of this phenomenon were introduced to Ireland or Britain (Salanova 2002; Case 2004b; Needham 2005, 182; Brodie 1998, 50).

The most common form of Beaker in Ireland can be classified as belonging to Clarke’s European Bell Beaker, or his Wessex/Middle Rhine types (1970); Stages 2 and 3 in Lanting and van der Waals (1972) scheme for the development of British Beakers (Brindley 2004, 334) and Case’s (1993, 1995a) Style 2 which are considered to date from c. 2450–2200 BC. Plain vessels without decoration but occasionally with cordons are also quite widespread in Ireland (Case 1993, 251; Grogan and Roche 2010, 36).

Late-styled Beakers (Case’s (1993) Style 3 and (2001) Group B2) that generally comprise inturned rims, wasited profiles and vertically arranged motifs, particularly triangles and cross-hatched lozenges are seldom found in Ireland (Brindley 2004, 334; Grogan and...
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Roche 2010; 33). The examples that are known are highly comparable to Long-necked, Short-Necked and Weak-Carinated Beakers in Britain (Needham 2005).

Irish Beakers range in size from the smallest example at Ballyglass which had a height of 9.2cm (Roche forthcoming) to much larger examples such as that at Parknahown, Co. Laois (external rim diameter: 29cm and vessel height: 29cm) (O’Neill 2007) and Ballybriest, Co. Derry (external rim diameter: 36cm and vessel height: 50cm) (Hurl 2001). Although most of these pots are thin-walled, thicker-walled Beakers are also common and generally distinguished from the former ‘fine’ pots by labelling the coarser vessels as ‘domestic’. However, these often occur on the same site and occasionally within the same context and both belong to a single ceramic repertoire comprising a spectrum of different sized Beaker pots that served a range of different purposes (see Grogan and Roche 2010, 36). Large bucket-shaped containers with cordons below the rim — often referred to (in an Irish context) as ‘Rockbarton pots’ which may have been storage vessels (Case 1961; Grogan and Roche 2010) — represent a form of ‘domestic’ Beaker that is particularly common in Ireland.

Petrological examinations have been conducted on Beaker pots from a range of sites including Newgrange (Cleary 1980), Monknewtown and Knowth, Co. Meath (J. Brindley, 1984), Dalkey Island, Co. Dublin (ibid), Ross Island; Co. Kerry (Ixer 2004), Lough Gur, Co. Limerick (J. Brindley, 1984, Cleary 1984) and Ballincollig, Co. Cork (Mandal 2006). All of which have revealed that these pots were made using locally available materials.

9.2.2 The context of Beaker pottery

Settlements represent the most common type of site (79% of 219) to produce this pottery and so it is unsurprising that the majority of Beakers as represented by 14541 sherds (67% of 21772) from at least 1099 vessels (88% of 1245) have been discovered within this context (see Chart 9.1). Funerary contexts represent the second most common type of site (17% of 219) to contain this ceramic. However, this category has merely produced 3% of all Beaker sherds and 8% of all Beaker vessels (see Chart 9.1). Only a small share (1%) of all the Beaker sites in Ireland is formed by the category of natural places and this context has produced no more than four sherds from three vessels (less than 1% of all Beaker pottery), all of which came from caves (see Section 7.5, Chart 9.1). Beakers have only rarely been discovered on what have been regarded as ceremonial sites (3%) but the six recorded incidents of this have produced 6534 sherds which represents a rather large proportion (30%) of all of this pottery in Ireland (see Chart 9.1). Unfortunately it is not
possible to state what proportion of Beaker vessels have been found in this context as the numbers of these are unknown from both Monknewtown and Lough Gur. For this reason, analysis of the proportion of sherds rather than vessels is a better indication of the number of Beakers from each context.

It is clear that the overwhelming majority of this pottery has been discovered on sites that have traditionally been considered to represent settlement contexts. However, the current study shows that archaeological remains dating from the last half of the third millennium BC, particularly features such as pits and spreads defy such broad-scale categorisations because they display evidence for both ceremonial and occupational activity (see Chapter Three and Four). This highlights the difficulties involved in making clear-cut distinctions between different forms of past practices and raises the question of whether such categories would have been meaningful to the people who performed these actions. It seems that activities were conducted as part of a spectrum of practices ranging between the ceremonial and the ‘domestic’ and occurring across a range of different contexts (see Chapters Three, Four, Five and Six). In light of this, it may be more appropriate to examine the range of specific features in which Beaker pottery was deposited, even if this involves some repetition of information from the preceding chapters.

Undoubtedly, pits are the main Beaker-associated feature in Ireland (see Chapter Three). There are Beaker-producing pits on 42% of all 219 Beaker-producing sites. Indeed, the excavation of a total of 177 pits has yielded at least 4436 sherds from 472 vessels representing roughly 20% of all the 21772 Beaker sherds found in Ireland (Chart 9.2, 9.3 and 9.4).

A total of 39 spreads have each been discovered on roughly 30 sites (14% of 219), which although much scarcer than pits, actually represents the second most common type of Beaker-associated feature. These above-surface deposits have produced at least 9721 sherds from a minimum of 567 vessels representing a very large proportion (45%) of the 21772 Beaker sherds found in this country. This figure excludes the 6534 Beaker sherds from an unknown number of vessels found within the surface deposits that were excavated within the interior of the embanked enclosures at Grange, Co. Limerick and Monknewtown, Co. Meath (see Chapter Six) because these spreads have traditionally been regarded as ceremonial. However, no evidence was found during this study to uphold the highly dubious distinction between "settlement spreads" and "ceremonial spreads".

Both “settlement” and “ceremonial” spreads represent the remains of deliberately accumulated debris containing the same types of artefacts and the main divergence between these is their location. Though this is a moot point given that it is unknown
whether any enclosure existed in these locations when these deposits were formed (see Chapters Three, Four and Six). These various spreads seem to represent related features that were produced through a very similar set of actions within a range of different locations. When considered together, the total amount of sherds from spreads at both ‘domestic’ and ‘ceremonial’ sites represents 75% of the 21772 Beaker sherds known in Ireland.

Although Beaker pottery has been recovered from a wide range of other features, the numbers of these seems rather negligible compared to the much larger amounts found in pits and spreads. Only 19 postholes (excluding those from timber circles) have been found to contain Beaker pottery, the quantities retrieved — 132 sherds from 31 vessels — have been very low and form a mere 2% of all Irish Beakers. As was shown in Chapter Three, these features are commonly found in association with other Beaker features, especially pits; however only a small proportion of postholes contain any ceramics and these produce very small amounts.

Beakers have only been recovered from 14 court tombs, 13 wedge tombs, six cists, four timber circles and six burnt mounds, each of which represents six percent or less of the 219 Irish sites known to have contained this ceramic Beaker in Ireland (see Chart 9.2, Table 9.1). The quantity of Beaker pottery recovered from each of these types of features is quite low, with by far the largest amounts coming from timber circles and wedge tombs (see Chart 9.3, 9.4 and Table 9.1). The former has produced 300 sherds from 50 vessels, while 500 sherds from at least 51 vessels have been discovered within the latter. However, each of these forms a tiny proportion (4% each) of the Irish Beaker assemblage (see Chart 9.3 and Table 9.1). Even smaller proportions of all the Beaker vessels identified in Ireland have been found within court tombs (2%), burnt mounds (1%) and caves (1%) (see Chart 9.3 and Table 9.1).

### 9.2.3 Associations

While a large quantity of Beaker pottery has been found on multiple sites in Ireland, the range of objects discovered in contextual association with this ceramic is quite restricted and predominantly consists of lithics. Beakers have been found with 258 convex end scrapers on 30 different sites, 20 barbed and tanged or hollow-based arrowheads on 13 sites, eight polished stone axes on eight sites, nine polypod bowls on seven sites, two bracers from two different sites, a single necklace comprising 24 disc-beads, a gold disc, a lead rod which is thought to be of Early Bronze Age date and a copper axe, as well as other
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items such as hammerstones and large quantities of lithic debitage (which are not quantified here for reasons explained in Chapter One). Clearly, Beaker pottery is rarely discovered with other typical Beaker items such as bracers and it has never been found with many others such as tanged copper daggers or V-perforated buttons.

Certainly, it seems that Beaker ceramics were deliberately kept apart from most other Beaker objects in certain settings. Most of these incidents of co-occurrence with Beakers have occurred within a 'domestic' context. Indeed each of the discoveries listed above has been made on what seem to be settlement sites (see Table 9.2). This represents a very obvious contrast with ceremonial and funerary sites, as well as natural places where very few items have ever been found in association with Beaker pottery. Convex end scrapers are the only item to have been found alongside this ceramic on sites from all four of these categories. Apart from these commonplace items, the only other objects found with Beaker pottery in a funerary context are four arrowheads, a polished stone axe and a bracer.

A more nuanced understanding of these patterns may be achieved by examining the co-occurrence of Beaker pottery with other objects within sub-categories of the four major contexts (see Table 9.3). A comparatively large selection of objects has been found in association with Beakers within both pits and spreads (see Table 9.3). These are the only features in which polypod bowls or hollow-based arrowheads have occurred with Beakers. Discbeads have only been found in direct association with this ceramic on one occasion and this was within a pit near the timber circle at Paulstown (see Chapters Four and Six; Carlin forthcoming). Spreads produced the only known instances of a copper axe or gold disc occurring in a feature alongside Beaker pottery, both of which were found at Lough Gur Site D (see Chapters Three and Four; Ó Ríordáin 1954, 410–12). The only other bracer found with this ceramic came from the sub-megalithic cist at Longstone Furness (see Chapter Five, see below).

While very few objects have been found with Beaker pottery in cists, passage tombs, caves, timber circles, court tombs and burnt mounds, a slightly wider range of objects including polished stone axes and barbed and tanged arrowheads were deposited with this ceramic in wedge tombs. Although scrapers have never been found with Beakers in passage tombs or caves, they do occur with this in almost every context, particularly frequently in pits and spreads (see Chapter Four), and are the only items to be recovered in association with Beaker pottery in timber circles, court tombs and burnt mounds.

One obvious finding to emerge from this analysis is that very few objects (excluding scrapers) were deposited alongside Beakers. The few cases where these did occur seem to have been mainly focused upon pits and spreads. While the numbers of items found with
Beakers in these contexts is still very low, their discovery suggests that pits and spreads were seen as different types of context that were suitable to occasionally receive such deposits. The absence of these sorts of associations within many or any other features is consistent with the hypothesis that the deposition of these items was highly codified.

9.2.4 The overall distribution of Beaker pottery

Beaker pottery is plentiful throughout most of the country and has a dispersed distribution with notable concentrations occurring in certain areas such as the Boyne Valley (see Fig. 9.2). Recent discoveries have greatly extended its distribution into regions such as mid-Munster or South Leinster where only a decade ago, this ceramic was scarce or totally unknown. Many of these new assemblages were found in the course of linear developments; particularly the construction of new roads and the impact of these on the known distribution of Beakers is clearly visible in the linear patterning present on the distribution map.

9.2.5 Beaker pottery in South Leinster

Less than a decade ago, the only known Beaker sites in the south Leinster region were the Dalkey Island settlement (Liversage 1968) and the Ballyedmonduff wedge tomb, Co. Dublin (Ó Riordáin and De Valera 1952). Since then, an important core of Beaker-associated activity has been revealed in the vicinity of these sites in the south Dublin area. Beaker pottery has been excavated on several occupation sites at the edges of the uplands overlooking Dublin Bay (Fig. 9.3) including Taylorsgrange, Cherrywood, Laughanstown, Laughanstown site 78, Carrickmines site 79, Carrickmines, Carrickmines site 63, Kilgobbin, Newtown Little, Blackglen, Carmanshall and Ballycullen (Lynch 1998; O’Neill 2000; Seaver and Keeley 2003, Seaver 2005, Reilly 2004; Clinton 2003; Conboy 2003; Hagen 2005; Ward 2006; Delaney 2001; Roche and Grogan 2005b).

A few sites with Beaker pottery have been identified to the west and southwest of the present-day city of Dublin (Fig. 9.3). These include possible occupation sites at Ballynakelly, near Newcastle, and a group of sites within the Liffey Valley at Kilmahuddrick and Quarryvale, Co. Dublin, as well as Collinstown, Co. Kildare (Doyle 2001, Scully 1996, Reilly 2009). Further west of the Dublin and Wicklow Mountains, but still within the catchment of the Liffey, Beakers occurred in pits at Corbally, and probably also in a cist at Furness, Co. Kildare (Purcell 2002; Macalister et al. 1913 and Eoin Grogan pers. comm.).
9.2.6  Beaker pottery on the Southeastern coastal fringes

South of Dublin, a ribbon of occupation sites with Beaker ceramics stretches along the lowlying fringes of the eastern seaboard between the uplands and the Irish Sea. Five tightly bunched excavations produced small amounts of this pottery by the coast at Charlesland and Rathdown, in north Wicklow (see Fig. 9.3; Molloy 2003; 2004a, 2004b, Grogan 2004c, Grogan and Roche 2004, Phelan 2004; Eogan and O’Brien 2005, Cafferkey 1996). Further along the edge of the coastal lowlands in south Wicklow, a cluster of small assemblages were discovered from a range of ‘domestic’ features between the Avoca and the Vartry Rivers during the construction phases of the N11 (see Fig. 9.4). These include Coolbeg (Tobin 2006a), Ballyclogh North (Whitty 2006a), Kilmurry South (Tobin 2007), Ballymoyle (Whitty 2006b), Templerainey (Ó Riordáin 1997) and Kilbride (Breen 1997). Small amounts of this ceramic were recovered from a group of Beaker settlement sites along the coastal plain in the Gorey area of north County Wexford at Ask (Bower 2006), Raheenagureen West sites 26 and 27 (Breen 2007), Moneylawn Lower (McKinstry 2007) and from Frankfort (Devine 2006; Grogan and Roche 2008a). An isolated discovery of Beakers was made during the excavation of a ring-ditch at Kerlogue in the south of the county (McLoughlin 2002a; Roche 2004a).

9.2.7  Beaker pottery along the Barrow and Slaney river valleys

A ribbon of nine Beaker findspots stretches along the Barrow Valley where it is flanked by the Castlecomer plateau on the west and the Blackstairs Mountains to the east (see Fig. 9.4). These were all recently discovered along the route of the M9/M10 Motorway and include the important assemblage from the timber circle at Paulstown, Co. Kilkenny (Elliot 2009). Smaller quantities came from apparent settlement contexts at Moanduff (Phelan 2010), Ballybar Lower (O’Connell 2009a) and Russelstown (O’Connell 2009b), all in Co. Carlow, as well as Burtonhall Demesne (Stephenson 2009), while a few sherds were found with Early Bronze Age burials at Moone, Co. Kildare (Hackett 2010). To the south, within the nearby Nore Valley, this ceramic was recovered from pits at Danesfort (Jennings 2009) and Baysrath, Co. Kilkenny (Grogan and Roche 2008c).

9.2.8  Beaker pottery in North Leinster

Beaker pit-sites have been excavated in the north Dublin coastal area at Beaverstown, Balrothery, Coldwinters, Broomfield, and Lusk (Hagen 2006a; Grogan 2006; O’Brien 1988; Roche 2004b). Beakers were also found slightly more inland on the north Dublin plains in predominantly residual contexts at Kilshane (Roche and Grogan 2005c) and also at
Harlockstown and Cookstown (O’Connor 2005; Clutterbuck 2004), located within the Broadmeadow River valley near Ashbourne at the margins of the more undulating upland terrain of south Meath (see Fig. 9.6).

Nearby within the Tolka catchment, this ceramic was discovered in pits at Dunboyne 3 (O’Hara 2008) and Johnstown 3 (Elder 2008), both in Co. Meath (see Fig. 9.6). These form part of a loose cluster of widely dispersed pit-sites with small Beaker assemblages that were recently excavated near the Hill of Tara including Berrilstown (Grogan and Roche 2006b), Ardsallagh 4 (Clarke 2008), Lismullin (O’Connell 2009) and Blundelstown (Danaher 2009).

To the north of Tara, in the catchment of the River Blackwater, a previously unknown node of Beaker settlement activity was discovered near Kells, Co. Meath, at Kilmainham (see Fig. 9.6), Gardenrath and Nugentstown (Lyne 2010, Bayley 2010a, b and c, Walsh 2009, Lynch 2008, McLoughlin and Walsh 2008). Further north along the Blackwater, this ceramic was also uncovered in a pit at Derver, Co. Meath (Rathbone and Ginn 2008).

To the east of Kilmainham, a major core of Beaker-associated activity uncovered within the catchment of the lower Boyne represents the greatest concentration of Beaker sites in the country (see Fig. 9.6). Large assemblages occur at the passage tomb complexes of Knowth (Eogan 1984, Eogan and Roche 1997) and Newgrange (Cleary 1983, Sweetman 1985 and 1987) in the Boyne Valley as well as the interior of the embanked enclosure at Monknewtown (Sweetman 1976). Just north of the Boyne, large numbers of Beakers were found in a spread at Mell and in pits at the Hill of Rath, both in Co. Louth (McQuade 2005; Duffy 2002).

South of the Boyne, just 4km east of the Brú na Bóinne complex, a dense concentration of Beaker sites comprising pits and spreads have been revealed at Rathmullan 9, 10 and 12, Carranstown, Donore and Oldbridge, all in Co. Meath (Nelis 2002; Grogan and Roche 2011a and b; Bolger 2001a and b and c; 2003a and b, O’Carroll 2004, Seaver 2008). Other discoveries of this ceramic were made near the mouth of the Boyne further east upon the coastal lowlands in topsoil at Colp, in a posthole at Kiltrough, and from a possible timber circle at Donacarney (Linda Clarke pers. comm.; Gallagher 2009; Grogan and Roche 2010b; Antoine Giacometti pers. comm.). A residual single Beaker sherd was also found on the east Meath coastal plain at Stamullin near the mouth of the Delvin River (Ní Lionain 2008).

To the north east, a distinct cluster of Beaker sites has recently been discovered within the gently undulating plains around the Dundalk Bay area, just south of the Carlingford Mountains (Fig. 9.5). These include four pit-sites excavated along the routeway of the M1.
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Motorway at Donaghmore 1 (Bailey and Ryan 2006); Newtownbalregan 2 (Bayley 2009a), Carn More 5 (Bayley 2005c) Faughart Lower 6 (Hayes 2007) and a possible timber circle at Newtownbalregan 5 (Bayley 2009b). Other discoveries of Beaker pottery within pits have been made in the surrounding area at Farrandreg, Co. Louth (Bolger 2002), Haynestown (McLoughlin 2009a) and Haggardstown 13 and 16 (McLoughlin 2009b and c).

9.2.9 Beaker pottery in Southeast Ulster

Slightly further northwards in southeast Ulster (see Fig. 9.5 and 9.6), Beaker discoveries are less common and predominantly occur at widely dispersed locations along the coastline. This pottery has been recovered from secondary contexts within the court tombs overlooking Carlingford Lough, at Clontygora Large, Co. Armagh, and Ballyedmond, Co. Down (Herity 1987), as well as that at Goward, Co. Down (Davies and Evans 1933) on the northern slopes of the Mourne Mountains and Ballynichol, Co. Down, by Strangford Lough (Collins 1956). It has also been found within the sandhills at Dundrum Bay (Collins 1959, Herity 1982) and also from pits at Downpatrick (Pollock and Waterman 1964) and Inch/Ballyrenan (Liam McQuillan pers. comm.) and as a stray find within the post-circle complex at Ballynahatty (Hartwell 1998), all in Co. Down.

9.2.10 Beaker pottery in Northeast Ulster

In northeastern Ulster (see Fig. 9.7 & 9.8), small amounts of poorly contexted Beaker pottery have only been found on a few sites in Co. Antrim, most of which have a coastal distribution including Bay farm (Jim Mallory pers. comm.) Bushmills (Clarke 1976), Goodland (Case 1969b, 42) and White park Bay (Clarke 1976), as well as the sand dunes at Castlerock, Co. Derry, near the mouth of the Bann (May and Batty 1948, Apsimon 1969). This pottery was also found within the cist and cairn cemetery at Lyles Hill and in a pit at Steeple, Co. Antrim (Evans 1953, Robert Chapple pers. comm.)

9.2.11 Beaker pottery in Mid-Ulster

In mid-Ulster, a few small clusters of sites with Beakers have been found, the majority of which occur in loose clusters of megalithic tombs throughout the Sperrins (see Fig. 9.8). One such small group of sites on the lower western slopes of these mountains flanking the Roe River in Co. Derry includes the Largantea and Kilhoyle wedge tombs (Herring 1938, Herring and May 1937), as well as Gortcobies cairn and a court tomb at Carrick East. Beaker-associated wedge tombs occur in the northern foothills at Cashelbane (Davies and Mullin 1940) and Loughash, Co. Tyrone (Davies 1939), as well as Barnes Lower court
tomb (Collins 1966) on the south side of the Glenelly valley and Legland court tomb (Davies 1940) situated to the south west of Bessybell Mountain.

Another similar group of Beaker discoveries have been made along the southeastern edge of the Sperrins Mountains in South Co. Derry (see Fig. 9.8). At Ballybriest on the side of Slieve Gallion, a wedge tomb (Hurl 2001) and a nearby court tomb (Evans 1939) both produced this ceramic. Nearby, to the north of Cookstown, excavations have revealed Beakers within pits at Ballynagilly (Apsimon 1969, 35 and 1976) and Cluntyganny (Brennan et al. 1978), as well as at Tullywiggan (Steven Briggs pers. comm.) in the Ballinderry River Valley, all of which are in present-day Co. Tyrone. In mid-Tyrone, two new lowland Beaker sites including a re-used timber circle and a cluster of pits were recently excavated at Armalughey, Co. Tyrone, on the eastern fringes of the Clogher Valley, linking Lough Neagh to Lough Erne (Dingwall 2010a and b; Carlin 2010).

9.2.12 Beaker pottery in the Northwest

Further northwest in the Counties of Mayo, Sligo, Leitrim, Fermanagh and Cavan (see Fig. 9.9), discoveries of Beaker pottery are quite rare and none have been found in Co. Donegal. Only thin scatters of widely dispersed sites with this ceramic have been found, although some of these seem to form very loose groups. A small cluster of sites occurs within the lakelands of the upper Shannon catchment particularly around the Lower and Upper Lough Erne. These include the court tombs at Ballyreagh, on the slopes of Brougher Mountain (Davies 1942) and Aghanaglack (Davies 1938), both in Co. Fermanagh, a wedge tomb at Aughrim on the south-east flank of Slieve Rushen, Co. Cavan (Channing 1993), as well as poorly contexted findspots at Errisallagh, Co. Fermanagh (Sweetman 1976), Gortnacargy (Ó Riordáin 1967) and Cornagleragh, Co. Cavan (Read 2006).

Along the River Shannon, Beaker pottery was discovered at Kilnagarns Lower wedge tomb in the Lackagh Hills beside Lough Allen, Co. Leitrim and in a pit at Cloongownagh, Co. Roscommon, beside Lough Corry (Corcoran 1964). Further northwest, only a few Beaker sites are known, these include the Moytirra wedge tomb near Lough Arrow (Cremin Madden 1969), a cist at Knockmullin beside the Unshin River (Cremin Madden 1968) and Creevykeel court tomb on the coast overlooking Donegal Bay (Henken 1939), all within Co. Sligo. Isolated outlying discoveries of Beaker pottery have been made at Ballyglass court tomb, on the northwest seaboard and in a pit at Ardcloon (Rynne 1956), beside the Strade River, both in Co. Mayo.
9.2.13 Beaker pottery in Clare and Galway

There are very few recorded Beakers from the Clare and Galway region and most of these come from a cluster of sites around the Burren, Co. Clare, including the settlement at Roughan Hill (Jones 1998; Roche 1999), the kerbed cairns at Poulawack (Hencken 1935) and Coolnatullagh (Eogan 2002), the portal tomb at Poulnabrone, Co. Clare (Lynch 1987, identified by Eoin Grogan) and from pits on the present-day Clare border at Rathwilladoon, Co. Galway (Lyne 2009). Small residual Beaker sherds also came from Mooghaun, Co. Clare (Grogan 2005d, 323–27) and Curragh More, Co. Galway (Grogan 2008).

9.2.14 Beaker pottery in mid-Munster and the southwest

To-date, this ceramic has not been found in certain areas such as the southwest coastal fringes, yet in other locations, particularly in mid-Munster, large concentrations of Beaker pottery occur in various places such as those discovered along the Funshion, Blackwater, Lee and Suir Rivers.

Dense clusters of Beaker ceramics occur in two locations between Caher and Cashel within the Suir River valley in Co. Tipperary (see Fig. 9.10). A cluster of four pit-sites produced this pottery between the foothills of the Galtee Mountains and the Suir Valley at Ballydrehid, Ballylegan, and Caherabbey Upper (McQuade et al. 2009). A previously unknown concentration of apparent settlement activity was discovered further upriver to the east of Cashel between the Silvermine Mountains and the Slieveardagh hills during the construction of the N8 Cashel Bypass (Grogan and Roche 2006a, Roche and Grogan 2008a). Eleven new Beaker assemblages, most of which were found in pits suggest that this area was intensively occupied at this time.

Along the Lee Valley in south Cork, a previously unidentified core of Beaker-associated activity has been revealed through the recent discovery of Beakers in pits at sites such as Barnagore (Danaher 2003), Carrigrohane (Danaher 2005), Curraheen (Danaher 2004a), Killydonohue (Sherlock 2005), Ballinaspiig More (Danaher 2004b) and Ballinure (Purcell 2005).

Over the last ten years, numerous discoveries of Beaker pottery have also been made within the valleys of the Bride, Blackwater and Funshion Rivers, primarily during the construction of the M8 motorway. These findspots mostly comprise pits and include Mondaniel 1 (Cotter 2005), Lisnasallagh 2 (O’Neill 2005), Ballyhoooly south (Cotter 2000), Gortore (Kiely 2006) and Ballynamona 2 (Hegarty 2011), all in Co. Cork and
Ballynacarriga 3 (Lehane et al. 2011), Caherdrinny 3 (Bower et al. 2011), and Gortnahown 2 (Kiely and O’Donohue 2011), in Co. Tipperary.

Beakers have also been found in the Blackwater Valley, within the Labbacallee wedge tomb, Cork (Leask and Price 1936) and the sub-megalithic monument at Moneen, Co. Cork (O’Kelly 1952) where Beaker ceramics were recovered within and under the cairn covering the cist. The former is the only wedge tomb in the southwest to have produced Beaker pottery, though the latter also seems to belong to the wedge tomb tradition (see Chapter Five). These megaliths are uncommon within this area and only a few other examples occur such as the nearby tomb at Manning or those located further south at Rathaneague and west along the Blackwater Valley at Island (O’Kelly 1958).

In complete contrast to the Blackwater Valley, wedge tombs are exceptionally common along the southwestern coastal fringe but Beaker pottery is almost completely absent, particularly in areas such as the Beara peninsula and Mizen Head (see discussion of this below in Section 9.11.5). Indeed the only discoveries of these ceramics within this region to-date occur in North Kerry. Beaker assemblages of varying size have been found at the copper mine at Ross Island (O’Brien 2004), in a pit at Ardagh near Lough Leane, 3.5 km to the west (Dunne 2003, 159) and also in pit clusters within the Lee valley at Cloghers (Kiely and Dunne 2005) and Gortalea (Coyne 2003).

9.2.15 Beaker pottery around the wider Lough Gur area and beyond

A well-known core of Beaker activity seems to have been centred upon the Knockadoon peninsula in Co. Limerick (see Fig. 9.10; Chapter Three; Ó Riordáin 1954; Grogan and Eogan 1987; Cleary 1982). Extensive assemblages of this ceramic were revealed by Ó Riordáin’s excavations at Lough Gur including sites C, D, 10, Circle K and at Grange (Ó Riordáin 1951, 1954; Grogan and Eogan 1987), though most of this seems to have been discovered within residual or disturbed contexts (see Chapter Three). The Lough Gur wedge tomb (Ó Riordáin and O h-íceadha 1955) represents one of the few megaliths of this type in the area containing Beaker pottery.

Beakers have also been found nearby within a mixture of spreads and/or pits at Rockbarton Bog (Mitchell and Ó Riordáin 1942), Rathjordan 3 (Ó Riordáin 1947 and 1948) and Ballingoola (MacDermott 1949), the latter two of which are located within the Camoge River valley. At a slight remove from this area of intensive activity, Beaker ceramics have also been discovered in a pit at Doonmoon, within the Morningstar valley (Gowen 1988), in disturbed contexts at Chancellorsland, (Doody 2009), within a spread at the Longstone
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Cullen ceremonial and funerary enclosure, all in Co. Tipperary (Roche 1995), and also to the south, in a pit at Kilfinnane, Co. Limerick, within the Loobagh River Valley in the northern foothills of the Ballyhoura Mountains (O’Donoghue 2006).

Beakers have been recorded in pits at Milltown North (Grogan et al. 2006, 302) and Aughinish, Co. Limerick (Cleary 2006) beside the Shannon Estuary. Further along this river, near Limerick city, small assemblages were also found in a burnt mound at Ballyvollane (Coyne 2002) and within pits at a number of locations in Kilbane (Hayes 2003a, 2003b; Purcell 2005b).

Nearby, small amounts of Beaker ceramics have been newly discovered mainly in pits within the Slieve Felim area of Tipperary at Ballycuddy More (Ruttle and Taylor 2008), Touknockane (MacLeod and Madigan 2008; Grogan and Roche 2009j) and Gortybrigane (Long and O’Malley 2008). These three sites are situated upon a significant routeway which leads from the prehistoric ford across the Shannon at Ballina-Killaloe, and traverses along the Kilmastulla River between the Arra and the Silvermine Mountains into the south midlands via the upper valleys of the Suir and Nore (Grogan 2005, 25–27, 99–102, fig. 6.6; Sheridan et al. 1992). Close by within the Silvermine Mountains, Beakers have been discovered within the Baurnadomeeny wedge tomb, Co. Tipperary (O’Kelly 1960). These are the only sites with Beaker pottery in this locale and represent an important addition to our understanding of the distribution of this ceramic in Ireland.

9.2.16 Beaker pottery in southeastern Munster

A core of Beaker settlement activity comprising six different assemblages was revealed near Kilmacthomas in Co. Waterford along the River Mahon, just south of the Comeragh Mountains (Johnston et al. 2008). Beaker discoveries from this area are scarce and only a few other poorly contexted findspots are known (see Fig. 9.4 and 9.10). These include Oonaglour Cave in the west of the county, Gracedieu situated along the Suir estuary (Russell 2006) and the entrance grave at Carriglong, which almost certainly belongs to the wedge tomb tradition (Powell 1941). The latter represents one of the few megaliths in the southwest to produce this ceramic.

9.2.17 Beaker pottery in the Midlands

Just over 40 kms northeast of the core of Beaker activity at Cashel, a loose cluster of four more Beaker occupation sites occurs between the Slieve Bloom Mountains and the Slieveardagh Hills, in the watershed between the Rivers Nore and Suir. These comprise Parknahown (O’Neill 2007), and Boherard, in Co. Laois, Glashare, Co. Kilkenny (Roche and Grogan 2008b and c), Castleroan, Co. Offaly (Kiely et al. 2011) and Lisheen, Co. Tipperary
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(Gowen et al. 2005). North of the Slieve Bloom Mountains, fragments of Beaker pottery were found in a cist at Cappydonnell within the valley of the River Brosna — a tributary of the Shannon — in north Co. Offaly (Coughlan 2010). Other than these, no other Beaker pottery has been found in the midlands to date. With the exception of Cappydonnell, there is a large swathe of land in the centre of the country where this ceramic is currently absent (Fig. 9.11)

9.2.18 Summary and discussion of the deposition of Beaker pottery

Overall it is clear that Beakers were deposited in quite a select range of contexts. While small amounts of Beaker pottery have been discovered in monuments such as wedge tombs and timber circle and to a lesser extent in contexts such as court tombs, cists and passage tombs, most of these ceramics were actually deposited in pits and spreads.

The overwhelming majority (75%) of Beakers in Ireland have been found in a mere 39 surface deposits. Although they may be comparatively small in number, these deposits tend to consist of large quantities of Beaker pottery as exemplified by the deposit known as Concentration D at Knowth which produced sherds from as many as 104 Beakers (see Chapters Three and Four). These features tend to be quite extensive in size and they seem to represent repositories or middens used for the storage of deliberately accumulated occupational debris (as demonstrated in Chapter Four) that were once presumably much bigger but have subsequently been ploughed-down or disturbed. Clearly, the majority of Beaker pottery in Ireland was deposited above ground, rather than below it and this almost certainly explains why Beakers are so commonly found in residual contexts in Ireland.

Spreads generally produce at least 20 vessels, a quantity that greatly outnumbers those from most other contexts. This far outnumbers the amount of Beakers in most pits — half of these contain sherds from just one vessel and only four (extraordinary) pits have ever contained more than 15 vessels — or pits groups (see Section 4.5.1). Equally large amounts of Beakers have only been recorded from three exceptional pit clusters in Ireland at Kilgobbin, Co. Dublin (Hagen 2005); Hill of Rath, Co. Louth (Duffy 2002) and Doonmoon, Co. Tipperary (Gowen 1988). The largest amount of pots to have been found in a megalith occurred in the chamber of a wedge tomb at Cashelbane, where the remains of 10 Beakers were identified. The greatest numbers of vessels from an entire timber circle, as well as the largest number of vessels from a single posthole of a timber circle were both found at
Newtownbalregan, where sherds from at least 15 Beakers were recognised, six of which were present within one posthole.

It seems that it was from the larger aggregations of occupational debris within these spreads or middens that small amounts of materials were obtained for deposition within many of those other features such as pits, timber circles and court tombs which produce much lesser amounts of pottery (see Chapters Three, Four, Five and Six). However, wedge tombs represent a notable exception this trend. The presence of more complete and uniformly well-preserved vessels in these megaliths suggests that this pottery was not obtained from a midden.

The deposition of Beakers in what seem to be the eroded remains of middens, some of which may have had an almost monumental character is indicative of a long-term attachment to place (see Brück 2006a, 299). Regardless of whether the materials within each of these was generated during a small number of large scale social gatherings and feasting or in the course of repeated smaller-scale everyday occupational activities, the visible nature of these deposits enabled ongoing engagement with the materials contained within them. The significance of these deposits is reinforced by the fact that a far greater range of artefacts including metal axes, a gold disc and a bracer occur with Beakers in these deposits than in any other context (see above and Chapter Four). The gathering of occupational detritus into large piles formed an important role in social practices during the Final Neolithic/Early Bronze Age including the construction and reproduction of identity. The aggregated materials may well have served as served as reminders of past events or activities and in doing so, may have functioned as physical metaphors for social relationships between people, places and things (see Chapter Four).

While spreads contain the most Beakers, pits were by far the most common feature to receive deposits of this pottery. The number of Beaker pits and the amount of sites that they occur upon far outnumber all other Beaker-associated features (see above). Similarly, the total quantity of pottery recovered from pits (20%) dwarfs that discovered within all other context-types, except spreads. However, unlike most of the other features, pottery was being collected within spreads and then taken from these to be deposited within most of the other features. Consequentially, the quantity of Beaker pottery from spreads is so large, that it slightly distorts our understanding of contemporary depositional practices involving this ceramic. An examination of the proportion of Beakers in each context which excludes all the pottery from spreads reveals that 76% of all sherds and 70% of all vessels from all features (other than spreads) were deposited in pits (see
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Charts 9.6 and 9.7). So, although most Beakers may have been collected within spreads, pits represent the main context in which this ceramic was re-deposited in Ireland.

One aspect that remains constant throughout this analysis is the obvious lack of Beaker pottery from a funerary context. Earlier chapters (Five and Six) which examined the occurrence of Beakers within a funerary or ceremonial setting revealed that there was a much greater amount of Beaker deposition in these contexts than had previously been realised. Yet each of those chapters considered the occurrence of Beakers solely within a funerary or ceremonial context. No attempt was made to compare these results with those from other contexts and this may have created the impression that a considerable proportion of Beaker ceramics had been retrieved from funerary and ceremonial sites. However, when the pottery from these contexts is actually considered as a proportion of all the known Beakers in Ireland, it becomes very clear that only a small amount of this ceramic was placed in these sorts of places and these depositional events were probably quite infrequent (see Charts 9.2, 9.3, 9.4, 9.6, 9.7).

With the exception of the burial activities within wedge tombs, the deposition of Beaker pottery does not seem to have been a common aspect of funerary practices. It remains probable that the excavation of a far greater proportion of those megaliths (as well as the full disclosure of information regarding two relatively recently excavated examples) would significantly increase the number of Beakers known from the sepulchral realm. Similarly, it appears that only a relatively small proportion of Irish Beakers were deposited within an undeniably ceremonial context, most of which has been found within the postholes of timber circles. However, any total amounts from this domain are complicated by the difficulties inherent in making any distinctions between the ceremonial and the profane, particularly in the case of pit deposits. It remains possible that the excavation of some of the many known (yet uninvestigated) ceremonial enclosures could alter this picture.

The absence of pottery from natural contexts is a very significant aspect of Beaker-associated depositional practices. It seems clear that there was a widespread policy of excluding Beaker ceramics from these places even though many other items belonging to the Beaker repertoire were deposited within them. Indeed the presence of other items like gold discs and lunulae in wetter areas such as the midlands where Beakers are scarce indicates that people were present in these areas during the Final Neolithic/Early Bronze Age and that acts of deposition were being conducted in those locations, but that pottery was deliberately excluded from these activities (see Section 9.11.5 below).
In conclusion, there is little doubt that the collection and deposition of Beaker pottery was just as circumscribed as the disposal of other objects like daggers and bracers. The quantity of pottery, the context in which it was being deposited, the manner of its deposition (e.g. in sherds from spreads or as vessels) and the objects that it could be deposited with were all highly codified. Beaker pot sherds were seen as socially significant objects that both possessed and created values, and played an important part in the social lives of people. These may have been perceived as relics or mementoes that were associated with the people who made and used them or with particular events (Brück 1999a, 319–21; Jones 1999, 57; 2008b, 331; Chapman 2000a and b; Pollard 2001, 327; Woodward 2002, 1040–1). Either way, these ceramic fragments had acquired symbolic meanings over the course of their use-lives which meant that they either required or were suitable for particular forms of depositional treatment (see 4.5.4, 4.5.5; Chapman 2000a and b; Brück 2006a, 303). The social role of these sherds will be considered alongside other Beaker objects in Chapter Ten (see Sections 10.5, 10.6, 10.7 and 10.8).

9.3 POLYPOD BOWLS: CONTEXT AND DEPOSITION

A total of 16 ceramic and wooden polypod bowls have been recovered from 12 different locations in Ireland (see Catalogue 5). These bowls are thought to have strong eastern Bell Beaker and Corded Ware affinities (Case 2004b, 375). They are widely paralleled in places such as central Europe (Harrison 1980, 26, 30, 39, 45), Sicily, Sardinia and to a lesser extent Southern France (Besse 2003; 2004). Two of these have also been found in Southern Britain, within disturbed contexts at Abingdon, Oxfordshire, and Inkpen, Berkshire (Clarke 1970, 89–92). These occur quite frequently in central European funeral assemblages, where they seem to have been placed in graves instead of Beakers (Van der Linden pers. comm.; Manby 1995, 83.)

9.3.1 Single find vs multiple finds and manmade vs natural contexts

Seven of these bowls in Ireland have been recovered as single finds, while nine have been discovered in association with other objects. Six (38% of 16) polypod bowls have been found in six natural wetland contexts (Chart 9.8), all of which were wooden versions within bogs (Earwood 1991/2, also see Chapter Seven). Five of these were retrieved as single finds, while one example from Tirkernaghan, Co. Tyrone, was found alongside two plain wooden bowls during peat cutting. Wood from this polypod bowl produced a radiocarbon date of (OxA-3013: 3960±100 BP) 2870–2147 BC (ibid).
9.3.2 Findplace – wet or dry

Ten ceramic polypods (63% of 16) were found in dryland manmade contexts (see Catalogue 5). A possible example was found at Longstone Cullen (Grogan 1989; Case 1995a, 20), but this remains unconfirmed so will not be included in this study. The only one of these ceramic bowls to occur as a single find was discovered at Newtownbalregan 2, Co. Louth (see Chapter Four). This lone vessel had been deposited intact in an upright position within a shallow pit beside a larger pit containing multiple Beakers. The remaining nine footed pots from dryland contexts occurred as multiple finds including two bowls (represented by seven sherds) which came from a disturbed deposit at Blackglen, Co. Dublin (Grogan and Roche 2009d).

The Newtownbalregan bowl is one of only two such pots (12% of 16) to have been discovered in pits. Sherds from a second example were found at Rathmullan Site 12, Co. Meath, within the uppermost fill of a large pit forming part of a pit cluster. This deposit contained more than 500 sherds of Beaker pottery as well as a barbed and tanged arrowhead and burnt pig bone which produced a radiocarbon date of 2470–2280 BC (SUERC-31907: 3890 ± 30 BP) (Bolger 2003b, 327; Fintan Walsh pers. comm.).

A total of six (38% of 16) polypod bowls have been found within four spreads at Newtownlittle, Co. Dublin, Newgrange, Mell and Rathmullan site 10, Co. Meath (see Chart 9.8 and Chapter Four). At Mell, Co. Louth, a polypod bowl represented by seven sherds, a foot and some smaller fragments came from a series of deposits that overlay each other (see Fig. 9.16). This spread also contained 354 sherds from a minimum of 26 Beakers, eight convex scrapers, a flint knife, a lead rod, fired clay pottery wasters, burnt bone and carbonised cereals (McQuade 2005). At Newtownlittle, Co. Dublin, the spread contained two rimsherds and two feet representing the remains of two polypod bowls. Also present in this deposit were 350 sherds from at least 20 Beaker pots, including a Beaker dish and five pieces of flint debitage (Ward 2006).

At Site 10 — only 60m from Site 12 mentioned above — in Rathmullan, Co. Meath, the foot of a polypod bowl was found in a deposit of occupational debris containing 250 Beaker sherds and a fragmented bracer (Bolger 2001a). The fragmented remains of two polypod bowls were found within the so-called Beaker layers surrounding the main passage tomb at Newgrange, Co. Meath (see Fig. 9.17, Cleary 1983, 74, fig. 25, group 15). These sherds were discovered as part of a considerable concentration of pottery (Pottery Concentration No. 3) within the central area near to a hearth (no. 5) (O’Kelly et al. 1983, 24), 72–74). Although it lacked feet, a large decorated open bowl (Ó Riordáin 1954, 398–9, fig. 37) that was included by Clarke (1970, 89–92) in the same group as his polypod Bowls appears to
have been recovered from a multi-period deposit containing Beaker-associated habitation debris at Lough Gur Site D, Co. Limerick (see Chapter Three).

9.3.3 Associations

Nine of these bowls have been found in association with other objects; at least seven were deposited alongside occupational debris (within four spreads and a pit) that included Beaker pottery and large quantities of lithic debitage (see Chapter Four). Other associated objects include a bracer from the spread at Rathmullan Site 10, a barbed and tanged arrowhead from the pit at Rathmullan Site 12 and a lead rod from the spread at Mell, as well as two wooden bowls within the bog at Tirkernaghan (see below).

9.3.4 The distribution of polypod bowls

Two of the wooden bowls have no recorded provenances and thus the distribution of polypods in Ireland is somewhat incomplete. Our current knowledge indicates that these objects were widely dispersed across the northern half of the country (see Fig. 9.18) and no footed bowls of any kind are currently known from the southernmost parts. This picture is only slightly altered by the inclusion of the bowl from Lough Gur, Co. Limerick, and the possible polypod from Longstone Cullen, Co. Tipperary. Excluding these two bowls, ceramic footed pots have only been found in the east of the country within areas where dense concentrations of Beaker sites and pottery are known. Ten of these were discovered along the coastal fringe stretching from Dublin to Louth with a very notable concentration of five bowls occurring at Newgrange, Rathmullan and Mell in the Boyne Valley area of Counties Meath and Louth. In contrast, the wooden bowls are predominantly known from the northwest counties of Roscommon, Fermanagh, Monaghan and Tyrone where the wet or anaerobic conditions necessary for the survival of these wooden artefacts are common. Beakers have only rarely been found in these less well-drained areas, a fact that seems to be related to the non-deposition of this ceramic in natural contexts (see below).

9.3.5 Summary and discussion of the deposition of polypods

In summary, polypod bowls have been found in a restricted range of both manmade and natural contexts consisting of spreads, pits and bogs. A greater proportion of these have been retrieved from dryland (63%) compared to wetland (37%) places. Unsurprisingly, all the ceramic versions have been retrieved from the former, while each wooden bowl has been found in the latter. Polypods mainly occur in natural wetlands as single finds and in dry manmade contexts as multiple finds. Most of the bowls that occur with other objects have been found in spreads. The ceramic bowls seem to have been deposited alongside
other occupational debris, predominantly consisting of fragmented Beaker pottery and lithic debitage (see Chapter Four), though a bracer was also present in one of the spreads containing sherds from a polypod.

Interestingly, almost all of the ceramic footed bowls seem to have been broken prior to deposition. The only exception to this is the near-complete polypod from the pit at Newtownbalregan 2 (Grogan and Roche 2005a) which appears to have been intact when deposited. In complete contrast to this, each of the other pots is represented by only a few fragmented sherds. The condition of these bowls is consistent with that of Beaker pottery in spreads and pits, most of which display evidence for considerable life-histories after their breakage but prior to their eventual deposition (see Chapter Four, also see below). It seems that the use-life of polypods also continued post-fracture, with sherds being collected and stored in large aggregations. The wooden bowls differ considerably from their ceramic counterparts, as all six of these were intact upon their discovery.

The deposition of ceramic polypods alongside Beaker pottery and other settlement debris suggests that these bowls were seen as part of the Beaker ceramic assemblage and were treated in accordance with the same conventions that governed the use of that pottery in Ireland. The remains of only two polypods have been found in pits, while at least six have come from spreads. This may suggest that it was considered more appropriate for these vessels to remain deposited within these large-scale accumulations of material. Equally, it may simply represent the fact that much greater quantities of pottery occur in spreads which means that there is a greater chance of these bowls being found in spreads than any other context. However, six wooden polypod bowls have been found within bogs, a context from which Beaker pottery seems to have been deliberately excluded. Indeed, Beaker pottery was rarely deposited in any form of natural context and thus the deposition of the wooden bowls in bogs suggests that polypods were seen as similar but different to pottery. Perhaps, the wooden materiality of these bowls leant them a quality that made them suitable for deposition in wetlands in a way that the ceramic nature of pottery did not. Regardless, the concentration of wooden examples in bogs and pottery versions in spreads certainly suggests that there were strict preferences about the ways in which polypod bowls could be deposited.

The rarity of polypod bowls in most parts of north western Europe, including Britain (Clarke 1970) suggests that these were not everyday objects. This is also intimated by their deposition within bogs in Ireland, a treatment which was applied to most contemporary supra-regional special-purpose objects (see below, Chapters Seven and Ten). Unlike ceramic polypods, these types of objects were generally deposited away from
everyday activities and were deliberated kept separated from Beaker pottery or other habitation materials. Thus, these polypod bowls represent a striking anomaly. The small numbers of these and the circumscribed nature of their deposition suggests that they fulfilled a different function to Beaker pottery and carried different meanings for their users. Indeed, the concentration of these bowls in the Boyne Valley also suggests that these may have had a special role, but this remains open to questioning.

9.4 V-PERFORATED BUTTONS: CONTEXT AND DEPOSITION

At least 59 V-perforated buttons have been found at 14 locations in Ireland (see Catalogue 3). These occur as single and multiple finds, as well as in hoards. Significantly, there are no records of any of these buttons ever being found with Beaker pottery in Ireland.

9.4.1 The character of Irish buttons

Irish buttons are predominantly dark in colour, particularly black and no amber examples have been found (Harbison 1976). Most of the Irish V-perforated buttons belong to Shepherd’s Types 1 and 2 which are circular and flat based (see Shepherd 2009). These are predominantly found in northern Britain and date from approximately 2300–1900 BC (ibid, 343). With the exception of the bone example from Kinkit, Co. Tyrone, these buttons were made from an assortment of specially selected materials including anthracite, steatite and mudstone, most of which are known to occur in Ireland. For example, anthracite has been mined in recent times in Counties Tipperary, Laois and Kilkenny. While these types of materials may have had particular symbolic values attached to them, it is also likely that they were chosen with reference to the British buttons made of jet from Whitby in Yorkshire. However, not all the Irish buttons appear to be of local manufacture. A few buttons also appear to have been made of jet, such as those from Lissan and Lurgan (Harbison 1976), while a group of ten unprovenanced examples (in the National Museum of Ireland) were made using albertite from Strathpeffer, Sutherland, in Scotland (see Shepherd 2009, 341). These almost certainly represent imports.

9.4.2 The condition of the buttons

The condition of some V-perforated buttons in Britain has been found to be quite worn (Woodward et al. 2006) and Ian Shepherd (2009, 348) observed that many buttons had been rebored or restrung. All of which suggests that these objects had a long use-life. While no such examination has yet been conducted on Irish V-perforated buttons, the edges of the three buttons from the Mound of the Hostages are certainly worn and chipped suggesting that these had lengthy histories of use (see Fig. 5.12). There is no evidence to suggest that Irish V-perforated buttons did not have important social biographies just like
their British counterparts and may have being used by multiple persons during their lifespan.

9.4.3 Numbers of objects and number of instances

When discussing the quantities of objects found in a particular context, we must be careful not to project our present-day values into the past. This is especially true for artefacts like V-perforated buttons. Sets of buttons occurring together probably represent the remains of a jacket or cloak or a necklace (Shepherd 2009, 348). These buttons would have formed composite elements of a single item and the actual number of buttons deposited may not have been that significant to the depositors. Both a single button and a group of buttons may reflect a single depositional act. Thus the number of objects from a particular context-type should not be interpreted as a definitive indication that it represents a preferred depositional zone. Accordingly, it is important to contrast the number of objects deposited in a context with the number of depositions of that object-type in that kind of context to see if they correlate. In this chapter, both of these aspects are considered and contrasted with each other to avoid bias.

9.4.4 Hoard versus Single Find

At least eight V-perforated buttons have been discovered as single finds without any other associations (see Table 9.4 and Chart 9.9). While, a total of 36 buttons have been found in three hoards, all of which were discovered in natural places. All three of these represent one-type hoards: 14 stone buttons were found in a bog at Drumeague, Co. Cavan (Harbison 1976, 15), while another ten bone buttons was deposited ‘on a flagstone pavement’ in a bog/boghole at Skeagh in the same county (Harbison 1976, 15). A cache of 12 stone buttons was found on Ballyboley Mountain, Co. Antrim, but unfortunately no further contextual details are available (Wood-Martin 1895, 534).

9.4.5 Context: Manmade versus Natural

Contextual information is lacking for 12 V-perforated buttons (see Catalogue 3). At least 38 (65%) of the 59 Irish buttons have been recovered from five natural places including 3 bogs and two mountainsides, while a minimum of nine buttons (15% of 59) have come from six manmade contexts comprising two cists and four passage tombs (see Chart 9.10).

Six of these buttons have been found in passage tombs: Loughcrew Cairn R2, Co. Meath, Carrowmore Site 49, Co. Sligo; Dowth and Mound of the Hostages, Co. Meath (Harbison 1976, 14, see Chapter Five). Three (two of anthracite and one of mudstone) buttons were found within the chamber at the Mound of the Hostages, where at least one example made
from anthracite appears to have accompanied an Early Bronze Age inhumation burial (O'Sullivan 2005, 104–9, see below). Antiquarians discovered a steatite button along with oyster shells and three sherds of (unidentified) reddish pottery in association with two burials (one cremated and one unburnt) within the central chamber of a simple passage tomb (Monument no. 49) at Carrowmore (Wood-Martin 1888, 68; Harbison 1976, 14). An unusual starshaped V-perforated button made from jasper was recorded by Wilde (1857, 122) as being found “in the sepulchral caverns during the excavations of the tumulus” at Dowth. An unperforated stone button (of unknown material) was found by an antiquarian (Rotherham 1895) within what seems to have been the chamber of a passage tomb (Cairn R2) at Loughcrew.

Three buttons have been discovered in two cists: Portanure, Co. Cavan (Glover 1975, 151; Waddell 1970, 110) and Kinkit, Co. Tyrone (Glover 1975). At the former, two buttons — presumably V-perforated — were said to have been found in a cist that was destroyed at the beginning of the 20th century, but details of it and its contents are decidedly vague (Glover 1975, 151; Waddell 1970, 110). At Kinkit, a single bone button accompanied the cremated remains of two young adults along with a bone pin (see Fig. 5.18). Significantly, this represents the only V-perforated button to have been found with a burial in a non-megalithic context in Ireland. Furthermore, this example was made from bone and Ann Woodward (pers. comm.) has suggested that buttons made from organic materials such as bone represent the earliest incarnations of these objects.

9.4.6 Natural Contexts: Wet versus Dry.

Of the 38 buttons found in natural places, 25 (43% of 59) were found in wet places, all of which were represented by bogs (Table 9.4). Two hoards (see above) from this context produced 24 of these, while a single example was found in Lurgan bog, near Dromore, Co. Down (Harbison 1976, 34: Munro 1902). A total of 13 buttons have been discovered in two apparently dryland natural locations, both of which were mountainsides. A hoard of 12 buttons came from Ballyboley (see above, see Chapter Seven), while a single specimen was discovered on the mountainside at Knocknarea, Co. Sligo, near the possible passage tomb known as Miosgán Meadhbhá (Harbison 1976, 35).

9.4.7 Associations with buttons

At least three buttons have been found in association with other objects on three occasions. In each instance, these were deposited with burials: at the Carrowmore and Mound of the Hostages passage tombs and the cist at Kinkit (see above). At least one button (but possibly two) was discovered with a crouched inhumation (Burial 18) along
with a bronze awl and a Bowl (Food Vessel) within the Mound of the Hostages (O’Sullivan 2005, 107–110, see Chapter Five) The other associated objects comprise the aforementioned bone pin from Kinkit, and three unidentified pot sherds and oyster shells from Carrowmore (Wood-Martin 1888, 68; Harbison 1976, 14).

9.4.8 Distribution of buttons

V-perforated buttons have only been found in the northern half of the island, with the most southerly examples occurring in Co. Meath within the passage tombs at Tara, Dowth and Lough Crew (see Fig. 9.19). The densest concentration of buttons has been found in the poorly drained northern midlands in present-day Co. Cavan where 26 of these occurred at three separate locations. Though, there is some degree of overlapping, the distribution of Beaker pottery and buttons is quite complementary (see Fig. 9.2), in many cases, this ceramic has not been found within at least a 10km radius of these ornaments.

9.4.9 Summary and discussion of the deposition of buttons

Overall then, V-perforated buttons only occur within a restricted set of contexts, namely bogs, mountainsides, passage tombs, and cists. There were more instances of deposition of these as single finds than in hoards or with other objects. The majority of these ornaments were found within natural places, in wetlands represented by present-day bogs where they were predominantly deposited in (one-type) hoards, but also singly (see Chapter Seven). Buttons have also been recovered from six manmade contexts – mainly passage tombs, but also cists. However, these objects have only been found in association with three burials. Significantly, one of these was found with an inhumation accompanied by an Irish Bowl at the Mound of the Hostages. It has been argued that this particular burial practice may represent an Irish version of the classic Beaker inhumation (see Chapter Five). It is difficult to discern if any of the few buttons found in such monumental contexts were intended as funerary gifts or as ceremonial deposits.

Although V-perforated buttons and Beaker pottery may have had slightly different chronological currencies with the floruit of button use possibly occurring after that of this ceramic (see above and Chapter Eight), the lack of association between these two artefact types may be better understood in another way. Clearly, the deposition of both of these objects was quite circumscribed and the type of context that was suitable for one seems to have been deemed inappropriate for the other. Beaker pottery has been found in a large number of megalithic tombs, but it is only rarely discovered within passage tombs (see Chapter Five). In contrast to this, passage tombs are the only form of megalith to have produced V-perforated buttons. It seems particularly curious that these ornaments were
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not placed in any other type of megalith, particularly those wedge tombs which received primary deposits (containing Beaker ceramics) that were contemporary with the use of V-perforated buttons (see Chapter Five).

A conscious effort appears to have been made to strategically deposit these buttons separately from other stereotypical Beaker objects and especially to keep buttons apart from Beaker pottery. Some buttons were imports, while others were locally made to resemble British and European examples. It seems likely that these supra-regional ornaments would have evoked people and ideas from other places where these buttons were also used. The particular social biographies of each of these items and the values that these had become imbued with may have strongly influenced their depositional treatment (see Chapter Ten).

9.5 Bracers: Context and Deposition

At least 112 bracers have been found in Ireland (see Catalogues 6 and 7). The majority of these are unprovenanced single finds without any associations (Harbison 1976, 7). There are only nine examples for which contextual details are known and only one or two have ever been discovered in association with Beaker pottery.

9.5.1 The character of Irish bracers

Irish bracers are typically tall and narrow with a plano-convex profile and in keeping with the Atlantic bracer tradition, have just two holes (see Fig. 9.20; Harbison 1976). Only a small number of the four-holed examples that are more common in northern Europe have been found here (Woodward et al. 2006, 534; Fokkens et al. 2008, 112). However, the number of bracers to have been discovered in Ireland is much larger than those from other Atlantic regions. A total of 20 bracers are known from Portugal, six come from Brittany and another six from the Paris Basin (Salanova 2004, 69-71). In neighbouring Britain, 95 (68 from England, 24 from Scotland) bracers have been found (Smith 2006), but most of these are four-holed.

At least half of all Irish bracers are red in colour, though dark grey, brown or black examples also occur in smaller numbers (Roe and Woodward 2009; Harbison 1976, 6). This is in contrast to the Atlantic Façade, where bracers are mostly grey (Laure Salanova pers. comm.), as well as Britain where these are mainly blue/grey or green/grey variations and only three red bracers are known (Woodward et al. 2006, 534). The strong emphasis
on red bracers in Ireland may indicate links with central Europe where these are common (Sangmeister 1964).

Roe and Woodward (2009) observed that only three main types of stone were used in the manufacture of Irish bracers: jasper, porcellanite and a mixture of fine-grained siltstones, mudstones and shales. The selective use of these stone types may have been motivated by the symbolic values attached to these materials. This is illustrated by the use of porcellanite from Tievebulliagh, Co. Antrim which was traditionally used for making polished stone axes (Roe and Woodward 2009; Cooney and Mandal 1998, 58). The brown and grey bracers were made from fine-grained sedimentary rocks such as siltstones, mudstones and shales that were also used in the manufacture of polished stone axes in Ireland (Cooney and Mandal 1998, 81; Roe and Woodward 2009). This strongly parallels the use of stone axe material to make bracers in England and Scotland (Woodward et al. 2006).

9.5.2 The condition of the bracers

Harbison (1976, 4) observed that over one third of all Irish bracers were damaged including examples that had been broken, some of which were subsequently reworked to form smaller bracers or pendants. More recently, Roe and Woodward (2009) identified an even higher rate of pre-depositional breakage (61% of 43), reworking and repolishing. Compared to those made from other stone types, the jasper bracers seem to have been specially selected for this treatment and these display a much greater rate of breakage (60% of 27 red bracers, compared to 34% of 26 dark coloured bracers). Indeed, at least 13 red (see Fig. 5.13), but only four dark coloured bracers have been deliberately snapped or sawn in half (Roe and Woodward 2009). Broken bracers also occur in Britain but in far smaller numbers (ibid). It has been suggested that these were deliberately broken so that they could be employed in processes of social enchainment whereby pieces were taken away by different groups post-breakage as symbols of their shared relationships (Woodward et al. 2006, 536 Roe and Woodward 2009).

9.5.3 Hoard versus Single Find

At least three bracers have been discovered as single finds without any other associations and there is only one record of bracers occurring in a hoard (see Catalogue 6). Two bracers (one near-complete and one broken) were found in a box bound with a gold band, together with two gold discs and several jet beads within Corran bog, Co. Armagh (Wilde 1857, 89; Case 1977b, 21).
9.5.4 Context: Manmade versus Natural

Though most bracers lack contextual details, five bracers have been found in five manmade contexts while at least four have been recovered from three natural places, all of which were in wetlands (see below). A further three bracers have dryland findspots but these seem to have been discovered as unstratified stray finds and it is not possible to decipher their original depositional context. Although it cannot be proven, it does seem quite likely that a large proportion of the 100 uncontexted bracers were found in natural places. This is supported by the fact that only five bracers have been discovered in the course of the highly numerous excavations of archaeological sites conducted in Ireland. All four bracers recorded as being retrieved from natural places were found in bogs (see Chapter Seven). This includes the two from the Corran hoard (see above), another from a bog at Ironpool, Co. Galway found while turf cutting (Costello 1944) and an example that was discovered a few centimetres from the base of the the blanket bog at Carrowkeel Mountain, Co. Sligo, near the passage tomb complex (see Table 9.5 and Chart 9.11, Watts 1960, 115; Harbison 1976, 24).

The five bracers from manmade places were found in a range of contexts that are predominantly of a ceremonial or funerary character. At Drumstaple, Co. Derry, a vessel (of unknown type) containing cremated bone and a bracer was reported as having been discovered by a farmer; however both the sherds and bracer are now lost (Harbison 1976, 7). Three fragments of a bracer were found in a sub-megalithic cist located next to a standing stone at Furness, Co. Kildare, along with the cremated remains of two adults (a male and possible female), and a sherd of possible 'domestic' Beaker pottery (Macalister et al. 1913; Macalister 1928; see Chapter Five). A stone object found in the court tomb at Ballywholan, Co. Tyrone (that is now lost) was described as being red in colour with a perforation at both ends and a plano-convex section (Kelly 1985, 162). This is almost certainly a Type A bracer. The exact context and associations of this bracer are unknown, but comparison with the deposition of Beaker objects in other earlier Neolithic megaliths suggests that its placement may be more directly related to ceremonial rather than sepulchral practices (see Chapter Five).

At Longstone Cullen, Co. Tipperary, a two-holed Type A bracer that had been snapped in half was found with an encrusted urn. Although Beaker pottery was also present on this site, the contextual association of the bracer with this later form of pottery suggests that it was deposited as an heirloom (Helen Roche pers. comm.). Only one bracer was retrieved from a possible 'domestic' context at Rathmullan, Site 10, within the Boyne Valley Co. Meath. This fragmented (Type A2 -ZTPC) bracer occurred within a spread of occupation
debris along with 250 Beaker sherds, the foot of a polypod bowl and lithics (Bolger 2001). This bracer is loosely dated by a burnt longbone from a pig that was also present within this deposit which produced a radiocarbon date of 2460–2200 BC (SUERC-31920: 3850±30 BP) (Fintan Walsh pers. comm.). This is the only radiocarbon date from a context containing a bracer in Ireland. Harbison (1976, 27 and Pl. 18, No 94) catalogued a bracer found in a spread at Site C at Lough Gur, Co Limerick; however as has been recently observed by Fiona Roe and Ann Woodward (2009), this object is best interpreted as a pendant.

Interestingly, although bracers have never been found in any passage tomb, these artefacts do appear to display a spatial association with these monuments. As well as the aforementioned example found near the Carrowkeel passage tomb cemetery, another two have also been discovered as stray finds in similar locations. A fragmented (Type A2 - 2SPC) bracer was discovered in topsoil 500 m east of the passage tombs at Fourknocks (King 1999) and another (Type B2) was found within 400 m of Cairn K at Lough Crew, Co. Meath (Cooney 1987).

9.5.5 Associations

Bracers have only been found with other objects on five occasions – all of which have been mentioned above. The associated objects include the two gold discs and jet beads from Corran bog, the pot of unknown type from Drumstaple, the Encrusted Urn from Longstone Cullen, the probable Beaker sherd from the Furness cist and the 250 Beaker sherds from the spread at Rathmullan that also included the foot of a polypod bowl.

9.5.6 The distribution of bracers

48 of the 112 bracers from Ireland have no recorded provenances and this means that only an incomplete distribution can be mapped. Based on this, these objects seem to have been dispersed throughout the country (see Fig. 9.21), though not as widely as Beaker pottery (see Fig. 9.2). The majority (55) of bracers are recorded as finds from the northern part of the country including Counties Sligo, Donegal, Tyrone, Derry, Armagh, Down and Antrim. A particularly dense concentration (38) occurred within Co. Antrim and many of these bracers are lacking exact details of location and share the same provenance. As well as those from the northern counties, seven bracers have also been recovered from a band of land stretching across the middle of the island in Counties Galway, Westmeath, Kildare and Meath, four of which occur in the latter. Only three bracers have been discovered further south in Counties Tipperary and Limerick. There are large swathes of the country
where bracers have not been found including the south east, the south-west and much of the western seaboard. Compared to the 20 bracers known to have been found elsewhere in Ireland, the large numbers of these — 38 from Antrim — from the northeast is very curious. While it might be tempting to dismiss these as modern fakes, many of these bracers have been broken in antiquity, thereby strongly suggesting that these are genuine objects (Ann Woodward, pers. comm.). Most of these bracers came from mid-Antrim, an area that also produced large amounts of Neolithic projectiles (Woodman et al. 2006, 268–275). It remains possible that this concentration may be the result of some bias associated with the prominence of antiquarians and collectors operating in this area in the 19th and 20th centuries (see Woodman et al. 2006, 309). While it is beyond the remit of this study, it may be revealing to examine which bracers came from which antiquarian collections and the role of collectors in the creation of what seem to be archaeological hot-spots.

9.5.7 Summary and discussion of the deposition of bracers

Overall then, although bracers do occur in a slightly wider set of contexts than most other non-ceramic Beaker objects, there are still strict preferences in the way that these were treated. It has been argued here that these were probably predominantly deposited in natural places. They have rarely been recovered from manmade contexts and are seldom found in a funerary setting as they so often are elsewhere in Europe. The discovery of the bracer in the cist at Furness — the most obviously Beaker-associated sepulchral context in which these objects have been found in Ireland — seems quite exceptional. A total of 32 Beaker-associated burials including 18 cremations and 14 inhumations have been discovered within nine wedge tombs, the construction and use of which has been firmly dated to the period 2400–2050 BC (see Chapter Five). However, bracers have never been found in these monuments. This dearth seems to suggest that a deliberate choice was made not to deposit these in that context, perhaps because of the fact that they contained funerary remains. There seems to have been a desire or need to keep bracers at a remove from monuments and settlements (see Chapter Seven). Furthermore, Beaker pottery has only been found with bracers on two occasions in Ireland, suggesting that it was important to maintain a separation between bracers and other objects including Beaker pottery.

It was not just their depositional context that was quite restricted or circumscribed. Specific colours and types of stone including historically significant stone types were preferentially selected for the manufacture of these in a favoured shape and style. Red bracers were also specially chosen for particular forms of depositional treatment including their fragmentation and re-working. The colour of these bracers seems to have held
special significance for people in Ireland at this time (see Cooney 2002; Jones 2002; Van Gijn 2008, 194).

The selectivity involved in the creation of bracers suggests that a range of important meanings were being reproduced within and through these objects. Indeed some of the stone materials already possess specific values as these had traditionally been used for the manufacture of polished stone axes. The production, fragmentation, reworking and eventual deposition that occurred throughout the long use-lives of some bracers implies that they were seen as highly symbolic objects that fulfilled important social functions (see Brück 2006b, 76).

Recent studies have found that the majority of bracers from burials in Europe were not simply utilitarian tools. When found with skeletons, these predominantly occur on the outside of the arm rather than on the inside where a functioning bracer would have guarded the wrist (Fokkens et al. 2008, 112–6). Microscopic examinations of English bracers have revealed very little evidence for wear and many may never have been used before their deposition (Woodward et al. 2006). The materiality, size and form of many bracers suggest that these could not have functioned as wrist-guards (Fokkens et al. 2008, 117). Furthermore, some are so finely made that they would have shattered upon any impact (ibid). Impractical Irish examples include eight bracers that are less than 5cm long.

It has been argued that stone bracers represent special purpose ornaments that had a symbolic function (Woodward et al. 2006; see also Fokkens et al. 2008). These had cosmological connotations and were deposited in graves as part of the exchange of objects between people and the supernatural (Fokkens et al. 2008). These objects carried particular meanings that were appropriate for gifts to the ancestors and that served to construct desirable forms of social identity for the deceased (ibid). In Ireland, bracers rarely occur in graves, but their deposition seems to have been as codified and circumscribed as those found in a funerary context elsewhere (see Chapter Ten).

9.6 COPPER DAGGERS: CONTEXT AND DEPOSITION

There are 20 copper daggers known from Ireland excluding the example from the Killaha hoard, Co. Kerry, which appears to post-date the main currency of Beakers in Ireland (see Chapter Seven, see Catalogue 2). Ten of these are simple tanged blades (Type Knocknagar), while the other ten display rivet holes (Type Listack) (Harbison 1969b). Importantly, none have ever been found with Beaker pottery in Ireland.
9.6.1 The condition of copper daggers

A single tanged and riveted copper dagger from the Whitespots hoard was examined for use-wear by Katharina Becker (2006). She observed that this had a blunt tip and was quite damaged along one cutting edge (ibid, 89). However, this is not to say that all copper daggers have been found in a similar condition. Other copper daggers such as that from the Silees River show absolutely no signs of use (Sheridan and Northover 1993, 61).

9.6.2 Hoard versus Single Find

17 copper daggers were discovered as single finds, while three were deposited within two hoards from Knocknagur, Co. Galway, and Whitespots, Co. Down (see Catalogue 2). In both hoards, the daggers occurred with thick-buttressed copper axes. At Knocknagur, the hoard comprised a tanged copper dagger, three Lough Ravel thick-buttressed copper axes and three double pointed awls (Harbison 1969b, 10 and 19). The hoard from Whitespots consisted of a tanged copper dagger, a tanged and riveted copper dagger and a Lough Ravel thick-buttressed copper axe (Case 1966, 162; Harbison 1969b, 7 and 18).

9.6.3 Context: Manmade versus Natural and Wet versus Dry

No information is available regarding the context of eight (40% of 20) copper daggers. There is no record of any copper daggers being recovered from any burials or other man-made contexts in Ireland; instead these have all been discovered in natural places (see Chapter Seven). At least 10 daggers (50%) are from wet contexts: six (30%) of these including that from the Knocknagur hoard have been found in six bogs, while four (20%) were retrieved from three rivers (see Chart 9.12). A minimum of two daggers have been recovered from a dryland context. Both were found as part of the hoard within a rock crevice at Whitespots, Co. Down (Case 1966, 162; Harbison 1969b, 7 and 18).

Significantly, early copper daggers (Type Knocknagur) have overwhelmingly been found in bogs (see Chapter Seven). The four daggers from rivers are all of the tanged and riveted type (Listack) whose currency is of a slightly later date (see Chapter Seven). The presence of these daggers in rivers seems to represent a shift in practices occurring c. 2100 BC, at which time river deposition dramatically increased (Needham 1988, 230 and 241).

9.6.4 Associations

Daggers predominantly occurred as single finds and so have few associations. They have only been found alongside other objects within the two hoards from Knocknagur and Whitespots, where they were deposited with copper axes, awls and other copper daggers (see above). Thus, these metal blades have not been found with Beaker pottery in Ireland,
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despite occurring regularly with this ceramic in other regions such as Britain (Harbison 1979, 98).

9.6.5 The distribution of tanged copper daggers
Tanged copper daggers predominantly occur within central Ireland in present-day Counties Galway, Leitrim, Offaly, Meath, Cavan, and Fermanagh (see Fig. 9.22) and there is a clear concentration of these in the less well drained areas of the Midlands. Only a few northern and southern outliers are known, with few or none at all occurring in large parts of the island such as the south, southeast or northeast and west. Thus, the distribution of the daggers does overlap with that of Beaker pottery though the ceramics are not that common in the midlands and daggers are often lacking from the areas where Beakers are most common (see Fig. 9.2).

9.6.6 Summary and discussion of the deposition of tanged copper daggers
Overall then, copper daggers are predominantly discovered as single finds in wet natural places, particularly bogs. They rarely occur in hoards and have only a few associations with other objects, mainly copper axes. The repeated occurrence of single daggers in bogs suggests that their deposition was highly structured. It seems to have been important to maintain a separation between these and other objects particularly Beaker pottery. Their deposition in natural places away from settlements or burials suggests that it was appropriate to keep daggers at the boundaries of the lived-in landscape. This is in stark contrast to the treatment of these blades in Britain and other parts of Europe, where they were deposited in graves along with Beaker pottery (Needham 1988).

Daggers appear to have been precious objects (see Salanova 1998b and 2007, 221). These were specially crafted from copper and seem to have been items of exchange. Based on the numbers of these known in Ireland, they appear to have been quite rare. The usefulness of these objects as tools has been questioned and their main function seems to have been as symbolic representations of particular concepts (see Nielsen 2009). These items were included in graves to act as gifts to the ancestors and also to construct a form of male identity for the deceased that was related to the social ideal of the man as warrior-hunter (Thomas 1999, 157–9; Vander Linden 2004, 41; 2006a and b, Case 2004c, 29; Fokkens et al. 2008). Debate continues as to whether daggers symbolised martial values (e.g. Sarauw 2007a and 2008) or recalled the qualities of a hunter and the use of blades to give the coup-de grâce to hunted game (Case 2004c, 29; Harding 2006, 506–7). Nielsen (2009) has convincingly argued that both flint and copper daggers (as well as halberds) were
functionally inappropriate for use as weapons. Instead he has proposed that these were special purpose objects that may have been used for ritualistic butchery. Though, some recent use-wear analysis of Grand Pressigny daggers from Corded Ware burials suggests these were used to harvest cereals (Van Gijn in press).

Either way, while the exact meanings of the supra-regional tanged copper daggers remain unknown, it is clear that these symbolised key values. Indeed as many archaeologists have argued daggers were inalienable objects of exchange and would have played an important social role (e.g. Sarauw 2008; Vandkilde 2005a). Ultimately, this strongly influenced how these precious objects were treated. In Britain, they were placed in graves as part of funerary ceremonies, while in Ireland they were probably deposited during collective ceremonial activities in natural places (see Section 9.12 and Chapter Ten).

9.7 LUNULAE: CONTEXT AND DEPOSITION

A minimum of 92 lunulae have been found in Ireland, both as single finds and in hoards, yet like so many other objects on this island, these have never been found in association with Beaker pottery (see Catalogue 8).

9.7.1 The condition of the lunulae

Some lunulae show evidence for having been repeatedly rolled and unrolled or folded over (see Fig. 9.23). Very few are recorded as having been found in a rolled position (Cahill 2005b, 53–71), though the examples from the hoard from Carrickmore, Co. Tyrone, may still have been rolled up upon their discovery (see below). Some lunulae also seem to have been deposited in protective containers such as the lunula from Crossdoney, Co. Cavan, which was found in a wooden box or those from the hoard found within a bog in Co. Sligo that seem to have been rolled and unrolled before being encased in leather or a cloth (see Cahill 1994, 90).

9.7.2 Hoard versus single find

Lunulae were predominantly deposited as single finds (72 out of 91) and a far smaller proportion (19 out of 91) of these were found within a total of eight hoards (Table 9.6). These are overwhelmingly one-type hoards comprising pairs of lunula, though groups of three or four have also been found. The only recorded instance of lunulae occurring with other types of objects was within the Coggalbeg Hoard, Co. Roscommon, where a lunula was discovered along with two gold discs during peat cutting (Fig. 9.24, Kelly and Cahill 2010).
9.7.3 Context: manmade versus natural and wet versus dry

Contextual information is only available for 31 lunulae comprising 14 single finds and another 17 from seven hoards. A total of 61 examples (59 single finds and one hoard) from 60 findspots are lacking sufficient locational data.

Based upon the available information, most lunulae — 28 (31% of 91) — have been found in natural places (see below) and only four (5%) have been discovered at two manmade contexts, both of which were megaliths (Table 9.6). A hoard of three lunulae is reported to have been found at a megalith at Cairnlochran, Magheramesk, Co. Antrim (Taylor 1980, 142), while a single lunula occurred within or near another megalith at Highwood, Co. Sligo (Wood-Martin 1888, 180–1; Cahill 2005a, 276). Unfortunately further details of these rare discoveries are lacking.

A minimum of 15 (16% of 91) lunulae have been found in 9 dryland locations (see Chart 9.13), four of which came from the two manmade contexts mentioned above and 11 (five single finds and six from two hoards) were retrieved from seven natural contexts (see Chapter Seven). Two lunulae were found on mountains underneath large boulders. One lunula came from a quarry, another from a rocky context and three examples were retrieved from fields: one of which was found under a boulder at Carrickmore, Co. Tyrone (Frazer 1897), and two of which were found together under a boulder at Rathroeen, Co Mayo (Taylor 1970, 70; Cahill 2005b, 57). A hoard of four was retrieved from a spread of gravel at Dunfierth, Co. Kildare (Eogan 1994, 34).

At least 15 lunulae were recovered from a total of 11 wet places, mainly from bogs (see Chart 9.13). Only one lunula was found in a lake and none have been found in rivers. So, 14 of all lunulae (15% of 91) came from a total of ten boglands. This includes six single examples such as that found “under twenty feet of peat” near Enniskillen, Co. Fermanagh (Frazer 1897, 65) and another eight from four hoards including the aforementioned specimen from Coggalbeg and the three folded lunulae that were recovered from Banemore bog, Co. Kerry (Cahill 1983, 78–80).

9.7.4 The distribution of lunulae

Lunulae seem to be fairly evenly spread throughout the island of Ireland (see Fig. 9.25), though they are notably absent from the southeast of the country, where only one example occurs in Co. Wicklow. Although the distributions of lunulae and Beaker findspots do overlap to some extent, clusters of both are mutually exclusive (see Fig. 9.2). This is exemplified by the eastern coastal counties of Louth, Meath, Dublin and Wicklow, where this ceramic is plentiful but very few lunulae have been recovered. Denser concentrations
The context and deposition of Beaker objects in Ireland

of lunulae occur across the central to northern midlands where 20 of these have been found and also in the southwest where eight lunulae have been recovered, four of which came from present-day northern Kerry. Significantly, all of these are areas where Beaker pottery has not been found in large amounts (see Section 9.2.14 and 9.2.17). Moreover, an oppositional relationship has also been observed between the find spots of lunulae and wedge tombs in the southwest (O’Brien 2004, 570–2; Cahill 2005a, 277). This patterning is probably a reflection of the differential depositional treatment of Beakers and lunulae. Unlike Beaker pottery (see below), lunulae were largely excluded from man-made contexts and so were generally deposited away from monuments, in natural places, particularly bogs.

9.7.5 Summary and discussion of the deposition of lunulae

Overall then, lunulae were predominantly deposited as single finds and to a lesser degree in hoards along with other lunulae, but are rarely ever found in association with other objects. Lunulae chiefly occur in natural places and most have been found in bogs. All of this strongly suggests that the deposition of these objects was very restricted and that it was important to keep these apart from other ornaments.

The recurrent aspects of their deposition and the uniformity of the damage to lunulae indicate that these were being used in a consistently circumscribed fashion. Lunulae seem to have been special-purpose objects of ritual significance whose main function may have been symbolical. Indeed, these probably needed to be deposited in very specific ways within particular places because of their enduring potency as symbols. The marking of some lunulae deposits with boulders and their occurrence in contexts such as bogs from which they could be retrieved suggests that these were curated objects that were repeatedly hidden and reclaimed (Cahill 2005b; Becker 2008). Most of these objects seem to have been stored (on a permanent or temporary basis) at a distance from everyday activities in suitable places such as bogs. When needed, these could be resurrected for use in particular ceremonies and their recovery and deposition may even have formed a part of these ritual activities (cf. Dickins 1996).

9.8 SUNDISCS: CONTEXT AND DEPOSITION

22 gold discs of broadly contemporary date with Beaker pottery have been found in Ireland (see Fig. 9.26 and Catalogue 1). This excludes two later examples from Ballydehob (Sparrogoda) and Ballyvourney, Co. Cork (see Cahill 2005a, 260–274) which post-date the currency of Beakers in Ireland.
9.8.1 Condition

While most gold discs are in good condition, some such as the pair from Kilmuckridge, Co. Wexford (Cahill 1994 and 2005a) or the single example from Lough Gur (Ó Ríordáin 1954, 384–6; 410–11) display evidence for having been folded in a similar fashion to lunulae.

9.8.2 Hoard versus single find

Single discs have only been recovered in Ireland on two occasions: as an isolated find in Castle Treasure, Co. Cork (Case 1977b, 20) and as a multiple find within a spread of habitation debris at Lough Gur (see Chapter Three). However, these discs are predominantly found as pairs (20 discs), and mainly within one-type hoards (16 discs). Discs have been found with other objects in merely two hoards from Coggalbeg, Co. Roscommon and Corran, Co. Armagh. The Coggalbeg hoard comprised a pair of gold discs and a lunula found in a bog (see Fig 9.24; Kelly and Cahill 2010), while the Corran hoard consisted of a pair of discs that were found along with two bracers and jet beads in a wooden box that was also found in a bog (Case 1977b, 21).

9.8.3 Context: manmade versus natural

No information is available regarding the context of nine discs (41% of 22). Of those with such details, most — 10 (46% of 22) — have been found in natural places: four from wetlands and six from drylands (see below and Table 9.4). A total of three gold discs (14% of 22) have been discovered in two manmade contexts at Lough Gur, Co. Limerick, and at Ballyshannon, Co. Donegal. The former of these comprises a very small undecorated gold disc that was recovered from a deposit of habitation debris sealed under a Late Bronze Age wall at Site D, Lough Gur in a context that included Beaker pottery (see Chapter Three). Antiquarian accounts report that a pair of discs was found in a cist at Ballyshannon, though further information is not available for this (Eogan 1994, 21; Case 1977b, 30–1).

9.8.4 Context: wet versus dry

At least nine discs (41%) have been recovered from five dryland contexts (see Table 9.7). Three of these discs (14% of 22) come from the two manmade contexts mentioned above and the other six examples (27% of 22) were retrieved from three natural find-spots, all of which were located on agricultural land (see Table 9.7). Wetland contexts have produced a minimum of four discs (18% of 22): these occurred within two hoards from two bogs: Corran and Coggalbeg (see Chart 9.14 and Table 9.7)
9.8.5 **The distribution of sundiscs**

Gold discs have a wide distribution throughout Ireland (see Fig. 9.27), but they predominantly occur in two distinct concentrations in Counties Armagh, Monaghan, and Roscommon, all within the northern midlands and also along the southern coastline within Counties Cork and Wexford. Outliers have also been found to the west in Co. Mayo and north in Donegal.

9.8.6 **Summary and discussion of the deposition of sundiscs**

In summary, gold discs are mainly found in pairs within one-type hoards from a mix of both wet and dry natural places consisting of bogs and fields. These discs have only been found with other objects in two hoards, both from bogs. All of this suggests that the deposition of these items was very structured. It seems to have been important to keep these separate from other objects and to deposit these in particular locations away from settlements and burials. Evidence for folding on some discs like that also present on lunulae as well as their deposition in contexts such as dry places and bogs from which they could be retrieved suggests that these may also have been special-purpose objects which were curated and then used episodically for ceremonial occasions.

In Britain, these objects generally occur in graves as was the case at Mere and at Farleigh Wick, both in Wiltshire (Eogan 1994, 18), and also at Banc Tynddol, Wales (Timberlake *et al* 2004). In Brittany, Spain, and Portugal, these discs have been found with secondary Beaker burials in earlier Neolithic megaliths (Taylor 1994, 45 and 52). These supra-regional ornaments seem to have functioned as symbols that enabled the expression of various concepts that were important to widely dispersed communities at this time.

9.9 **Gold bands and basket-shaped earrings: context and deposition.**

Three basket-shaped earrings have been found in Ireland: an unprovenanced pair and a single find from Benraw, Co. Down (a.k.a Deehommed or Dacomet) (Fig. 9.28) O’Connor 2004, 207–8; Taylor 1994, 46). Unfortunately, contextual details are lacking for all three of these (see Catalogue 4).

Five decorated gold bands have been found in Ireland. All of these were discovered at Belville, Co. Cavan in a stream-bed that formed a tributary of the River Erne\(^{18}\) (Cahill,

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\(^{18}\) Previously there had been some confusion about whether or not all of these were found in the stream, but this has recently been clarified by Mary Cahill (2005a, 267).

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The context and deposition of Beaker objects in Ireland 2005, 267). The gold bands comprise two pairs of sub-rectangular plaques with round ends and central perforations, as well as a single band composed of four fragments (Fig. 9.29). The single band is thought to be a diadem (Eogan 1994, 19, Case 1977b, 27), while Taylor (1979, 237; 1994, 46) has observed that the four plaques may be considered as a form of basket-shaped earrings. All of these certainly represent sheet gold objects that would have ornamented the forehead, hair or ears and in this regard, can be grouped along with basket-shaped earrings.

Overall then, eight rolled sheet gold head ornaments have been discovered both as hoards and as a single find from a total of three findspots. Contextual information is only available for the five head ornaments which were found in a wet natural place represented by a stream. Significantly, the basket-shaped earring from Benraw and the bands from Bellville also show evidence of having been rolled or folded in a similar fashion to lunulae and gold discs (see above, Cahill 2005b).

9.10 BATTLE AXES: CONTEXT AND DEPOSITION

A total of 32 early battle axes have been found in Ireland, all of which seem to have been discovered as single finds (Simpson 1990). Contextual information is only available for four of these: two come from the River Shannon, one was reputedly found within an old copper mine, somewhere in Co, Cork and one that is now lost was recovered from the chamber floor of a passage tomb at Sess Killgreen, Co. Tyrone (after Simpson 1990 and 1996). There is no record of these occurring in any graves along with Beakers or Beaker related materials in Ireland as is commonly the case in Britain (see Simpson 1996). Nor indeed is there any evidence that these were ever deposited in association with Beaker pottery. The absence of these objects from hoards and their lack of associations suggest that they were deposited in a circumscribed fashion. Based on the treatment of the other supra-regional ornaments that form part of the so-called Beaker package in Ireland, it seems probable (to me) that the uncontexted battle axes were probably deposited in natural places.

9.11 OVERALL DISCUSSION: COMPARATIVE OVERVIEW OF THE CONTEXT AND DEPOSITION OF BEAKER OBJECTS IN IRELAND

So far in this chapter, we have analysed the context and deposition of each Beaker artefact-type on an object by object basis. Here, I conduct an overview of the treatment of
the various Beaker objects in Ireland in relation to each other. This involves examining aspects such as the types and quantities of artefacts occurring as (1) single finds or in hoards, (2) in wet or dry, as well as (3) man-made or natural places, (4) the main contexts in which these objects were deposited and also (5) the overall distribution of these various objects across the island. Such a comparative approach serves to highlight the wider patterns in the depositional practices of this time.

9.11.1 The deposition of hoards versus single finds: an overview

There is clear patterning in the deposition of Beaker objects in Ireland. Like Beaker pottery, polypod bowls mainly occur as multiple finds. In contrast, bracers, battleaxes, lunulae and copper daggers mainly occur as single finds, whereas V-perforated buttons, gold ear ornaments and sundiscs are chiefly found within hoards (see Chart 9.15). Most of these either rarely or never occur with other types of objects, and only a small quantity of a very restricted range of items such as bracers, buttons and sun discs have ever been found with other artefacts (see Chart 9.16). A bracer was found with Beaker pottery in a spread and a cist, bracers were also discovered with gold discs in the Corran Bog hoard, in addition gold discs were recovered with a lunula in the hoard from Coggalbeg Bog. Significantly, arrowheads and polypod bowls are the only items from the Beaker package to have been found alongside Beaker pottery in Ireland with any kind of regularity. Other Beaker objects are almost never found with this ceramic. The only exceptions to this are the two aforementioned bracers and a discbead necklace that was found alongside Beakers within a pit (see Chapter Four).

9.11.2 The deposition of Beaker objects in wet versus dry places

Although near-equal quantities of artefacts such as lunulae, V-perforated buttons and bracers seem to have been found in both wet and dry places (see Charts 9.17 and 9.18a and b), this is not the case for all types of Beaker objects. Daggers and rolled gold sheet head ornaments are predominantly found in watery places. More gold discs have been found in dryland contexts than wet and Beaker pottery has never been found in a wetland context.

9.11.3 The deposition of Beaker objects in manmade versus natural places

Items such as battleaxes and bracers seem to occur in both natural and manmade types of context in almost equal numbers, though; this finding is complicated by the lack of contextual information available for both. Other objects including tanged copper daggers, lunulae, gold discs, gold head ornaments and V-perforated buttons are either exclusively
or predominantly found in natural places (see Chart 9.19a and b and 9.20). This seems to have been the preferred depositional context for most of the objects forming the Beaker repertoire. Overall, very few of these supra-regional artefacts have been discovered within manmade archaeological features, yet most of the Beaker (99%) ceramics in Ireland has been retrieved from these.

9.11.4 The patterning in the deposition of Beaker objects in Ireland

The extent of the patterning within the depositional record becomes even more apparent when the range and quantity of Beaker objects occurring in each of the main context types is examined. Beaker pottery and lithics such as scrapers and debitage occur in all of the main manmade contexts, but as stated above, this ceramic has not been found in any wet places (see Table 9.8). Many objects only occur in quite a restricted range of contexts and seem to have been excluded from many others. For example, no Beaker arrowheads have been discovered in timber circles, disc beads have only been found in pits, polypod bowls have been discovered in pits, spreads and bogs, while copper daggers are exclusively recovered from bogs, rivers and natural dryland places.

Other objects such as bracers, V-perforated buttons and gold discs occur in a slightly wider array of contexts. Bracers have been recovered from a spread, a court tomb, a cist and a bog, while buttons have been retrieved from passage tombs, cists, bogs and dryland natural places (see Table 9.8). However, very few of these have been found within most of these types of spaces and it seems that that their deposition was also quite constrained. In many cases, only one example of an object has been found in a particular context and most of these objects were predominantly deposited in only one or two types of place (see Table 9.8 and 9.9). For example, a single gold disc was found in both a spread and cist, but these two instances represent an aberration when compared to the higher numbers (12) that have been found within bogs and natural dryland contexts. A much greater proportion of bracers, buttons, daggers and lunulae have been found in bogs than in any other context (see Table 9.9). Indeed, with the exception of Beaker pottery, bogs seem to represent the preferred context for the deposition of supra-regional objects in Ireland (see Chart 9.21).

Not only were many Beaker objects deliberately kept separate from each other, but the deposition of these was also contextually compartmentalised. A restricted set of objects occur in settlement contexts as represented by pits and spreads. The former predominantly received deposits of occupational debris comprising potsherds, lithic debitage and a very small number of rare Beaker-associated items like disc beads and polypod bowls. Spreads consist of very similar material to that found in pits, but they
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contain much larger quantities of these, as well as a wider range of artefacts. These include a gold disc, a copper awl, two metal axes, ceramic polypod bowls, and a bracer, many of which are rarely found in other man-made contexts.

Timber circles received comparable kinds of deposits to those often found in pits. Indeed, pit-like depressions were dug into the remains of the rotting postholes that formed these wooden monuments and these holes were then backfilled with scoops of accumulated settlement debris comprising Beaker sherds, stone tools and debitage (see Chapter Six). However, other items that have been found in pits such as barbed and tanged arrowheads were completely excluded from deposition in timber circles.

Within a funerary setting, the deposition of Beaker material was just as circumscribed. For example, quite a number of V-perforated buttons have been found within passage tombs — one of only two manmade context-types to have contained these ornaments — yet very few Beakers seem to have been placed within these. The paucity of this pottery from these tombs is more startling when one considers the very large quantities of Beaker sherds from the entrance areas of the tombs at both Knowth and Newgrange (see Chapters Three and Five).

Wedge tombs have produced far more Beaker pottery than any of the other classes of megalithic monument. These seem to have been deposited as complete vessels, while most of the Beakers from other megaliths seem to have been deposited as sherds. Indeed it is within wedge tombs that the largest body of evidence for Beaker-associated burials have been found. The inclusion of complete vessels in these tombs was almost certainly related to funerary rites that seem to have been conducted almost exclusively within these monuments (see Chapters Five and Ten). Significantly, despite the discovery of many Beaker pots as well as number of Beaker-associated burials in wedge tombs, almost no typical Beaker items other than arrowheads have been found within them.

Bogs represent another context where deposition was highly codified. Beaker pottery seems to have been totally excluded from them, yet these places received more deposits of many Beaker items than any other context and most of the objects that are common in bogs are rarely found in any other context.

All of this suggests that the treatment of earliest Bronze Age items was both multifaceted and very circumscribed. One of the main aspects of which was the maintenance of a separation between items regularly found in settlements or monuments and those that were almost exclusively deposited in natural places. Beaker pottery and lithics that were used in everyday occupational activities have predominantly been found within socially
constructed landscapes. This multipurpose ceramic was excluded from natural places (other than caves) and could only be deposited within the confines of the manmade world.

On the other hand, many of the classic supra-regional components of the Beaker package were either excluded or deliberately removed from everyday contexts and instead were deposited in marginal places at a distance from settlements, graves and monuments. The treatment of these objects mirrors the type-specific deposition of contemporary copper axes and halberds which are mainly found as single finds within wet natural places, particularly bogs (see Chapter Seven and Nine, after Becker 2006; O'Flaherty 1995), though axes and halberds do occasionally occur in one-type hoards and roughly half of all the contexted copper axes that were found within hoards come from dry natural places (based on information from Becker 2006).

9.11.5 The distribution of Beaker pottery and objects in Ireland

Largely due to recent discoveries of Beaker pottery, the known extent of Beaker-associated activity in Ireland has been radically transformed over the last decade. An examination of the distribution of all the Beaker objects and ceramics featured in this study reveals that Beaker deposits of one kind or another were quite widespread across the island (see Fig. 9.30). However, there are some areas, where particular concentrations of certain object types occur and other locales, where these are scarce. For example, V-perforated buttons are exclusively found in the northern half of the country, a fact that probably reflects the stronger links and proximity of this part of Ireland to northern Britain.

Recent excavations have extended the distribution of Beaker pottery into regions where it had been absent such as south Leinster, mid-Munster and along the western Atlantic fringe. Previously unrecognised cores of intensive activity have now been identified at places such as the northernmost foothills of the Dublin–Wicklow Mountains, the Dundalk Bay area of Co. Louth or the Blackwater Valley in Co. Cork. These new discoveries have augmented the status of the Lower Boyne Valley settlement core as the greatest concentration of Beaker sites in Ireland. Indeed, a minimum total of 14314 sherds from 573 vessels — representing almost half of the 28119 Beaker sherds found in Ireland — have been retrieved just from this area. Most of these assemblages have come from the artefact-rich spreads of occupational debris at Monknewtown, Newgrange and Knowth (see Chapter Three).

Evidence for extensive Beaker activity has been long been recognised at Lough Gur, Co. Limerick (e.g. Ó Riordáin 1954; Grogan and Eogan 1987). No recent discoveries have been
made in this area, yet it continues to stand out because of its exceptionally high density of sites producing large quantities of Beaker pottery. A total of almost 6000 Beaker sherds (21% of the total 28119 sherds from Ireland) have been recovered from 15 sites in this complex; unfortunately the majority of this was found in residual and/or disturbed contexts (see Chapter Three).

Despite the growth of new discoveries over the past decade, some gaps in the distribution of Beaker ceramics still remain. This is most notably the case in the midlands where Cappydonnell, Co. Offaly, represents the only known site to produce this pottery. Elsewhere, Beakers have rarely been found in west Galway, the southwest coastal fringe and northeast Ulster, particularly Co. Antrim. However, non-ceramic Beaker objects that were generally kept apart from Beaker pottery have been found in each of these areas (see above and below).

The present-day distribution of sites producing Beaker pottery in Ireland is very much an artefact of the methods and circumstances by which these sites have been found and is likely to change in the future. This is neatly illustrated by the differences between the distribution and character of such discoveries in other Irish regions compared to Ulster. Most Beaker sites in Munster (66%: 50 of 76) or Leinster (86%: 80 out of 93) were discovered after 1996 and these were almost exclusively found in the course of commercial excavations conducted in advance of construction activity. In contrast, half of all the Beaker sites from Ulster (18 out of 36) were found between 1930 and 1945 during research excavations of upland megaliths by a small group of Ulster-based archaeologists including Estyn Evans, Oliver Davies and Ivor Herring (see Chapter two, Chart 9.5). Indeed, only 13% (5 out of 36) of Ulster Beaker sites have been found since 1996 in the course of commercial investigations and there are comparatively few examples of this ceramic being found in sub-surface features on lower terrain. Instead Beaker sites in Northern Ireland predominantly consist of monuments, particularly wedge tombs located on elevated positions within Counties Tyrone and Derry (see Fig. 9.12).

Only a small number of upland sites including megaliths have been archaeologically excavated in the Republic of Ireland and thus Beakers are relatively scarce from these contexts. The fact that the majority of Beaker sites from the rest of Ireland have been found during excavations carried out ahead of development has greatly influenced their distribution patterns. The engineering requirements of linear infrastructural projects means that certain types of topography such as wetlands in the form of marshes and bogs, as well as upland or steep terrain are generally steered clear of. Equally, upstanding and other known sub-surface archaeological sites, as well as potentially archaeologically
sensitive areas are also generally avoided because of legislative protection designed to ensure their preservation. This means that certain forms of site including monuments and particularly those occurring within upland or wetland zones are rarely excavated. In this regard, archaeological discoveries along motorways or other similar construction projects present quite a biased picture of the past character of an area.

In Leinster and Munster where most Beaker-associated discoveries have been made as a result of commercial, residential and infrastructural development, the influence of the aforementioned selection criteria is clearly visible in the type of sites that are most commonly excavated. The majority of these discoveries consist of pits that lacked any above-ground expression and which have been found in slightly elevated positions within generally low-lying locations. Conversely, very few Beakers have been discovered within megaliths or other monuments in these two provinces and absolutely none have been found in such contexts over the past decade. Indeed only a small number of wedge tombs within the southern half of the country have been investigated (see O’Brien 1999, 86-9) and of these only Labbacallee, Co. Cork (Leask and Price 1936). Baurnodemeeny, Co. Tipperary, Lough Gur, Co. Limerick, Ballyedmonduff, Co. Dublin, and the so-called Entrance Tomb at Cariglong, Co. Waterford have produced Beaker pottery (see Fig. 9.12).

In this regard it is necessary to inquire if the gaps in the distribution of Beaker pottery in Ireland are real or contrived and whether the concentration of sites producing this ceramic in places like north Leinster are genuinely reflective of past patterning or simply due to the intensity of recent large-scale infrastructural development in that area. Are these distributions a product of the differential survival of the archaeological record and of the different means by which this record is revealed? It seems particularly appropriate to question whether the paucity of this pottery from places such as the midlands is merely a reflection of a lack of research in this region.

The archaeology of the central lowlands has received very little scholarly attention. Apart from Co. Meath (Moore 1987) the archaeological inventories for the counties in this region remain unpublished. Although some aspects of this area’s archaeological record have been examined as part of wider studies (e.g. Cooney 1987 and Mount 1997), little or no synthesis has been conducted and overall understanding remains poor. This might suggest that the paucity of Beaker pottery from the midlands is due to a lack of investigation. However in recent times, a number of large-scale archaeological examinations have been conducted prior to the construction of residential developments and linear infrastructure including the M4 motorway (Carlin et al. 2008), the M6
motorway (Anon 2006), and the Gas Pipeline to the West (Grogan et al. 2007). Despite these excavations, very few Beakers or other earlier prehistoric ceramics have been found.

Most of this region appears to have been largely devoid of evidence for human activity in the Neolithic, particularly wetter poorly drained portions with heavy soils that may not have been best suited to early prehistoric agricultural technology (Grogan et al. 2007, 137-9). Indeed it appears that Neolithic pottery and megaliths are largely absent from this region (see Fig. 9.13). For example, no Early Neolithic pottery is known from Counties Offaly, Westmeath, Roscommon or Longford (see Fig. 9.14, Grogan and Roche 2010). Very little Middle Neolithic pottery has been found other than the vessel recovered from a bog at Bracklin, Co. Westmeath (Fig. 9.15, Ó Riordáin 1961, Grogan and Roche 2010, illus. 4). The only Grooved Ware known in this area is from the timber circle at Whitewell, Co. Westmeath (Phelan 2007).

Thus, it seems that the central lowlands remained sparsely populated until after the start of the Early Bronze Age when significant concentrations of burials began to appear along the broad moraine ridges, particularly in Co. Westmeath (see Waddell 1990, Cooney 1987, 131). This seems to represent a major expansion of settlement into new lower-lying areas which began to occur shortly after the appearance of Beaker pottery and escalated considerably during the late stages of its currency (Cooney 2000, 18; Cooney and Grogan 1999, 105, Carlin 2005a). Present evidence seems to indicate that the paucity of Beakers from the midlands is a genuine reflection of the low level of inhabitation of this landscape, both during and at the end of the Neolithic. Concentrations of other Beaker objects including lunulæ, copper daggers and V-perforated buttons all occur in various parts of the midlands, thereby indicating that this area was not devoid of activity at this time (see Fig. 9.30). This patterning seems to be reflective of the practice of depositing supra-regional objects in natural places, particularly bogs that were located away from areas that were intensively occupied.

The paucity of Beaker pottery from the northeast seems curious given that it has a long tradition of settlement as revealed by excavations at places such as Donegore Hill (Mallory et al. forthcoming) and Armalughey (Carlin 2010). Significant assemblages of early and middle Neolithic pottery have long been known from this region (see Case 1961, Sheridan 1995, Grogan and Roche 2010) and a few sites have produced Late Neolithic Grooved Ware (see Roche and Eogan 1999, Brindley 1999a). A large concentration of Food Vessel burials also occur in the area (Waddell 1990, 37; Grogan and Roche 2010, 41, illus. 8). The exceptionally large number of bracers found in Co. Antrim certainly suggests that it was
inhabited in the latter half of the third millennium BC by people who were highly aware of the Beaker tradition.

Elsewhere in Ireland, most locales with a history of Neolithic settlement have displayed evidence for their continued inhabitation at the beginning of the Early Bronze Age and Beaker pottery is commonly found on sites where earlier Neolithic pottery also occurs (see Chapter Three, also see Carlin 2005a). Thus, it seems highly anomalous that Beakers would be so rare in the north east. This perceived absence is more likely to be due to a lack of dissemination of information by archaeologists operating in the region. Indeed, I suspect that many more Beakers than I am aware of have been found in Northern Ireland during the 'boom', particularly in Counties Antrim and Down, but that I simply don't know about them because I am less familiar with the archaeologists working there (see Chapter One).

The absence of Beakers from the southwestern coastal fringe is notable and perhaps surprising given the presence of Beaker pottery at Ireland's earliest copper mine at Ross Island, Co. Kerry and the dense concentration of wedge tombs occurring in some parts of this region. However, as mentioned above, there has been relatively little investigation of the large numbers of wedge tombs in the southwest of the country. The only investigations of these were conducted by Herity (1966, 1967, 1970) who excavated four tombs in Waterville, Co. Kerry, and O'Brien (1999) who excavated two examples at Altar and Toormore, Co. Cork, none of which produced Beaker pottery. The extreme southwest of the country with its coastal uplands and rugged terrain has not been subject to large-scale development projects and as a result, there have been very little archaeological excavations of any kind in this area. This can be seen as the main reason for the current lack of Beaker pottery known from this region.

On the whole, there seems to be a particularly strong concentration of Beaker sites in the eastern part of the country, which may be a simple reflection and continuation of historic settlement patterns (see Fig. 9.14 and 9.15). At an island-wide scale, most discoveries of this ceramic have been made in coastal or riverine locations. This is exemplified by the numerous sites producing this pottery that have been recorded along the fringes of the eastern coastal lowlands and also within the major valleys such as the Barrow, Nore, Suir, Blackwater and Lee in the south of the country. Movement by water may have been a major mode of travel in prehistory (e.g. Condit and O'Sullivan 1999) and many of these rivers served as prehistoric communication arteries (Grogan 2005b, 27-8). The concentration of Beaker sites along these valleys suggests that these places were preferentially selected as locations for settlement, perhaps to facilitate interaction with
other communities. The wide dispersal of supra-regional items such as copper daggers, bracers and gold discs throughout Ireland indicates that movement and communication between different groups was an important activity (see Fig. 9.30).

While it is true that there is a paucity of wedge tombs in the east of the country with the exception of a few locations such as the Dublin Mountains, there is little other clear-cut evidence for regional differences in social practices in terms of the distribution of different site-types, objects or depositional practices. Beakers occur in pits and spreads in all parts of the country where this pottery has been found. Beaker pots and objects have only been found in a small number of cists and these are quite widely dispersed across the island.

Wedge tombs containing Beaker pottery are mainly located in the north of the country, but this is largely reflective of the actual distribution of these megaliths and the greater numbers of these that have been investigated in that area. Similarly, Beakers have only been found in court tombs in the north of Ireland, but these Early Neolithic tombs are far more common in this region than anywhere else and a greater number of the northern examples have been excavated. Beakers have only been found in Late Neolithic timber circles in the east of the country, but again, this seems to be related to the fact that these monuments have a predominantly eastern distribution in Ireland.

9.12 UNDERSTANDING THE TREATMENT OF BEAKER OBJECTS

Overall, it seems that the deposition of Beaker objects within these various different places formed part of a system of highly codified social practices. Common ideas seem to have been shared by society regarding the correct life-path for particular object types as indicated by the fact that a diverse range of objects were treated in very uniform ways on a universal scale throughout the island. Each of the main contexts to receive deposits of Beaker materials seems to have represented distinct categories of place. These appear to have been socially defined as suitable types of spaces for these objects to be deposited. This is supported by the varying character of the depositional activity that was conducted within them. It seems that the placement of particular types of objects in each of these different types of places served to create, reproduce and transform the special meanings that were attached to these spaces, as well as the objects themselves.

The deposition of these items in pits, spreads, old and new megaliths, disused timber circles, burnt mounds, caves and other natural places, and particularly bogs may represent diverse ways of structuring the landscape as well as remembering and thinking about the past (see Fontijn 2007, 71; Bradley 2000a, 158). These various forms of deposition can all
be seen as different approaches to the imposition of order on the world as part of the human drive to make sense of our environment and to give meaning to our lives. For example, monuments are generally highly visible places that would have served as visual markers or aides de memoire for the deposits made within them. In contrast, depositional locales in natural places such as bogs may have been deliberately unmarked invisible places (see Chapter Seven), so that the depositional acts conducted in such places could only be remembered orally or through the repetition of similar practices (Fontijn 2007, 76–7, see Chapters Seven and Ten).

Traditionally, these ornaments that form the Beaker package have been understood as personal possessions that were competitively exchanged and displayed as part of a prestige goods economy (e.g. Clarke et al. 1985; Needham 2004; Heyd 2007; Sheridan 2008a). Stuart Needham (1988) observed that British Early Bronze Age artefacts could be divided into two separate groups based upon the contexts in which they occur. One of these groups — consisting of daggers, ornaments and small tools — predominantly occurs in a funerary setting. These seem to represent symbols that were appropriate to send into the world of the dead. The other group comprise deliberately deposited objects from a non-funerary context, including halberds, lunulae and axes which are generally found as single finds or in one-type hoards and were labelled as ‘community deposits’. However in Ireland, no such distinction is possible because almost all typical non-ceramic Beaker artefacts other than arrowheads were excluded from a sepulchral setting (see Chapter Five).

Furthermore, it is difficult to argue that Beaker objects such as tanged copper daggers, bracers and lunulae served as personal possessions in an Irish context. The deposition of Beaker ornaments in Ireland was very standardised and seems to have been conducted in accordance with a shared set of social principles. Indeed, these practices were so uniform and structured that it seems very unlikely that they could result from private individual actions and choices. The highly circumscribed treatment of many of these items suggests that these were communally deposited objects whose significance was unrelated to either personal wealth or economics.

Most of these artefacts were beautifully crafted supra-regional objects that had been produced through community-based enterprise. These were predominantly non-functional special-purpose ornaments that were made using new techniques and represented new ideas. These would have been imbued with very particular values in the course of their creation and exchange. Such was the craftsmanship involved in the manufacture of some of these objects, that visual display must have been an important
aspect of their use. It seems likely that there would have been a performative aspect to their deposition and the main function of some of these objects may have been their display in communal ritual and ceremonial activities (Needham 1988, 246). We have seen (above) that at least some of these were being stored in natural places away from normal activities and then retrieved for specific rituals.

The deposition of these ornaments seems to have occurred in the course of ceremonial practices by local communities, which may have joined the life stories of people, objects and places together (Fontijn 2008, 102). The ideas symbolised by these objects would have been celebrated in the course of this even though the object was about to disappear temporarily (if it was going to be retrieved) or permanently. It may have been important for people to have witnessed the burial of these active agents and the act of deposition may have been an important occasion for a community, during which they constructed and expressed their communal and personal identity through their links with other people and events (see Chapter Ten, also see Fontijn 2008, 98). Particular values seem to have been depicted and attributed to people, places and things over the course of these collective acts. Beaker objects also seem to have possessed meanings that required they be treated in a specific manner which including their exclusion from graves. The meanings of these artefacts and the reasons for their highly circumscribed treatment are explored in Chapter Ten.
CHAPTER TEN – UNDERSTANDING THE BEAKER PHENOMENON IN IRELAND AND ITS IMPLICATIONS FOR EUROPE

10.1 INTRODUCTION

Traditional approaches to the Beaker phenomenon in Europe have focused almost exclusively on the funerary domain, thereby resulting in a particularly biased understanding of Beaker objects. The integrated nature of this study avoids such pitfalls by examining the depositional treatment of these objects within a general framework of depositional practice including their occurrence as single finds and in hoards, burials, ceremonial settings, settlement features as well as natural places.

In this chapter, I synthesise the findings from this thesis to create an enriched appreciation of the Irish manifestation of the Beaker phenomenon including the use of Beaker artefacts in social practices on this island and the social significance of these, particularly in relation to the ways in which they served to construct, as well as constrain personal and group identities at this time (see Section 10.2). I examine the influence of other people from nearby regions on the development of the Beaker phenomenon in Ireland. I consider the ramifications of the results of this study for our understanding of the context in which metallurgy was adopted in Ireland and the relatedness of copper to the Beaker phenomenon. Finally, I outline the implications of the findings of this thesis for understandings of the wider European Beaker complex and I propose future studies that can further improve our knowledge of this period in an Irish context.

10.2 THE SOCIAL ROLE OF BEAKER ARTEFACTS AND THEIR DEPOSITION IN IRELAND

In this thesis, the large body of evidence for Beaker-associated activities from a wide range of non-mortuary contexts in Ireland is used to gain a unique understanding of the function of Beaker artefacts within arenas that have traditionally received little attention. This shows that the deposition of metalwork, ornaments and pottery belonging to the European Beaker assemblage formed part of an interlinked system of social practices. My analysis of these depositional activities leads to an evidence-based alternative reading of the significance of these objects that takes full account of their social agency and a better
knowledge of the meanings attached to these objects and the roles that they played, particularly in relation to the expression and constraint of identities and relationships.

The occurrence of Beaker artefacts in Ireland can be rather frustrating to study due to the discovery of so many of these items as stray or single finds within natural places, particularly bogs (see Chapter Seven and Nine). However, the examination of the context and condition of Beaker objects demonstrates that there were characteristic ways of treating particular artefacts in accordance with an island-wide depositional framework. The depositional treatment of this assemblage in Ireland was universally structured, selective, type-specific, contextually-specific and place-specific. This resulted in many Beaker objects being kept apart from each other.

This repetitive patterning prevents the interpretation of these finds as the product of random acts. Instead, this represents the residue of a coherent set of highly circumscribed actions that were conducted in accordance with particular traditions or cultural rules. These deposits reflect the conduct of interrelated strategies for the negotiation and reproduction of social values by local communities within in a range of contexts such as settlements, natural places, megaliths, cists, and timber circles (see Needham 1988, Needham 2007, Needham 2008b). Accordingly, the particular manifestation of these objects in the Irish archaeological record is highly significant because it directly represents the social practices and beliefs of that era.

Each of the main contexts to receive deposits of Beaker materials seems to represent a distinct category of place that was socially defined as a suitable locale for the deposition of particular types of objects. The repetitively rule bound nature of this deposition provided a means of structuring the landscape by transforming and (re)producing the special meanings that were attached to these places, as well as the objects themselves (Fontijn 2007, 71; Bradley 2000a, 158). For example, by placing materials in megaliths, people expressed their links with manmade ancestral places, while deposition in bogs and rivers enabled the assertion of connections with enduring natural spaces.

The structured depositional treatment of Beaker objects suggests that these were imbued with some commonalities of meaning that were shared by groups throughout the island and that these shared meanings were partially responsible for the deposition of these items as part of a wider system of highly structured practices (see Rowlands 1993, 147, see below). Of course, this is not to say that Beaker artefacts represented the same thing to everyone at all times: the meanings attached to these items were highly dynamic and varied from person to person, context to context and were strongly influenced by the
biography of each object. This plurality of meanings is evidenced by the occasional divergences in the depositional treatment of these artefacts (see below).

Just like humans, objects also have life cycles with a beginning and end and may even be regarded as possessing life (Jones 2008b, 331). They do not have inherent meanings or significance; instead multiple social characteristics are attributed to objects over the course of their use-lives based on biographical factors such as where they came from, who made them, who they previously belonged to and how they were acquired (Kopytoff 1986; Gosden and Marshall 1999, 170; Hoskins 1998; Hodder and Hutson 2003, 192; Barrett 1994, 88; Boast 1995, 70). Though these objects may be exchanged or fragmented, their life story may often have been remembered (see Brück 2004a, 313; 2006b, 74–5). There is a growing appreciation of the interconnectedness of the material and the social, and the ways in which objects come to represent people and people come to represent objects (see Appadurai 1986; Kopytoff 1986; Weiner 1992; Gell 1998; Boast 1997, 188 and Gosden and Marshall 1999, 169, 177).

Similar to present-day humans, bounded individuals did not exist in the Early Bronze Age: social identity was inherently relational and it was people’s relationships with other people, places and things that made them who they were (Brück 2004a, 312; 2006b, 76; Barrett 1994; Jones 2005). Objects are imbued with human values so that they play a key role in negotiating and representing social relationships, as well as constituting the person, both as an individual and as a member of the wider society (Latour 1996; Gell 1998; Weiner 1992). Certain artefacts actively bring humans together within a social network by creating connections across space and time, either between geographically distant people or between people and their predecessors (Latour 1996, Gell 1998, Chapman 2008; Brück 2006b).

All of this is very well illustrated by Beaker objects, many of which were non-functional, special-purpose and supra-regional ornaments that were beautifully crafted using new techniques (see Chapter Nine). Through their creation, exchange, and fragmentation, these objects had been imbued with particular social values and meanings. The selective treatment of these artefacts suggests that these were regarded as highly symbolic objects, which held particular ideological significance for the corporate group and played very important roles in identity creation rituals and ceremonies (see Chapters Seven and Nine, see below; see Brück 2004b, 180; Fontijn 2002; Fokkens et al. 2008).

This is exemplified by gold lunulae and other gold objects displaying signs of wear that suggest that these may have had a long use-life and/or wide circulation and were repeatedly buried and retrieved (see Chapter Nine; Cahill 2005b; Becker 2008; cf. Dickins
1996). Similarly, the fragmentation of bracers, particularly those made from red coloured stones, suggests that they had been curated on a long term basis before their final deposition. The uniformity evident in the damage to lunulae and wristbracers suggests that they were being repeatedly treated in very particular ways prior to their deposition. Presumably, this was related to their function as objects of ritual significance for different people over an extended period (see Chapter Nine).

It has been argued that Beaker ornaments do not represent the way that people normally dressed; instead these were special purpose value-laden ornaments that symbolized the cosmological values of the society in which they had an active function (Thomas 1999, 157–9; Fokkens et al. 2008; Barrett 1994, 117–9). Objects such as wristbracers and tanged copper daggers were deposited during funerary rites to portray an idealised form of social identity for the deceased and to act as gifts to the ancestors (Thomas 1999, 157–9; Vander Linden 2004, 41, Case 2004c, 29; Fokkens et al. 2008). These represent community deposits that fulfilled the requirements of the mourners and although some objects such as jet buttons or gold discs may also have served to accentuate the individuality of the deceased, these need not be considered as personal possessions. These artefacts were placed in graves to construct, negotiate and underline relationships (of authority, allegiance, indebtedness, and kinship) between the living and the dead and between people and places (Mizoguchi 1993; Thomas 1999, 156; Brück 2004a and b, 180; Barrett 1994, 116–19, 121–3 and Woodward 2000, 113–15). In the words of Barrett (1990, 182): “‘mortuary rituals are amongst the routine, strategic engagements through which people reproduce the conditions of their own lives’.

These interpretations of the meanings underlying the treatment of Beaker objects can also be applied to Beaker-associated depositional activities in Ireland, even though these were predominantly conducted outside of the funerary domain (see Section 10.5). Those aceramic Beaker artefacts that were placed in graves during funerary rites by communities in other parts of Europe were almost exclusively deposited within natural places in the course of collective ceremonial practices, yet, these can also be seen as similar forms of exchanges with the supernatural and the ancestors (see below). In this regard, Needham’s (1988, 246) statement that hoard finds represented community deposits because they were not linked with specific individuals may be considered a little over-simplistic.

Deposition in natural places, particularly bogs, served the needs of the community in much the same way as funeral activity. It represents a similar but different form of collective behaviour through which people endeavoured to construct and depict particular values,
meanings, relationships and categories of places (see Barrett and Needham 1988, 129; Fontijn 2008, 98). By ceremonially removing these objects (either permanently or temporarily) from the sphere of the living within these locations, these ornaments and the ideas associated with them were memorised (Rowlands 1993, 146; Fontijn 2007, 76–7; Fontijn 2008, 102). The presence of supra-regional paraphernalia belonging to the Beaker repertoire probably evoked other places, people, occasions and ideas. The exchange and deposition of these enabled local communities to construct and express an identity relating to their participation in a much wider interaction network (see Brück 2006b, 76; Fontijn 2008, 96). In this way, the deposition of Beaker ornaments in natural places played a role in the formation and reproduction of personal and communal identities in an Irish context.

Many of the Beaker objects found in natural places represent personal body ornaments that may have transformed a person’s physical appearance suggesting that some of these artefacts were actively used in the formation of identities. These artefacts may have played an important role in “transformation rituals” that were used to demarcate people’s transition from one life stage to another, for example from childhood to adulthood (Fontijn 2002, 146; 2008, 89). These items could have become bound up in the life cycles of people and strong connections may have formed between the biography of certain objects and the identity of those people who may have shared similar life-ways (Fontijn 2002, 146; 2008, 89). The deposition of these in natural places may represent a way of marking these particular points of identity transformation during life cycle rites or at the beginning/end of other ritual events including the ‘decommissioning’ of identities. Another interpretation of this is explored below in Section 10.7.1.

10.3 BEAKER-ASSOCIATED SETTLEMENT PRACTICES

The current study shows that the traditional view of Ireland as a place where Beaker pottery predominantly occurs in settlement or ‘domestic’ contexts (e.g. Case 1977a, 77; Burgess 1979, 213; Mercer 1977; Case 1995a, 19; Needham 1996, 128; Brindley 2007, 250; Bradley 2007, 147) does not match the complexity of the Irish evidence. These characterisations were founded upon a misreading of a small number of well-known discoveries, particularly those from Brú na Bóinne and Lough Gur that resulted in an exaggeration of the number of Beaker-associated houses.

This thesis reveals that Beaker pottery was used as an everyday pottery in settlement practices throughout Ireland. These ceramics are now known from most parts of the
island indicating that the use of this ceramic was much more widespread than previously realised. With the exception of the Midlands region which seems to have been sparsely populated at this time, much of the country was occupied by Beaker-users, with a particularly dense concentration of settlement in the eastern part of the country. However, there is very little irrefutably direct evidence for Beaker-associated settlements in Ireland. The overwhelming majority of Beaker pottery from settlement contexts has been found in pits or spreads containing occupational debris (see Chapter Four and Nine). There are few if any recognisable ‘domestic’ buildings associated with Beaker pottery and the flimsy sub-oval structure at Graigueshoneen, Co. Waterford, represents the most convincing example found to date. In general, houses from the mid-third millennium do not appear to have been substantial or to have left a lasting trace, and a distinct architectural form cannot be identified (see Chapter Three).

Deposits of Beaker-associated settlement debris within pits and spreads have been excavated on a number of sites without any evidence for contemporary houses (see Chapter Four). Despite the absence of structures, the presence within these pits and spreads of materials generated in the course of occupation represents convincing evidence for settlement. These deposits contain numerous sherds from multiple vessels displaying carbonised residues and sooting on their interior indicating that these were most probably used for cooking and serving foodstuffs. The discovery of burnt and unburnt animal bone including pig, goat, cow and sheep, the charred remains of cereals (especially barley) and hazelnuts, as well as seeds or endocarps of wild plant resources such as sloes, apples and blackberries in these deposits provides more evidence for food preparation and consumption. Also present are stone tools including querns, thumb-nail scrapers, barbed- and-tanged and hollow-based arrowheads, polished stone axes, hammerstones and large quantities of lithic debitage. These various objects indicate the occurrence of a range of occupational activities, some of which may have been of extended duration (see Chapter Four). Unfortunately, it remains difficult to demonstrate that the artefactual material within these deposits represents on-site debris generated directly from long or short-term settlement in these places. Nevertheless, the discovery of so many of these features in historically favoured settlement locations suggests that unless there is clear evidence to suggest otherwise, these should be interpreted as the only surviving component of inhabitation (see Chapters Three and Four).

Spreads are relatively small in number, but these above-ground deposits tend to be quite extensive in size and have produced large quantities of sherds from multiple pots representing 75% of all the Beakers in Ireland (see Chapter Nine). These seem to represent the remains of deliberate accumulated debris that was generated either over the
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lifetime of a settlement or during large scale acts of consumption associated with social gatherings. The presence of metal axes, a gold disc and a wristbracer within spreads suggests that these deposits had a special character, as such objects are rarely found in any other archaeological contexts. The aggregation of occupational detritus into large upstanding collections seems to have fulfilled various practical, social and ceremonial functions. The almost-monumental nature of these deposits served as physical reminders of past events, activities and people, while also demarcating particular locations so that they endured as meaningful places. The character of these large piles enabled future engagements with the material contained within them as indicated by the fact that debris seem to have retrieved from these for deposition in other contexts such as pits, timber circles and megaliths (see Chapters Four, Five and Six).

Clusters as well as isolated examples of Beaker pits have been identified at many sites and these represent the most common feature to receive deposits of Beaker pottery in Ireland. The total quantity of Beaker pottery from pits dwarfs that discovered within any other context other than spreads (see Chapter Four and Nine). These pits vary from those with a single sherd to examples containing more ‘formalised’ deposits including very large amounts of pottery as well as other deliberately selected or arranged artefacts such as polished stone axes, polypod bowls, disc beads, and fragments of cremated human bone (see Chapter Four). It has been shown in this thesis that these pits were specially created to receive deposits and were filled in very soon after being dug, but that the materials within them were generally not so rapidly formed. The very partial and fragmentary nature of the majority of the ceramic assemblages within these pits indicates that a significant time-lapse occurred between the original breakage of these vessels and their final deposition. Also, these deposits contained different sherds deriving from the same vessels that were weathered and burnt to various extents, thereby implying that these been temporarily stored in larger repositories, most likely the spreads identified in this study.

Overall, in terms of the contexts and manner in which Beaker-associated settlement debris was being deposited, including the types of objects that were included and excluded, it is clear that the treatment of occupational detritus was highly circumscribed. Many Beaker pits and spreads display evidence for codified behaviour indicating that their formation had a ceremonial or formal character. This certainly parallels the deposition of the other objects forming the Beaker assemblage such as daggers and wristbracers (see Chapters Seven and Nine). Furthermore, the placement of habitation debris in a comparable fashion within a wide range of contexts including megaliths and timber circles complicates the interpretation of any of occupational deposits as simply representing settlement activity.
No absolute division between ‘domestic’ and ritual activities seems to have existed for people at this time (see Brück 1999a, Bradley 2005a).

Richard Bradley (2005a, 208–9) has argued that the prehistoric record exists largely because of cultural intent: it is the routine conduct of activities in a culturally prescribed manner with a heightened degree of formality that results in these leaving an archaeologically recognisable trace. This certainly seems to be true of Beaker settlement, the surviving evidence for which seems to be a poor reflection of what once was (see Chapter Four). Much of the Irish evidence for Beaker-associated occupation in so-called settlement contexts — occupational debris within spreads and pits — seems to have been the product of ideologically significant activity that served the needs of the community and may not directly represent settlement activity (see Chapter Four). Many of these deposits were made in a ritualised manner that deliberately emphasised ‘domestic’ aspects of life (see Bradley 2005a, 32–36). Of course, these depositional activities were not conducted in isolation from the everyday world; instead these seem to represent part of a spectrum of settlement practices that formed a continuum ranging from the sacred to the profane.

Settlement debris represented a meaningful cultural material that fulfilled an important social role and it seems obvious from their distinctive treatment that pot-sherds were seen as objects that both possessed and created meaning; these took on a life of their own that was independent of the pots to which they once belonged (see Sections 4.5.4 and 4.5.5). The symbolic materiality of potsherds is hardly surprising given that people construct and negotiate their social relationships, identities and worldview through their everyday material engagement with their world, including the routine production, use and disposal of objects. These sherds may have been seen as heirlooms or relics of certain people or past events that acted as physical metaphors for social relationships between people, places and things (see Woodward 2002, 1040–1). The fragmentation, curation and deposition of these quotidian items may also have been considered to be connected to various stages in the human life-cycle and to beliefs about fertility, renewal, regeneration (Case 1973; Pollard 2000; Cooney 2005) as well as transformation (Brück 1995).

The aggregation and deposition of Beaker-associated occupational debris within spreads and pits seems to have represented a social strategy that deliberately emphasised everyday ‘domestic’ activities (see Cooney 2005, 25). These depositional acts may have represented an important occasion for local groups — perhaps marking or commemorating the end of an occupation — during which the life stories of the people and the places associated with these settlement deposits may have been remembered and celebrated (Thomas 1996, 197; 1999; Pollard 1999; Fontijn 2008, 102). The removal of
'domestic' materials from the sphere of the community in the course of these remembrance practices would have resulted in the meanings associated with these artefacts being recalled and reproduced through their deposition (Rowlands 1993, 146; Fontijn 2007, 76–7).

The commemorative dramatisation of the collective routines of the household through the deposition of the fragments of settlement-life was also central to the constitution of social relationships during the latter half of the third millennium BC. By ritualising the occupational customs of daily life, in a manner that commemorated and depicted their togetherness, people accentuated their connections with each other. Through these depositional practices, local groups constructed and maintained a collective identity based upon the assertion of their mutual membership of an imagined 'domestic' community (see Thomas 2010; Carsten and Hugh-Jones 1995; Waterson 1995; Lévi-Strauss 1983). Regardless of whether the settlement materials within pits or midden-like spreads were produced through on-site settlement activity or feasting, the creation and existence of these features seem to have functioned as reminders of shared activities such as the preparation and consumption of food. These deposits acted as metaphorical representations of the various social ties that bound people, places and their ancestors together to form a socially cohesive cosmology.

10.4 **BEAKER-ASSOCIATED FUNERARY PRACTICES**

Beaker pottery is typically found as part of funerary assemblages in association with other artefacts accompanying single burials throughout Europe (Vander Linden 2006a). However, the Beaker complex in Ireland is traditionally viewed as lacking a funerary component (Case 1995a, 19; Needham 1996, 128; Brindley 2007, 250). This study demonstrates that there is much a greater body of evidence for Irish Beaker-associated funerary practices than has been previously recognised. Indeed, an increase in evidence for burial occurs with the appearance of Beaker ceramics in Ireland (see Carlin and Brück forthcoming). However, this does not take the same form here as it does in Britain and central Europe. The classic crouched inhumation with accompanying stereotypical grave goods including a Beaker pot is completely absent and this novel funerary rite was not practiced until later, c. 2200 BC, in conjunction with a new form of pottery known as the Food Vessel tradition. Instead, we see marked diversity in mortuary practice comprising cremations and inhumations, the construction and primary use of wedge tombs, the re-use of earlier Neolithic chambered tombs, and the deposition of burials in cists and cairns, as well as pits in possible 'domestic' contexts (see Chapter Five). Collective burial
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predominates in both wedge tombs and cists, though there is some evidence for successive individual burials and for single burials within cist-like chambers within wedge tombs.

A total of 40 Beaker-associated individuals — 16 unburnt and 24 burnt — have been recovered from 17 different sites,$^{19}$ primarily wedge tombs (nine sites) and cists (seven sites). 32 of these burials — 18 cremations and 14 inhumations — have been recovered from wedge tombs. Based on the available information, cremation seems to have been the preferred burial rite. There appears to be an almost equal number of male and female adults, while very few juveniles were represented in the record. No evidence was detected for any gender-related aspects to these burials. There are also a small number of contemporary aceramic inhumations and cremations in cists and pits that were occasionally accompanied by other Beaker grave goods, such as that from Kinkit, Co. Tyrone. These seem to represent another feature of Beaker mortuary practice at this time, perhaps suggesting that it was socially unacceptable or simply not required in some instances to include a Beaker pot with the burial.

There seem to have been strict rules regarding how and where various materials or objects could be deposited within a megalithic and funerary setting. Very few of the objects commonly found with Beakers elsewhere in Europe such as bracers or buttons have been found within funerary contexts in Ireland, especially not with burials or with Beaker pottery. While human remains may have been placed in earlier Neolithic megaliths like court tombs, passage tombs or portal tombs at this time, no items from the Beaker assemblage seem to have been deposited with these. Instead, court tombs seem to have been specifically chosen to receive deposits comprising sherds that had been broken for some time prior to their final deposition and had probably been obtained from a larger aggregation of settlement debris.

In contrast, passage tombs have produced very little Beaker pottery; yet six V-perforated buttons have been discovered within these tombs, while three wristbracers and an early bronze axe have been found in their immediate environs (see Chapter Five). It is highly questionable whether any or many of the Beaker deposits in the older megaliths represent funerary activity; given their lack of association with human remains, these deeds seems to have been of a more ceremonial nature. The deposition of sherds and other settlement debris within court tombs greatly resembles the placement of similar materials within pits

$^{19}$ Cremated human bone has been found in pits with Beaker pottery but this is excluded here because there is little clear evidence to indicate that it was the product of Beaker-associated funerary practice (see Sections 5.8 & 5.9).
and spreads. This illustrates the difficulties in distinguishing between sepulchral and ritual activity and suggests that such a distinction may not have been made by the people at this time.

Wedge tombs represent the only context in which it was appropriate to deposit complete Beaker pots with burials; arrowheads seem to represent the only other typical Beaker objects considered appropriate for inclusion as grave goods in these monuments (see Chapter Five). These megaliths appear to have been specially constructed to bury a select group of dead people with Beaker pots and arrowheads. Sub-megalithic cists which seem to form part of the same monument tradition as wedge tombs may also be considered as new or re-invented purpose-built graves (see Chapter Five). These monuments seem to represent a new separate category of special places that needed to be created to enable the introduction of relatively novel forms of funerary practices such as inhumation or the deposition of grave goods (see Section 10.7.1).

Similar steps were taken to facilitate the adoption of the classic Beaker funerary rite comprising crouched single inhumations accompanied by pottery and other grave goods. Although a small number of inhumations are known from the first three hundred years of the earliest Bronze Age, there appears to have been a resistance to some aspects of this practice, including the deposition of Beakers with the bodies of the dead. It was not until a new completely new special purpose funerary ceramic — Irish Bowls of the Food Vessel tradition — was developed c. 2200 BC, that pottery began to be buried with inhumations on a more regular basis (Brindley 2007). Yet, the orientation of the body in these graves, as well as the types and positioning of associated objects, resembles that of contemporary Scottish Beaker burials (see Chapter Five). These Bowls are almost exclusively found in mortuary contexts and were probably created specifically to accompany inhumation burials as the Irish version of British funerary Beakers. Their development seems to have enabled the widespread adoption of inhumation burials within pits, cists and older megaliths (Carlin and Brück forthcoming).

Overall, while there is much more evidence for Beaker-associated funerary activity in Ireland than previously realised, the sepulchral sphere was rarely a focus for the deposition of Beaker objects. Only a very small proportion of Beaker pottery has come from burials compared to the amount found in non-funerary contexts (see Chapter Nine) and many of the Beaker objects found in megaliths do not seem to have been deposited as grave goods. People here do not seem to have been wholly comfortable with placing Beaker pottery and objects with burials. Beaker sherds played such an important social role in the depiction of household-based kinship that perhaps it was rarely deemed
acceptable for Beakers to accompany the dead. It may have been feared that the deposition of Beakers in funerary places might dilute the associations of this pottery with the home place. Indeed, it may be speculated that the need to preserve this connection between the Beaker pot and the ‘domestic’ community ultimately resulted in the creation of a new pot type — the Irish Bowl — that was almost exclusively associated with the dead. The reluctance of people to deposit classic supra-regional objects such as tanged copper daggers and wristbracers with human remains may also be understood in terms of a desire to express a local identity in this setting by emphasising their ancestral membership of the local group rather than their international connections.

A concern with the communal expression of shared identities is indicated by the predominance of collective burial practices, as well as the sustained construction and re-use of collective megaliths tombs and ancient communal monuments until 2200 BC (see Chapter Five; Cooney and Grogan 1999, 93; Thomas 1999, 162). Although burial was restricted to only a limited number of people, these seem to have been specially selected by the community as representative of the wider regional corporate group to interact with the ancestors on their behalf (see Fokkens 1997, 369, van der Beek and Fokkens 2001, 307). The collective burial of this select group in wedge tombs served to relocate some of the dead in a manner that maintained their relationship with the community of the living (Thomas 1999, 162).

Earlier Neolithic megaliths may have been seen as ancestral burial places that represented the concept of the ideal collective grave in which original representatives of the community were buried (Fontijn 2008, 94). Such monuments are often located in places associated with the home as ancestors are seen as being derived from the household and some are seen as the founders of the group (Helms 1998, 15). By placing Beaker-associated habitation materials into ancient monuments, groups may have been celebrating the ‘domestic’ in a way that demonstrated kinship between the present-day household and their ancestors. These exchanges with their distant relations may have maintained and symbolised the entitlement of the local group to occupy these lands (see Fokkens 1999, 41; Bradley 2007, 60). These ceremonial deposits also served to highlight their membership of a local community that belonged to a specific place and had its own group identity.
10.5 BEAKER-ASSOCIATED CEREMONIAL PRACTICES

Prior to the present study, Beaker-associated ceremonial practices in Ireland had received very little attention, yet these seem to have been the main form of interaction with the ancestors and/or the supernatural. This thesis demonstrates that there is much greater evidence for this type of activity than previously recognised and that the majority of Beaker depositions in Ireland seem to have been made during routine actions that were performed in a structured and culturally prescribed manner, suggesting that the sacred and the profane formed inseparable aspects of everyday life. The widespread occurrence across the whole island of small-scale deposits dating from the latter half of the third millennium BC suggests that many more parts of the landscape including the ‘natural’ world were becoming imbued with meanings that socialised them. Compared to the Late Neolithic (Cooney and Grogan 1999, 228), there seems to have been a significant increase in the variety and quantity of arenas in which Beaker-associated depositional ceremonies were conducted at this time.

This thesis shows that there was a spectrum of contemporary ceremonial practices in Ireland comprising deposition in pits, spreads, megaliths, timber circles and natural places, as well as large-scale social feasting activities that were conducted at pre-existing ceremonial enclosures, each of which displays a slightly different character (see Chapters Four and Six). These various customs were all quite rule-bound and there seem to have been commonly-held ideas about the sort of objects that could be deposited in particular contexts in the course of these activities. For example, the deposition of Beaker pottery was totally excluded from natural places. Similarly, a much wider array of objects are occasionally found in pits and spreads compared to the very restricted range of materials found in timber circles (see Chapter Five and Nine).

The deposition of Beaker objects in natural places was so uniform and structured that it has been argued here to represent the residue of formal ceremonial activities conducted by local communities, during which they constructed and expressed their personal and group identity through their links with other people and events (see Section 10.2; Chapter Seven.) Many of the classic supra-regional Beaker objects found in Ireland seem to have been deposited during communal activities within natural places, particularly present-day bogs on the edges of the socialised landscape (see Chapter Seven). It appears that the ideas associated with these items were memorised by depositing them (either permanently or temporarily) in these places during transformation rituals.

Deposits of settlement materials including fragmented sherds of Beaker pottery, but excluding many of the other stereotypical Beaker objects were placed with various
degrees of formality in a number of contexts such as pits, spreads and Neolithic megaliths (see Sections 10.3 and 10.4). These activities seem to represent ceremonial interactions (such as gift exchanges) between the communities of the living and the ancestors. Fragments from Beaker occupations were also ceremonially deposited into the postholes of Late Neolithic timber circles. Long after their original construction, holes were created within their structural features to be immediately backfilled with Beaker materials resembling those found within pits.

Timber circles seem to represent Late Neolithic formalised representations of people’s homes that were used to maintain the social cohesion of local communities by celebrating their collective ‘domestic’ activities. (Carlin et al. forthcoming; Smyth 2010; Bradley 2005a, 53–6; Pollard and Robinson 2006, 167; Thomas 2010). The ceremonial deposition of collective occupational-waste within the structural features of these communal wooden circles long after their original construction suggests that people were drawing upon the symbols of everyday ‘domestic’ life to emphasise their shared group-identity and maintain the cohesion of the local community. The ideological connection between these structures and homes probably remained relevant for local communities after Beaker pottery replaced Grooved Ware. Perhaps by re-digging these postholes and backfilling them with Beaker-associated deposits, people were commemorating the past communities who constructed these monuments, while also reasserting a shared connection between themselves and their predecessors (see Chapter Six).

Other pre-existing ceremonial foci including earlier Neolithic megaliths, and other places with long histories of inhabitation attracted a considerable degree of Beaker depositional activity. Despite the adoption of a suite of novel aspects of material culture in the late third millennium BC and an increase in the range of contexts in which objects were deposited, a definite interest in older monuments places, people and practices was maintained and new ceremonial monuments or centres were not developed. This is illustrated by the evidence from Newgrange and Knowth where the Middle Neolithic monuments continued as foci for largely unchanging forms of ceremonial practices over much of the third millennium (O’Kelly et al. 1983; Sweetman 1985 and 1987; Roche and Eogan 2001, see Chapters Three, Five and Six). This interest may indicate a concern to define and underpin the identity of local groups in the context of increasingly wider inter-regional links by highlighting their attachments to place and their links with past ancestors through the performance of settlement-related depositional acts that probably brought to mind the virtues of the perfect ‘domestic’ community.
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This material engagement with the past represents a recurrent aspect of Beaker deposition that links activity in both the funereal and ceremonial spheres and concomitantly blurs the divisions between them. However, most of these deposits seem to have been of a commemorative nature. Either way, much of the available evidence for the use of Beaker objects in Ireland was generated through collective ceremonial deposition for the purposes of maintaining social and personal relations, as well as interacting with the supernatural (see Chapter Five, Six, Seven and Nine).

10.6. THE INFLUENCE OF OTHER REGIONS ON BEAKER PRACTICES IN IRELAND

In the middle of the third millennium BC, an expansion or re-establishment of exchange networks and long-distance connections occurred, whereby Beaker pottery, copper and other innovations like gold technology were spread along various routes such as the Atlantic coast and the large rivers of Western Europe (Brodie 2001; Vander Linden 2007b, 348). The early development of Beaker-associated metallurgy in Ireland combined with the comparatively large quantities and widespread distribution of Beaker objects throughout the country suggests that there was much contact between Ireland and Europe and that the Beaker phenomenon was enthusiastically adopted here from an early stage (see Chapters Eight and Nine). Objects and know-how do not move by themselves within a vacuum: their transmission generally also includes people, ideas, labour, and technology (Needham 2008b, 311; Vander Linden 2007b, 349). Certainly, the introduction of copper metallurgy c. 2500 BC could not have occurred without the movement of people with the requisite level of expertise, some of whom may have been ‘foreign’ (O’Brien 2004; Roberts 2008a, 35; 2008b, 364, see Section 10.7.4)

Having characterised Beaker-associated practices in Ireland, an examination of the role of external or ‘foreign’ groups from other parts of Europe in their development is now required. In this section, I consider whether aspects of the Irish manifestation of the Beaker phenomenon resembles Beaker-associated practices from elsewhere in Europe that were introduced to this island alongside Beaker objects. Beginning with Atlantic Europe, followed by Northern and Central Europe, I compare the styles/types of Beaker objects in these regions and the manner of their deposition with those known from Ireland.
10.6.1 Connections with Atlantic Europe

It is most probable that the Beaker phenomenon was originally developed by Atlantic communities based in Iberia (e.g. Bailly and Salanova 1998; Kunst 2004, Harrison/Martín 2004; Salanova 2002 and 2004, Cunliffe 2001, 228; Case 2004c) and that long-established routes along the Atlantic coastline provided some of the key trajectories for its dispersal (Cunliffe 2001, 197; Salanova 2004). There appears to have been a long history of contact and exchange between people in Ireland and other groups along the Atlantic façade dating back to the earlier Neolithic (Sheridan 1986; 2003; 2004b; 2005; 2007b). This is amply illustrated by the shared traditions of megalithic architecture and art, though this is mostly Middle Neolithic activity (Shee Twohig 1993), which was followed by a period of apparent exclusively insular movements between Ireland and Britain. It has long been suggested that the character of the Beaker phenomenon in Ireland was due to a high level of interaction with Atlantic Europeans at this time, though opinion has varied as to the exact nature of this (e.g. Herity and Eogan 1977, 117–122; Burgess 1979; Needham 1996, 128; O’Brien 2004, 565; see Chapter Two).

The distinctive arsenical copper technology displayed by early Irish metalwork is similar to that practiced in conjunction with Beakers in Atlantic France and Iberia (O’Brien 2004, 557–61; Ambert 2001). This suggests that people who introduced early metallurgy to Ireland were Beaker-users from Atlantic Europe (O’Brien 2004, 558–569). Thick-butted copper axes characteristic of Atlantic Europe are widely known in Ireland (Burgess 1979, 213); close parallels to the Irish Lough Ravel axes are found in Iberia and Atlantic France (Sheridan 1983, 16; Harbison 1979, 103) and copper halberds are present in both Ireland and Spain (Schuhmacher 2002, 282–4; O’Flaherty 2003). Cumulatively, this evidence for the production of similar objects using the same type of copper technology suggests that links between Ireland and these regions were ongoing at this time.

Although Beaker ceramics generally occur in a highly fragmentary condition in non-funerary contexts in Ireland, thereby making it difficult to identify the form and style of the vessels from which these sherds have been derived, these do show some influences from France and Iberia (Brindley 2004, 335; Needham 2005, 179, see Section 9.2.1). Decorative aspects including simple horizontal and comb impressed decoration, minor geometrical motifs, and cordons that are present on many Irish Beakers reflect an Atlantic contribution to the ornamentation of these pots (Case 1995a, 20; 2001, 374).

Well known examples of Beakers with a prominent Atlantic resemblance (see Fig. 10.1) include the remnants of an S-shaped vessel at Moytirra, Co. Sligo, which can be assigned to Clarke’s (1970) European Bell Beaker type (Cremin Madden 1969, fig. 2. Wk. 169-170)
and another found at Dalkey Island (Liversage 1968, 61, fig 9, sherds 73, 207) which has a low-bellied S-profile that is characteristic of Breton Beakers (Case 1993, 254; Needham 2005, 179). Sherds from a vessel (No. 2) at Newtownlitttle, Co. Dublin (Grogan 2005), are very similar to those at Moytirra. Two Beakers described as Maritime-type from Hill of Rath, Co. Louth (Duffy 2002, Brindley 2000), may represent further examples of this. Numerous Beaker polypod bowls have been found in Ireland, which may indicate links with southern France, where these occur relatively frequently (Besse 2003; 2004). However, polypods seem to be of Central European origin and Irish Beakers also exhibit affinities with central or northern European styles of this pottery (Case 1995a, 20; 2004b, 375). This will be discussed below.

There are many non-ceramic Beaker artefacts with predominantly Atlantic affinities in Ireland including barbed and tanged arrowheads, gold sun-discs, diadems or bands, and basket-shaped ornaments (Case 2004b, 375). The basket ornament from Benraw, Co. Down, is considered to be an import from Estremoz in Portugal (O’Connor 2004 and Taylor 1994). While gold lunulae are considered by many to have been an Irish Beaker-associated invention (Eogan 1994, 38; Taylor 1994, 44; O’Connor 2004, 210), a few of these occur in Brittany (Eogan 1994, 36 and fig. 13; Taylor 1980).

Irish bracers are predominantly two-holed and their form is highly characteristic of the Western Beaker tradition (Harbison 1976; Woodward et al. 2006, 534; Fokkens et al. 2008, 112), thereby suggesting evidence for direct links with the Atlantic seaboard. However, this is complicated by the fact that Irish bracers are predominantly red in colour, with dark grey, brown or black examples occurring in smaller numbers (Roe and Woodward 2009; Harbison 1976, 6). This is in stark contrast to the Atlantic façade, where bracers are mostly grey (Laure Salanova pers. comm.), as well as Britain where these are mainly blue/grey or green/grey variations (Woodward et al. 2006, 534). The colour of Irish wrist-guards seems to indicate influences from Central Europe, where four-holed red examples are common (Sangmeister 1964).

It is interesting to note that far fewer artefacts such as tanged copper daggers and wristbracers have been found in either northern France or southern Portugal (Salanova 2004, 73) than Ireland, where a total of 110 bracers and at least 20 tanged copper daggers have been discovered. This compares to the 20 bracers known from Portugal, six from Brittany and another six from the Paris Basin (Salanova 2004, 69–71). Only five tanged copper daggers occur in Brittany, another five daggers have been found in the Paris basin and these are equally rare in Portugal (Salanova 2004, 69). This may indicate that there
was a different approach taken towards the manufacture and use of these objects in Ireland.

Single Beaker inhumations are almost totally absent from Beaker-using regions along the Atlantic façade including Iberia and northern France, where collective burials predominate, most of which were placed within megalithic monuments (Vander Linden 2006b, 319; Salanova 2007). This may seem comparable to Ireland where Beaker-associated burnt and unburnt human remains were mainly buried within newly constructed wedge tombs. However, only older Neolithic megaliths were used in these other regions and inhumation was the sole burial rite.

In Atlantic Europe, Beaker pottery and objects were predominantly deposited together with burials and are almost exclusively recovered from grave contexts. For example, there are 121 sites with Beaker finds in Brittany: almost all are funerary contexts and 81% are megalithic tombs (Salanova 2004, 66; Vander Linden 2006a, 85). This scenario contrasts strongly with Ireland, where Beaker pottery and objects were almost never placed together — certainly not within a funerary context — and the latter were almost exclusively deposited in natural places.

While the occurrence of Beaker artefacts in non-anthropogenic contexts has not been the subject of detailed examinations within many parts of Atlantic Europe, this does not seem to have been a feature of Beaker practices in these regions. Only a few examples of this are known such as the recovery of a hoard comprising copper axes and a palmella point from the River Loire at Trentemoult (Harrison 1980, 112). A few daggers or wristbracers have been recovered as chance finds (Briard and Roussot-Larroque 2002), but the only Beaker objects commonly recovered as single finds from natural places are Palmella points (Laure Salanova pers. comm.) and these are not found in Ireland.

Overall, while there is some evidence for a high level of interaction between Ireland and Atlantic Europe at this time, there are also clear differences and Irish Beaker-associated social practices display few influences from the Atlantic façade. The main similarities between Ireland and these Atlantic regions seem to be a shared concern with historic monuments as evidenced by the occurrence of Beaker pottery in earlier megalithic tombs; however, this ceramic is also regularly found in such contexts in Denmark and northern Germany (Vander Linden 2006a, 46).
10.6.2 Connections with Northern and Central Europe

The red colour of many Irish bracers leads us in the direction of central and northern Europe in pursuit of evidence for external influences on the insular development of the Beaker phenomenon. There are other indicators of contemporary contact between Ireland and these areas such as the presence of numerous polypod bowls in Ireland, a type of Beaker ceramic that originally emerged in central Europe (Harrison 1980, 26, 30, 39, 45). Beaker pottery displays decorative treatments including zig-zags, fringes, multiple chevrons, ermine decoration, finger nail and finger-tip impressions that reflect a central or northern European influence (Case 1995a, 23; 2004b, 375). This is reinforced by the discovery of a small number of early continental-style Beakers from sites such as Dalkey Island, Newgrange and Lough Gur (Clark 1970) which seem to display All-Over-Ornament or All-Over-Cord decoration (Case 1993, 248; Brindley 2004, 334; Grogan and Roche 2010, 36; see Chapters Eight and Nine). Hollow-based arrowheads and thin-butted copper axes are prevalent in Ireland and are both considered characteristic of northern Europe (Case 2004b; Burgess 1979, 213). Close parallels to the Irish Ballybeg thin-butted flat copper axes occur in Germany, the Netherlands, and Scandinavia (Mount 2000, 70).

Despite the stylistic commonalities displayed by these objects, there are many obvious differences between Irish Beaker-associated social practices and those prevalent in Central Europe. This is most notable in the mortuary arena, where the classic crouched single inhumation burials accompanied by Beaker pottery and other items from the Beaker assemblage are a recurrent feature of the Beaker phenomenon (e.g. Strahm 1995; Turek 1998; Müller 2004; Czebreszuk 2003; Vander Linden 2004).

Interestingly, some of the best parallels for Irish Beaker-associated social practices seem to be found in a similar type of location to Ireland at the outer edges of the continent. In Denmark, Beaker pottery, gold and metal objects as well as wristbracers are totally excluded from burials (Vandkilde 2005a, 27). The pottery is predominantly found as occupational debris in settlement contexts (Sarauw 2008, 30 and 40; Vandkilde 2009), while the aceramic objects were often deposited in natural places. Danish versions of Irish lunulae are suggestive of links with Ireland at this time (Vandkilde 2005a, 25), but other evidence seems to be lacking and there are many differences between the Beaker phenomenon in Ireland and Denmark, not least the presence of inhumation burials complete with flint daggers and arrowheads in the latter country (Sarauw 2007a).
10.6.3 Similarities and differences between Ireland and Britain

The Irish manifestation of the Beaker phenomenon has generally been considered to be very different to that of Britain (O’Brien 2004, 565, Burgess 1979, Case 1995a, 19, Thomas 1991, Needham 1996, 128, Cooney and Grogan 1999, 87, Case 2004b); however, the current study reveals a surprising number of similarities between Beaker practices in both countries. During the Late Neolithic, strong links developed between these islands, when local communities across the Irish Sea became interconnected through their use of Grooved Ware and related artefact types (Roche 1995; Brindley 1999a; Sheridan 2004a, 32–3).

These networks of exchange seem to have continued after the appearance of the Beaker phenomenon. For example, Irish copper played an important role in the earliest British metalwork and occurs in some southern British Beaker burials (Northover et al. 2001, 28; Needham 2004, 235). This metal seems to have been exchanged along the same routes as polished stone axes during the Neolithic (Needham 2004, 235; Cooney 2000, 204). This is most visible in northeastern Scotland, where a significant concentration of porcellanite axes from Ulster have been found (Sheridan 1986, 2) and the earliest metal objects were thick-butted flat copper axes from Ireland (Cowie 1988, 7). The Migdale-Marnoch bronze metalwork tradition which used Irish copper and Cornish tin subsequently developed in this region (Needham 2004, 235).

Gold lunulae have been found in Britain, which seem to represent imports from Ireland (Eogan 1994; Taylor 1994, 42–44), while V-perforated buttons found in Ireland also point to links with northern Britain: some of these seem to be made from Yorkshire jet while others were made using albertite from Sutherland in Scotland (Harbison 1976; Shepherd 2009, 341). Anglo-Irish interaction at this time is also indicated by the stylistic similarities between Irish Beakers and those from Wessex and Northern Britain (Case 1995a, 20; 2004b, 375; see Sections 8.6, 8.8 and 9.2.1).

Beaker-associated settlement practices in Britain and Ireland seem quite similar: most of the British evidence also comprises ephemeral remains such as pits or spreads which contain Beaker-associated occupation debris, large aggregations of which have been found as surface deposits (see Chapter Four; Case 1995b; Garrow 2006, Thomas 1999, 64–74; Jones 2005; Bradley 2007, 150), though some exceptional evidence for houses has been discovered on the Western Isles (e.g. Parker Pearson et al. 2004).

The re-use of Late Neolithic timber circles for Beaker deposition (see Gibson 2005, 670) and the ongoing use of large scale ceremonial monuments such as Durrington Walls and
Mount Pleasant (e.g. Parker Pearson et al. 2006; Thomas 1996, 212–22) in Britain testify to marked commonalities between ceremonial practices on both islands c. 2500 BC. In particular, depositional practices reveal a shared concern with historic places. In Britain, this is indicated by the discovery of Beaker pottery at sites such as the Windmill Hill enclosure (Brück 1999b, 380), the West Kennet long barrow (Case 1995b) and most notably at Stonehenge (Parker Pearson et al. 2007, 631).

Perhaps the most obvious difference between the manifestations of the Beaker phenomenon on both islands is the presence of the stereotypical Beaker crouched inhumation in Britain (Clarke 1970, Bradley 2007, Carlin 2011). However, it has recently been recognised that British Beaker-associated mortuary practices are much more diverse and complex than previously assumed (Gibson 2004). These comprise a mixture of collective, individual and token burials as well as excarnation, inhumation and cremation within a wide range of contexts including secondary deposits in long barrow ditches and in megalithic tombs (ibid, 176–183) that greatly parallel contemporary Beaker-associated activity in Ireland. Indeed, quite a number of Neolithic tombs in western and northern Britain were reused in the mid/late 3rd millennium BC for a variety of Beaker-associated depositional practices (see Chapter Five, Henshall and Wallace 1964; Burl 1984; Woodham and Woodham 1957; Case 2004a, 196; Bradley 2000b, 221–4). Significantly, recumbent stone circles in north-east Scotland and Clava cairns near Inverness in Scotland were Beaker-associated constructions dating from the second half of the third millennium BC that may represent the northern Scottish counterparts of Irish wedge tombs (Bradley 2000b; 2005; 2007, 174; see Section 5.11.2).

There are also some British regions such as Cornwall (Jones 2005, 31; 2006) and the northeast and the Moray Firth regions of Scotland where Beaker burials predating c. 2200 BC are scarce or non-existent (see Sheridan 2007a; 2008a; Ashmore 2004, 132; Needham 2004, 239; Wilkin 2009; Curtis and Wilkin forthcoming), perhaps suggesting that people there resisted adopting the classic Beaker inhumation rite in a similar manner to groups in Ireland. Indeed, this seems especially true of east-central Scotland, where Food Vessels appear in tandem with a massive increase in single burial practices (see Wilkin 2009; Curtis and Wilkin forthcoming).

One inescapable contrast between these two islands is the fact that most of the Beaker objects in Britain have been found in a funerary context, often in graves containing Beaker pottery. Unlike Ireland, deposition in natural places does not seem to have been an important aspect of the Beaker phenomenon in Britain, with the possible exception of northeastern Scotland where early metalwork is almost exclusively represented by axe
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hoards from wet places, (Cowie 1988, 13–19; Needham 2004, 239; 2007). Other divergences between Ireland and Britain include the dominance of green and grey fourholed bracers in Britain (Woodward et al. 2006).

There also appears to be significant discrepancies in the dating of the Beaker phenomenon on both islands. Radiocarbon dates indicate that the deposition of Beaker pottery peaked from 2400–2200 BC in Ireland, but then declined as it began to be replaced by Food Vessels and had totally disappeared by 2000 BC (see Chapter Eight). In Britain, the floruit of British Beaker use occurred c. 2200 BC, at which time, new regional forms of Beaker were developed and Beaker-associated funerary deposition became much more frequent, and only ceased to be used c. 1750 BC (Needham 2005, 171; Sheridan 2007a, 99). There is a corresponding increase in mortuary activity in Ireland, but this mainly occurred in tandem with the use of Irish Bowls which seem to fulfil a very similar role in graves as the recently hybridised British Beakers (see Chapter Five). However, most of the Irish Beaker dates come from pit deposits, while the majority of British examples are obtained from graves (Bayliss et al. 2007a, 50). So, to some extent, the contrast in dating that have been highlighted merely reflect the different types of context from which radiocarbon dates have been obtained on both islands (see Section 8.8). It remains possible that greater radiocarbon dating of Beaker settlement deposits in Britain would result in a significant increase in evidence for Beaker activity there between 2500–2250 BC.

Notwithstanding the existing differences, there are many commonalities between Beaker practices in Ireland and Britain. Ultimately, it is the west, southwestern and northern regions of that island which displays the greatest similarities with the Irish version of the Beaker phenomenon. This seems to indicate the existence of shared regional traditions between people in these areas in the latter half of the third millennium BC. This is exemplified by the evidence for connections between Ireland and east-central and northeastern Scotland (see Curtis and Wilkin forthcoming, Needham 2004; Cressey and Sheridan 2003, 80) as illustrated by discoveries such as that at Seafield West, near Inverness, where a burial with a distinctively Irish Bowl was located next to a second burial containing a bronze dagger made from Irish copper and a second Irish Bowl (Cressey and Sheridan 2003).
10.7 UNDERSTANDING THE IRISH RESPONSE TO THE BEAKER PHENOMENON – HOW AND WHY

The diverse range of extensive international contacts between Ireland and Europe (Almagro-Gorbea 1995, 136–7; Case 2004b, 361) may reflect the location of Ireland along sea routes in the Atlantic that connected its inhabitants to Continental Europe and Britain at a time when boats represented one of the main forms of interregional travel (Waddell 1991, 3; Bradley 2007, 17–2; Burl 2004, 31; Davies 1946; Scott 1951, Slater 1991; Rainbird 1999, 231). However, despite, all the evidence for international interaction c. 2500 BC, the Irish manifestation of the Beaker phenomenon remains unlike that from most other parts of Europe. This raises important questions regarding why Ireland is so different. In this section, I consider the most plausible reasons for this. Ultimately, I explore the idea that Irish Beaker-associated practices are best understood as an insular response to the adoption of aspects of the international Beaker assemblage, which resulted in the complex fusion of pre-existing traditions with novel objects, technologies and ideas.

10.7.1 Ireland: facing out but looking in

The unique manifestation of the Beaker phenomenon in Ireland may reflect this island’s long history of regionally distinctive reactions to wider trends which dates back to at least the Late Mesolithic (see Woodman 2000, 247–9). During the Irish Neolithic, the unique character of the archaeology is exemplified by the construction of a large numbers of Early Neolithic houses (Grogan 2004a; Smyth 2007), the occurrence of a number of large passage tomb cemeteries such as Knowth, Co. Meath (Eogan 1984), as well as the early disappearance of Grooved Ware c 2500 cal BC (Sheridan 2004a, 31; Brindley 1999b; Eogan and Roche 1997, 219), and the dominance of cremation rites (see Kinnes 1992; Cooney 1992).

The fourth and third millennia BC in Ireland seem to be characterised by a disposition of openness to new transformative trends. There appears to have been a strong desire on the part of the people living here to interact with the wider world and remain abreast of international trends. There is substantial evidence that the Neolithic material culture of this island was continuously transformed through interaction between the population of Ireland and other groups along the Atlantic façade (see Section 10.6.1). For example, maritime travel along the coastline of Atlantic Europe between Brittany, northernmost France, Ireland and Scotland in the early fourth millennium BC seems to have played a
strong role in the spread of agriculture to Ireland (Sheridan 1986; 2003; 2004b; 2005, 2007b). Similarly, the Irish construction and use of passage tombs, as well as the presence of megalithic art within these testifies to the long distance movement of people, objects and ideas between Ireland and the Atlantic façade (Sheridan 1986, Shee Twohig 1993).

It was probably necessary for this island population to adopt supra-regional innovations, particularly those with an ideological aspect to avoid situating themselves outside the mainstream of social relations c. 2500 BC (Fokkens 2008, 18). Such exchanges with other groups were imperative for biological, social and material reproduction and would have played an essential role in the construction of personhood (Brück 2006b, 86–93). However, such interactions could also be socially problematic and quite risk-laden: these involved crossing various physical and social boundaries and the alteration of objects’ meanings that occurs in the course of exchange may have resulted in the questioning of existing value systems (ibid, 91). There seems to have been some ambiguity surrounding the idea that Beaker objects represented membership of far bigger communities. This probably caused a tension between the local and the global, as well as the traditional and the innovative that both threatened and strengthened social cohesion (Fontijn 2008, 101).

Local groups may have traditionally resolved such conflicting ideological values by adapting these international objects and practices in a peculiar manner that accorded with local Irish cosmological conventions. For example, Irish passage tomb builders tailored a broad mix of exotic features from along the Atlantic façade to create a unique form of megalithic practices (Sheridan 1986, 28). Although groups in Ireland were aware of the normative way of doing things elsewhere, they strategically chose not to follow these. All of this accords with Broodbank’s (2000, 20) suggestion that insular populations consciously adapt new cultural traits, which they employ in idiosyncratic ways to symbolise that they are both different and similar to the rest of the world. Through the exchange and sharing of common objects, people imagined themselves as part of a much wider community, yet by treating these differently they also expressed their own local identity and sense of place, thereby ensuring social cohesion (Cohen 1985, 12). It seems that people on this island were eager to adopt foreign material culture to become more like others, while also becoming more like themselves.

The distinctive character of the international Beaker phenomenon in Ireland can be understood in relation to this custom of adopting supra-regional innovations which were then used in a distinctive manner to express both international and local identities. Most of the exotic Beaker special-purpose bodily adornments such as tanged copper daggers and wristbracers made references to places or people that were spatially remote and very
much disconnected from the context of everyday interaction (Helms 1988). The idea that these objects reflected relations with international communities may have been a source of concern for local groups who did not want to lose their sense of self. So, while these items played an important role in the expression of affinity with other people in other places, they also represented powerful and threatening symbols that needed to be constrained and controlled.

Local communities seem to have used deposition as a strategy to resolve the difficulties associated with these transformative objects, whereby supra-regional items were kept apart from each other and from other local, traditional or everyday objects, particularly Beaker pottery, as well as the home place, by depositing these in spatially and contextually discrete transitional locations (Fontijn 2002, 279; 2008, 102–4; Thomas 1999, 121). Bogs with their unique mixture of wet and dry land represent isolated and inaccessible places in locations at the edges of the cultivated landscape and seem to have been particularly well suited for depositing ambiguous objects that needed to be concealed (Fontijn 2008, 98 and 102, see Chapter Seven, Nine). By maintaining such a separation between the local and the global, the values and ideas associated with these that were so contradictory yet mutually reinforcing could be expressed in a manner that avoided social upheaval.

Within certain settings, people may have construed themselves as part of a much wider community linked together through exchange and the sharing of common objects. However, inside the home, the funerary and the monumental contexts, they redefined themselves by expressing their local identities. In these contexts, people accentuated their shared local ancestry and long-standing attachments to place by depositing occupational debris associated with the home and everyday activities such as food consumption. At this time, the household still operated as a powerful metaphor for the well-established ties that connected people, places and their ancestors together to form a ‘domestic’ household community (see Section 10.6). Although the presence of Beakers in these deposits may also have referred to the links with the wider cultural world, the fragmented and used condition of the pottery may have served to diminish this aspect by emphasising its quotidian character in a way that enabled groups to reassert their local communal identities and preserve their shared sense of belonging.

It is possible to understand some aspects of Beaker-associated mortuary practices in Ireland as a regionally-distinctive strategy employed by local groups as a means of maintaining their shared local identity, while also demonstrating their awareness of wider European practices. The discovery of a small number of inhumations dating from the mid-third millennium BC within newly constructed indigenous monuments suggests that novel
burial practices appeared contemporaneously with Beaker pottery. Local communities seem to have facilitated the introduction of this custom in a manner that still reflected traditional values and underpinned local identity by re-imagining the Neolithic practice of building megaliths. These wedge tombs seem to have been specially designed to reference pre-existing types of megaliths in Ireland. Several of these tombs were built in the same types of locations as earlier monuments, particularly court and portal tombs, and they often occur in association with pre-existing tomb types (see Cooney 1979; Cooney and Grogan 1999, 85).

The evidence available from the small number of burials known to be contemporary with the Beaker phenomenon suggests that it was only permissible to place traditional materials within graves that reproduced ancestral social relations and expressed more local forms of identity (Fontijn 2008, 102). Supra-regional bodily ornaments were largely excluded from funerary contexts because they drew too much attention to international connections and would not have depicted the dead or the relationships between the living and the deceased in the correct manner as representatives of the local community (see Fokkens 1997, Thomas 1999, 162).

10.7.2 The Influence of the Late Neolithic

This thesis shows that the Grooved Ware complex was rapidly replaced by the Beaker phenomenon c 2500–2400 BC (see Chapter Eight, Brindley 1999b; see Carlin and Brück forthcoming), but that pre-existing Late Neolithic social practices were largely continued, albeit with objects from the Beaker assemblage fulfilling many of the roles previously associated with Grooved Ware pottery as well as other Late Neolithic novelties (see Section 10.4 and 10.5). The character of the Irish Late Neolithic seems to have strongly influenced the unique manifestation of the Beaker phenomenon in Ireland.

Irish Grooved Ware stands out in contrast from the British material because of its lack of decoration. The Irish version of this ceramic is most commonly plain with no decoration on the exterior and only one or more grooves on the upper part of the inner surface (Grogan and Roche 2010, 34, Carlin et al. forthcoming). Significantly, there is a growing awareness that a high proportion of Beaker vessels in Ireland are undecorated (Grogan and Roche 2010, 36, Case 1993, 251; Eoin Grogan pers. comm.). It may be speculated that these plain Beakers are in fact a reflection of the continuation of some of the traditions associated with the manufacture and use of Irish Grooved Ware.
The transition between the end of the Irish Middle Neolithic (3600–2900 BC) and the start of the Late Neolithic (2900–2500 BC) is characterised by a decline in emphasis on mortuary practices and other depositional activities within the domains of the dead (Cooney 2000, 167). The very small amount of evidence for Late Neolithic funerary practices in Ireland suggests that human remains were usually cremated, burials were rarely accompanied by grave goods of any kind and Grooved Ware pots were generally not deposited in funerary contexts (see Carlin and Brück forthcoming). These pre-existing approaches almost certainly influenced the character of Beaker-associated burial practices in Ireland. This is illustrated by the paucity of Beaker pottery or other Beaker-associated objects within mortuary contexts and the continuation of cremation as the main burial rite. Indeed, the absence of the stereotypical Beaker burial in Ireland may be partially understood as resulting from the reluctance of local groups to abandon the insular Neolithic preference for cremating the dead (Kinnes 1992, Cooney 1992).

In tandem with the Late Neolithic shift of focus away from funerary deposition, a far greater concern with the activities of the living developed at this time (Cooney 2000, 167). New ceremonial structures in the form of timber circles and possibly also embanked enclosures were built. Social gatherings and feasting — many of which occurred within these new monument types, as well as outside older monuments such as Knowth and Newgrange — seem to occupy a greater social role than ever before. Ceremonial practices developed that seem to emphasise the homeplace including the commemorative deposition of Grooved Ware-associated occupational debris in the postholes of timber circles and in pits (Carlin and Brück forthcoming; Carlin et al. forthcoming). Many aspects of these Late Neolithic ceremonial traditions are clearly echoed by Beaker-associated depositional practices in Ireland (see Sections 10.3–5). Indeed, the collection and deposition of occupational debris in middens and pits seems to have assumed an even greater level of importance in tandem with the abrupt replacement of Grooved Ware with Beakers (see Carlin and Brück forthcoming). Some Late Neolithic timber circles also continued to be used until 2200 BC, with Beakers fulfilling the roles traditionally associated with Grooved Ware at these monuments (see Chapter Six).

Of course, some slight modifications were made to the cultural grammar of the Irish Late Neolithic in conjunction with the advent of the Beaker phenomenon. For example, Beaker-associated deposits are less structured and occur in a wider range of contexts (see Carlin and Brück forthcoming; Carlin et al. forthcoming). Also, in contrast to Grooved Ware, most of the Beaker pottery was represented by only a few sherds each, indicating a subtle shift in depositional practices.
Although, this topic requires further study, the development of the Beaker phenomenon in Ireland can be seen as a direct but gradual consequence of the dramatic social changes that occurred c. 3000 BC. These include the decline of the Middle Neolithic passage tomb complex, the dissolving of the boundaries that previously structured Irish Neolithic social geography and the adoption of Grooved Ware (Roche and Eogan 2001, 139). At this time, the centralised systems of authority operated by large-scale Middle Neolithic tribal communities associated with the use of passage tombs were deconstructed, small independent collectives developed in their stead and interaction networks became more open (Carlin and Brück forthcoming, Carlin et al. forthcoming; Fokkens 1999, 38; Barrett 1994, 147).

These emerging local communities began to develop their own unique identities by interacting with other Late Neolithic groups across the Irish Sea, adopting and adapting new Grooved Ware-associated objects and ideas which they employed in idiosyncratic ways. This provides the context for the subsequent acceptance and development of the Beaker phenomenon in Ireland. It seems that the interest in using novel items to demonstrate connections with other people continued and by c. 2500 BC this had developed a more international character involving more extensive networks of communities. The manner in which novel objects were used to construct and define social relations and identities during the Late Neolithic would have inclined people towards engagement with the international Beaker complex. This simply represented the logical next step in a trajectory that began c.3000 BC (Barrett 1994, 97–107, Carlin and Brück forthcoming). In the words of Neil Brodie: “Beaker groups were not in the process of becoming Bronze Age elites or Iron Age tribal formations; if anything, their cultural assemblages mark a final and perhaps fatal flowering of Neolithic practice, with mechanisms of material and cultural procurement stretched to breaking point” (Brodie 1997, 311–2).

### 10.7.3 Turning to tradition

While people’s need for interaction with the wider world c. 2500 BC resulted in the adoption of many innovations that slotted seamlessly into insular pre-existing belief systems, such contacts inevitably resulted in the introduction of supra-regional novelties to Ireland that were less acceptable to some sectors of society and/or incompatible with extant cultural conventions (see Section 10.7.1). Such difficulties seem to have been resolved by adapting these new objects and ideas to fit within long-established practices.
including pre-existing depositional strategies — albeit with some modifications — that were drawn from the local Irish cosmology.

The maintenance or re-invention of older customs enabled living communities to highlight their links across space with geographically distant groups while simultaneously preserving their connections through time with past ancestors. This is amply illustrated by the heightened interest in earlier Neolithic tombs amongst Beaker-using communities compared to the low numbers of Grooved Ware-associated objects found in these (Carlin and Brück forthcoming). This seems to represent a deliberate rebirth of the Early and Middle Neolithic tradition of depositing occupational materials including pot sherds into megaliths (see Case 1969a; 1973).

Another example of this is provided by the small number of Irish bracers made of porcellanite from Tievebulliagh, Co. Antrim, and the many examples made from other fine-grained sedimentary rocks (Roe and Woodward 2009, see Chapter Nine). All of these rock types had been traditionally used for making polished stone axes in Ireland (Cooney and Mandal 1998, 58 and 81). The selection of these may represent the deliberate continuation of inherited customs to underscore people’s ongoing connections with past generations and older values.

Polished stone axes played a prominent role in social life during the Irish Mesolithic and Neolithic (Cooney and Mandal 1998, 34; Cooney and Grogan 1999, 231; Cooney 2004, 39) and the significance of these objects continued after 2500 BC (Cooney and Grogan 1999, 23). This is indicated by the discovery of numerous polished stone axes in association with Beaker pottery in settlement (see Chapter Four), ceremonial (see Chapter Six) and mortuary contexts (see Chapter Five), including evidence for their manufacture at Cloghers, Co. Kerry, and Roughan Hill, Co. Clare (see Chapters Three and Four). The discovery of a single polished stone axe within the spread of occupational debris and ore processing spoil at the Ross Island copper mine (O’Brien 2004, 358) and a cache of polished stone axes in another Early Bronze Age copper mine at Ballyrisode, near Goleen, Co. Cork (O’Brien 2003, 53–54), demonstrates the important role played by these traditionally significant objects in the acceptance of copper technology (Roberts et al. 2009).

A repertoire of copper objects resembling those found in Beaker-using areas elsewhere in northwest Europe including axes, halberds and daggers appears to have been enthusiastically and rapidly adopted contemporaneously with Beaker objects in Ireland c. 2500 BC. This development was strongly influenced by pre-existing practices associated with the production and exchange of polished stone axes (Cooney and Mandal 1998). This
is illustrated by the extraction of copper ore from a single source for several centuries by communities in the southwest (O’Brien 2004, 563) and the wide distribution of the products from this quarry throughout the island and across the Irish Sea along the same exchange routes as porcellanite axes (Needham 2004, 235).

A very large number of copper finds are known in Ireland, but copper axes form the main component (78%) of this early metal assemblage (Becker 2006, 80) and seem to have been particularly well received. For example, only 20 tanged copper daggers (see Catalogue 2) compared to 450 flat copper axes have been found throughout the entire island (Harbison 1969a). This exceptionally strong emphasis on the production and deposition of flat copper axeheads at this time suggests that axes retained their special role, despite the change in the material from which they were made (Carlin and Brück forthcoming).

The depositional treatment of copper axes also seems to replicate that of their stone counterparts. Hoards of early axes generally only comprised a single object type in the same manner that stone axe hoards only included other axes (Cooney 2004, 39). A focus on deposition in natural wet places seems to have continued after the introduction of copper technology. Bogs have produced 50% of all 400 contexted flat copper axes in Ireland (after Becker 2006). This echoes the recovery of a large proportion (57%) of stone axes from watery locations (Cooney and Mandal 1998, 34; Cooney 2004, 38–9). However, in contrast to the early metal examples, only 12% of stone axes have been found in bogs and a far greater proportion (45%) have been found in rivers (Cooney and Mandal 1998, 34–8). Indeed, the stone versions have been discovered in a much wider variety of contexts that include settlements and burials, compared to copper axes, which are almost exclusively found in natural places. This suggests that the treatment of copper axes was more rule-bound than that of their stone counterparts perhaps indicating that the social significance or symbolism of axes may have changed slightly c. 2500 BC.

This thesis has demonstrated that there is little difference in the depositional treatment of copper axes or halberds and contemporary supra-regional non-ceramic Beaker objects such as tanged copper daggers, V-perforated buttons and wristbracers in Ireland, most of which are predominantly found in bogs as single finds or within one-type hoards (see Sections 7.7 and 9.11.4). The practice of maintaining a spatial and contextual separation between these special-purpose supra-regional items and more everyday artefacts from the Beaker assemblage, particularly the pottery, has received much attention throughout this study. This strategy seems to have drawn upon the pre-existing Neolithic convention of depositing a restricted set of mundane objects in settlement contexts from which exotic
ceremonial items were excluded (Cooney and Grogan 1999, 211 and 231). During the third and fourth millennia BC, natural places were apparently seen as one of the contexts in which it was appropriate to emphasise the distinctive values associated with large finely made or highly polished stone axes, particularly those from distant places.

These supra-regional polished stone axes represented value-laden symbols of exchange that served to negotiate and reproduce collective values and underpin social relations (Cooney and Mandal 1998; Cooney and Grogan 1999, 231; Wentink and van Gijn 2008, 35). Unlike other more local or everyday objects, these axes had a special significance which meant that they needed to be treated in a particularly formal manner (Cooney and Mandal 1998, 34; Cooney 2004, 39). This is demonstrated by their deposition in distinctive contexts (Bradley 2000a, 120–1), often in natural places at the boundaries of the humanly constructed landscape. For example, most of the exotic Alpine jadeite axes which were brought to Ireland in the fourth millennium BC were deposited in wetland environs (see Pétrequin et al. 2008; 2009; Alison Sheridan pers. comm.). Similarly, a large proportion (43%) of the Langdale stone axes from Cumbria found in Ireland have been retrieved from rivers and bogs (Cooney and Mandal 1998, Bradley 2000a, 86).

Some of the objects within the international Beaker assemblage including tanged copper daggers and wristbracers appear to have assumed many of the roles previously occupied by certain forms of polished stone axes such as the expression of connections with the wider world during exchange ceremonies. Based on this, it seems plausible that the deposition of Beaker non-ceramic objects in Ireland was respecting the Neolithic practice of placing supra-regional stone axes in natural places. In this way, tradition functioned as a powerful framework that enabled people to reflect contact and interaction with others, while also maintaining their own unique group identity (Osborne 2008, 284).

10.7.4 Plus ça change.....

This thesis shows that the despite the adoption of novel Beaker-associated material culture and the technology for making these objects, no dramatic transformations in the structure of society seem to have occurred between 2500 and 2200 BC and it is difficult to argue that the introduction of the Beaker phenomenon or metallurgy to Ireland either caused or represented major changes.

While copper technology was certainly harnessed to produce functional items, early metal objects did not offer many advantages over stone-tools and the lives of people were not radically transformed by its introduction (O’Brien 2004, 515; Roberts 2008b, 365; see
Carlin and Brück forthcoming). Settlement systems and ceremonial practices were partially modified, while deposition in natural places increased but many traditional customs were maintained. There is also evidence for continuity in approaches taken to funerary practices over the course of the Late Neolithic-Early Bronze Age transition, though a slight increase in the level of evidence for burial activity and the limited adoption of inhumation rites also occurred (see Chapter Five, see Section 10.4). Overall though, the alterations that occurred in conjunction with the appearance of Beakers in Ireland were gradual and cumulative developments.

The widespread distribution of Beaker items on this island certainly suggests that the innovations in material culture and social practices that occurred at this time including the production, exchange, and deposition of these were accepted and instigated by local communities and cannot be attributed to a few individuals. It seems that Beaker novelties were adopted in Ireland because they were compatible with the local culture, its value system, and social structure (Rogers 2003, 10; Fokkens 2008, 18; Thomas 1999, 122). Ben Roberts (2008b, 365–6) has accentuated the strong influence of each community’s worldview in determining the distinctive ways in which early metallurgy was practised, an observation that is certainly borne out by the Irish evidence (see above, also see Carlin and Brück forthcoming). Copper metalworking was a community-based enterprise: the laborious processes associated with it could not have been conducted without the backing of local groups. This contradicts the traditional view that individual itinerant smiths were largely responsible for the spread of metallurgy (e.g. Childe 1930, 1944).

10.8. THE IMPLICATIONS FOR INTERPRETATIONS OF BEAKERS IN EUROPE

Having posited a new understanding of the nature of the Beaker phenomenon in Ireland, I now explore the implications of this for existing interpretations of this European complex. As outlined in the course of this study (see Section 9.12), the Irish evidence is clearly at complete odds with the widely-held view that the introduction of metals and the spread of the Beaker package indicate the emergence of a hierarchical society in which individual status was attained by the competitive exchange and display of exotic Beaker ornaments as part of a prestige goods economy (e.g. Renfrew 1974; Thorpe and Richards 1984; Clarke et al. 1985; Needham 2004; Heyd 2007; Sheridan 2008a). In an Irish context, there is very little evidence linking the adoption of the Beaker phenomenon with powerful individuals or an increase in social stratification and it is difficult to argue for the existence of either an institutionalised elite or a prestige goods economy in Ireland at this time.
My contextual analysis of the multiple inter-related components of Beaker-associated depositional practices suggests that Beaker ornaments and other early copper objects in Ireland were not passive by-products of a prehistoric fashion industry. The highly circumscribed treatment of these, including their presence within natural places rather than mortuary contexts, suggests that these deposits did not result from private individual actions or choices, and that they were not personal possessions associated with displays of wealth or status. To interpret Beaker artefacts solely in terms of status and prestige is to ignore the important social role of these objects (see Section 10.2).

Recently attention has returned to the role of human immigration in the transmission of copper metallurgy and the Beaker phenomenon. Arguably, this debate was reignited by the discovery of a grave containing the so-called ‘Amesbury Archer’ along with a range of supra-regional Beaker-associated objects in Wiltshire, southern England (Fitzpatrick 2002). Examination of the isotopic composition of the teeth from the deceased individual indicated that he had spent time in continental Europe, possibly southern Germany, as a young man (Fitzpatrick 2009). More evidence for Beaker-associated human mobility has subsequently been uncovered in Britain through isotope analysis of graves displaying continental funerary traditions. This includes the Boscombe Bowmen, Wiltshire, who may come from Wales, Ireland, or Brittany (Evans et al. 2006), as well as the burial of the 'Flying Dutchman' in the Kilmartin Glen, west Scotland, and an individual from Sorisdale on Coll in the Hebrides (Sheridan 2008a and b). In central Europe, recent studies of isotopes from Beaker burials have also revealed evidence for what may have been a considerable level of population movement at this time (Price et al. 1998; 2004, 30).

From the perspective of the research presented in this thesis, the role of pioneering migrationary individuals in the transmission of the Beaker phenomenon and/or copper technology has been overstated (e.g. Sheridan 2007a, 104–5; 2008a and b). Some commentators have suggested that continental Beaker-using immigrants prospecting for new sources of metal ore were responsible for the expansion of the Beaker phenomenon to Ireland and Britain (e.g. Sheridan 2008a, 64). This is inconsistent with the Irish evidence as outlined in this thesis. There is little to suggest that the motivations underlying the spread and adoption of the Beaker phenomenon were in any way directly related to a desire for copper technology on the part of the indigenous population or any continental Europeans (see Section 10.8.1). Furthermore, Stuart Needham (2007, 42) has observed that very few metal sources were actually exploited during the early phases of the Beaker phenomenon and Beaker pottery was also spread to many non-metal bearing regions including southern England.
The distinctive ways in which the novel forms of Beaker-associated practices, ideas and material culture were adopted and adapted to fit within pre-existing social traditions indicate that the greatest influence on the development of this phenomenon was the local insular community. The adoption and development of the external ideas associated with the Beaker complex in Ireland was almost wholly a product of the longer-term dynamics of Irish society, and the movement of people is best seen as a symptom rather than a cause (see Section 10.7.2; see Vandkilde 2004, 355 for similar interpretation of Danish Beaker phenomenon). The wish to belong to an interregional social network was already being expressed by local groups during the Irish Late Neolithic and participation in wider networks of socio-cultural interaction can be seen as the logical next step in this sequence of events. Small-scale seasonal movements between the continent and Britain and Ireland of the kind suggested by Humphrey Case (1969a, 1998, 410; 2004b) seem to represent an archaeological reality that enabled the transmission of new objects and ideas at this time, but such voyages may best be seen as a reflection of various local communities' attempts at self-determination.

10.8.1 WHITHER THE BEAKER PACKAGE?

The repeated co-occurrence of objects such as wristbracers, V-perforated buttons or tanged copper daggers with Beaker pots as part of grave assemblages in Britain and Europe has created the impression of a distinct and cohesive assemblage or 'culture'. It has been argued that these objects represent a formalised funerary assemblage often referred to as the 'Beaker package' (e.g. Shennan 1976; 1986). However, in Ireland, there is little semblance of any such coherency. Indeed, there is a distinct lack of associations between Beakers and these objects in any context, especially within the funerary sphere. The Irish evidence suggests that Beakers were not introduced to this island as part of a unified cultural ‘package’ and that the relatedness of Beakers and other objects may have been exaggerated elsewhere as a result of an almost exclusive focus upon the funerary domain.

While the lack of associations between these various objects in Ireland could be dismissed as a mere reflection of the highly selective nature of Irish depositional practices, the archaeological reality of the Beaker package has also been questioned in Atlantic regions where collective burials were dominant such as Portugal, northwestern and southern France (Salanova 1998b, Vander Linden 2006b, 318–9). Many of the artefacts that supposedly form key elements of the Beaker panoply including tanged copper daggers and wristbracers are rare in both northern France and Portugal (see Section 10.6.1), where some of the earliest Beaker pots – the 'Maritime style' which was to become the
inspiration for numerous new types of Beakers across Europe – have been found (Salanova 2002; 2004, 73). Around the Tagus Estuary in Southern Portugal, where Beakers probably first appeared, these pots are mainly found with arrowheads and Palmella points, the latter of which are seldom found with Beakers in other parts of Europe (Case 2004c; Salanova 2002; 2004). Similarly, while some aspects of the Beaker phenomenon such as burial practices seem to have been highly standardised in certain areas, they were regionally variant in many others. For example, single inhumations were the main form of Beaker-associated burial in Britain and Holland, but cremations dominated in Hungary, while collective burials were to the fore in Brittany and Ireland (see Section 10.6, see Harrison 1980).

Overall, the Beaker repertoire does not comprise a distinct formalised assemblage that emerged within the same cultural milieu. In the words of Laure Salanova (2004, 73), “the phenomenon of Bell Beaker vessels must be disassociated from the other artefacts with which they have been perhaps rather hastily linked. The classic and rare Bell Beaker vessel-dagger-wristbracer set comprises elements which reflect different networks”. The Beaker assemblage seems to represent a dynamic collection of novel materials, objects, ideas and practices that were circulating in exchange networks over a large spatial tract (see Case 2004c, 15; Salanova 2002; Needham 2005, 182; Brodie 1998, 50). These were continually modified over the course of numerous exchanges and interactions between various communities and then used within diverse local practices in many regions across Europe (Clarke 1976; Shennan 1977; Barrett 1994; Benz et al. 1998; Thomas 1999, 122; Vander Linden 2004; 2007a, 185–6; Vandkilde 2005a; Sarauw 2007b; 2008). The outcome of these interactions between various regional groups was influenced by a range of factors including the particular position of each place in relation to the various exchange networks, the structured nature of the relations between different areas, and the dynamics of each society. The fruits of these exchanges were then adapted to fit into the local milieu in each area, often resulting in divergences from other Beaker using communities (Salanova 2000, 2004, 75; Vander Linden 2007a, 346–350; 2007b, 187).

While Beaker-associated novelties were probably recognised as being extrinsic to the local society and of international character, it seems implausible that people may have known or understood the geographical extent of these in the third millennium BC or regarded these as European exotica (Barrett 1994, 97). Although there are some similarities in the manifestation of Beaker objects in various regions, there are too many differences to support any pan-European interpretations of this. The varied treatments of Beaker-associated objects in each region makes it unlikely that these carried fixed monolithic meanings; instead they tend to have gained new significance in accordance with how they
were used in different social contexts in various places (Shennan 1982; Barrett 1994; Boast 1995; Thomas 1999, 157).

There does not seem to have been a Beaker package or a Beaker phenomenon *per se*; instead we are dealing with the archaeologically detectable materialization of interactions, exchanges and expressions of supra-regional connections on a European scale from c.2500 to at least 2200 BC. The Beaker materials that are found by archaeologists are the product of selective and intentional acts reflecting the ideological values of those that deposited them (see Pollard 2002; Fontijn 2002; Hill 1995; Thomas 1999; Bradley 2003, 6–12; 2005a, 208–9). At this time, people chose to signify an international identity and/or links to other communities in materially-specific ways — most notably through the exchange and deposition of particular objects in funerary contexts — that left particularly obvious archaeological traces of interregional interaction and the movement of people.

While the scale and character of Beaker-associated exchange networks may distinguish this period from what occurred before or after, these do not represent some enigmatic or abnormal phenomenon. Society is founded upon exchange and interactions such as the movement of people, objects or ideas are imperative for biological, social and material reproduction (Mauss 1923; Lévi-Strauss 1949; 1987, 47). International exchange was not a new phenomenon that suddenly developed in the latter half of the third millennium BC. The widespread distribution of specific prominent artefacts or traditions across Western Europe is entirely consistent with much of the continent’s prehistory. For example, the extensive occurrences of Neolithic megalithic tombs throughout Europe indicate that humans have continuously adopted novel material culture over millennia in accordance with local needs. Similarly, the exchange of Beaker-associated innovations parallels other previous traditions such as the distribution of jadeite axes from the western edge of the Alps as far west as Ireland during the late sixth to early fourth millennium BC (see Pétrequin et al. 2008; 2009).

In many ways, groups in the mid-third millennium BC were just doing what people had always done. They were obtaining novel objects and using them to create meanings, to express themselves, to construct their identities, to demonstrate their relationships with others and to make sense of their lives, as well as the world in which they lived. Indeed, this seems very similar to what we continue to do to this day. From this perspective, the so-called Beaker phenomenon can be seen as a modern construct whose existence is based upon a particular reading of the evidence that exaggerates the strangeness of the exchanges that characterise it (Clarke 1976). The idea of a Beaker phenomenon is a hangover from cultural-historical approaches to the past that were prevalent when this
period first began to be studied (see Chapter Two). Unfortunately, understandings of the Beaker phenomenon continue to suffer from the amount of attention given to questions of ‘who?’ and ‘where?’, rather than more informative questions regarding what really developed at this time and the reasons behind this. This is exemplified by the latest upsurge in interest in the movement of individuals in the latter half of the third millennium BC (see Section 10.7.4). Much of the scholarship on this topic currently operates within a vacuum that ignores the historical context of human travel by focusing exclusively on the movement of individuals from 2500 to 2000 BC through the use of isotope studies and other means (e.g. the Beaker people project - Parker Pearson 2006). Beaker-associated migrations will continue to be regarded as extraordinary until such studies examine the evidence for human movement within a broader time-frame.

In light of this, the terms the “Beaker package” or the “Beaker phenomenon” seem particularly unsuitable words to characterise the participation of local communities in wider networks of socio-cultural interaction involving the circulation of people, ideas, beliefs, expertise and objects c. 2500–2200 BC. Helle Vandkilde (2009, 77) labelled this type of cross-cultural movement of persons, ideas, and objects which people perceived as being external to their own community as a ‘transculture’. Based upon the evidence for the manifestation of Beaker objects in Ireland, this currently represents the most appropriate designation to use. Consequently, I will now refer to this as ‘the Beaker transculture’.

Rather than worrying about what not to call these social developments, it may be more constructive to ask: why did inter-regional exchange of material culture and the depiction of connections with others become so important across Europe in the third millennium BC? While it does not seem possible to identify a single factor explanation for the development of these interregional social networks, involvement in the form of exchanges and movement within them appears to have been a strategy chosen by local groups across Europe as part of the negotiation of their identities. Vandkilde (ibid) advocates understanding this transculture as a “very loosely constituted imagined collective” operating along similar lines to Benedict Anderson’s (1991) concept of socially constructed “imagined communities” whereby people recognize themselves as belonging to a larger group even though they may rarely or never have actual physical contact with other members of that group.

Interaction in Beaker-associated social networks made it possible for people to construct shareable worlds to which they could belong, while still remaining separate. Beaker-associated novelties enabled mutual forms of material engagement that could be adhered to or modified to varying extents (Thomas 1999, 122 and 157). Craftsmanship and
expertise appear to have been particularly valued during this period as indicated by the wide transmission of transferable transformative technologies (Needham 2004, 218). Through the investment of time, energy and expertise in the creation and distribution of Beaker pots, wristbracers, fine flintwork, and early metallurgy, people used these new skills and objects to create age, gender and ethnic-related identities that demonstrated connections with other communities (e.g. Shell 2000; Butler and Fokkens 2005, 396; Fitzpatrick 2009).

Supra-regional Beaker symbolic objects had connotations, but these were vague enough that they appealed to a wide number of people, who then attached their own meanings to them (see Cohen 1993, 196). These objects proved to be especially suitable for humans to negotiate their relationships with each other and their world-scape during the mid third millennium BC. In each region, these supra-regional innovations were employed in various different practices that constructed social identities and helped communities to mark and mediate the shifting social boundaries that defined their world. The placement of standardised material culture with individual burials represents one of the obvious ways in which idealised representations of social identities were enacted in some regions including parts of Britain, while this was conducted in others such as Brittany through the deposition of the same material culture with collective burials in megalithic tombs. Ultimately, participation in the interregional Beaker social network facilitated the creation and maintenance of particular forms of social identity both within and beyond the local society, by enabling people to express new forms of collective ties with a wider international community in a manner that simultaneously emphasised their similarities with and differences from these other groups (Barrett 1994, 97–107; Thomas 1999, 122; Vander Linden 2007b, 349–350; 2007a, 183; Vander Linden et al. 2009, 77).

The idea of an imagined international community to which smaller local groups could believe they belonged certainly fits well with the Irish manifestation of the Beaker transculture. In the latter half of the third millennium BC, Ireland was inhabited by a well-connected society who was capable of maintaining long-distance exchange-networks and developing relationships of mutual allegiance with other people elsewhere in Europe. Local communities chose to participate in wider networks of socio-cultural interaction to situate themselves within a more shareable world in a manner that furthered their own needs. Through the adoption of a selection of Beaker-associated material culture, people symbolically constructed community in a manner that depicted them as possessing an international identity and enjoying positive social relationships with other regional groups.
Understanding the Beaker phenomenon in Ireland

While supra-regional Beaker-associated artefacts enabled people on this island to imagine themselves as belonging to an international collective, it also served to reinforce their own distinctive insular identity. The concept of ‘community’ is a relational idea that implies both similarity and difference (see Cohen 1985, 12). The use of these extrinsic Beaker objects in traditional practices also served to materialise and maintain the cohesion of local communities through the expression of a shared historic identity. In conclusion, local communities were developing their own unique blend of intra-regional and inter-regional identities by interacting with other international groups across the Irish Sea, adopting and adapting new ideas which they employed in idiosyncratic ways. Ultimately, the manifestation of the Beaker complex in Ireland is predominantly a reflection of the worldview of the indigenous population.

10.9 Future directions

There is much that remains to be done to further our understanding of the Beaker transculture in Ireland. The increase in development-led excavations from 1997 to 2007 produced a large amount of Beaker pottery. Yet very little is known about these ceramics and there has been no detailed synthesis of these or attempt to relate them to the pre-existing corpus. Many of the Beakers from older excavations are in need of detailed re-evaluation and there are doubtless assemblages containing Beakers that have not yet been identified as such. Overall, there would be much to be gained from an in-depth first-hand study of the methods of manufacture, as well as the form, decoration, size and function of Beaker pottery in Ireland. Ideally the results of such examinations would be compared with the context of deposition of various different forms of ceramic. A similar study is required for Beaker-associated lithics in Ireland. Typical Beaker tools, reduction technology, procurement strategies and tool manufacture remain poorly understood. A contextual approach to such a study would yield many dividends.

Unfortunately, it has not been possible within the confines of the present study to situate Beaker-associated practices in Ireland within their historical context by comparing Beaker depositional contexts and practices associated with preceding and succeeding ‘cultural’ packages (Grooved Ware and Food Vessels). To-date, no study has ever applied a longue durée perspective to examine the interrelationship of the activities and objects associated with all three of these ceramics that were so prevalent during the Late Neolithic/Early Bronze Age transition. In this thesis, a high level of evidence for continuity with previous traditions and a lack of evidence for dramatic alterations to social practices have been observed. This requires further exploration at an island-wide level.
It has been suggested that the appearance of Beakers in Ireland was part of a continuum of gradual developments that began at the start of the Late Neolithic. Credible as this hypothesis might be, it requires further investigation to demonstrate its veracity. Food Vessels appear to be an indigenous response to either the arrival of Beaker pottery, or perhaps the practice of depositing pottery with single inhumation burials in Ireland. The relationship between these different ceramics certainly warrants further examination. However, our understanding of the social practices associated with Grooved Ware and Food Vessels remains very poor, despite the large number of recent discoveries pertaining to both, and a detailed study of these is much needed to advance understandings of the period 3000–1800 BC. One way of addressing this lacuna might be to conduct a study of the depositional treatment of the various types of ceramics current between 3000–1700 BC. Another investigation could examine the deposition of all special purpose items from this timeframe within an integrated overarching contextual framework.

It would certainly be beneficial to examine Beaker-associated deposition in its broadest sense by situating Beaker finds within their landscape context. My research suggests that Beaker objects played a key role in structuring the landscape and creating distinct categories of place. Contemporary depositional strategies display a keen awareness of the past cultural history of the areas in which they were found to occur. A detailed exploration of the location of Beaker finds in relation to each other as well as other contemporary or pre-existing sites such as wedge tombs and burnt mounds within the context of their local landscape would certainly provide a better understanding of Beaker depositional practices and how these symbolically relate to the places in which they were conducted. It would be fruitful to apply this approach to a number of suitable geotopographical regions such as those around the Boyne Valley or Carlingford Lough, where many recent discoveries have been made, but to also extend the time frame to include the Late Neolithic and Early Bronze Age.

Finally, the dating of the duration and development of the Irish Beaker transculture remains poorly understood and is in need of further research. In particular, there are many undated cremation burials from wedge tombs and a range of other contexts in Ireland that may be contemporary with the use of Beaker pottery. Similarly, there are a sizable number of aceramic Early Bronze Age inhumations that have not been dated, but may have been buried between 2500 and 2200 BC. A program of radiocarbon dating to tackle this area would be highly beneficial.
10.10 CONCLUSION

In conclusion, this thesis provides a regionally specific study of the character, context and dating of Beaker-associated deposits in Ireland that addresses a major gap in our knowledge of the third millennium BC. It represents the first in-depth synthesis of the very large body of data from both old and new discoveries of Beaker artefacts in Ireland. It also provides the only uniquely Irish interpretation of the Beaker phenomenon that takes full account of more recent developments in our knowledge, as well as the regional character of the evidence.

The dominant trend in more recent approaches to the Irish manifestation of the Beaker phenomenon has been to see this development as either a cause or symptom of an increase in social ranking and a greater emphasis upon the individual (e.g. Cooney and Grogan 1999, 83–93; Waddell 1998, 121; O’Kelly 1989, 71–72). This is the first study to critique this interpretation by highlighting the lack of supporting evidence and by moving beyond the legacy of Lough Gur and Newgrange to offer an evidence-based alternative. As discussed in Chapters Two and Three, many innovations in Irish material culture were previously misattributed to the arrival of this phenomenon and wrongly considered to represent Beaker-associated social transformations. Most of these changes are now known to have occurred either in conjunction with the adoption of Grooved Ware at the end of the Middle Neolithic or at a much later date in the Bronze Age. Ultimately, this thesis offers a new perspective on how and why the Beaker phenomenon was adopted in Ireland that furthers our understanding of the nature of the wider European Beaker phenomenon.

Overall, this contextual study of the Beaker transculture in Ireland shows that an international suite of new ideas and objects including metallurgy were adopted and adapted because they fulfilled the distinctive needs of local communities. Beaker-associated material culture played a vital role in facilitating the expression and constraint of both personal and group identities as well as local and international social relations during an era when travel, trade and other forms of international interaction were greatly intensified. However, these developments merely represent part of a long sequence of gradual alterations in strategies of identity formation that occurred throughout the third millennium BC.
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Smyth, J. 2009


A PROPER PLACE FOR EVERYTHING: THE CHARACTER AND CONTEXT OF BEAKER DEPOSITIONAL PRACTICE IN IRELAND

Volume 2 of 2

Neil Carlin

The thesis is submitted to University College Dublin in fulfilment of the requirements for the degree of Doctor of Philosophy in the College of Arts and Celtic Studies

School of Archaeology
Head of School: Professor Tadhg O’Keefe
Supervisor: Dr. Joanna Brück
October 2011
Gazetteer of sites that have produced Beaker pottery

County Antrim
County Armagh
County Carlow
County Cavan
County Clare
County Cork
County Derry
County Down
County Dublin
County Fermanagh
County Galway
County Kerry
County Kildare
County Kilkenny
County Laois
County Leitrim
County Limerick
County Louth
County Mayo
County Meath
County Offaly
County Roscommon
County Sligo
County Tipperary
County Tyrone
County Waterford
County Wexford

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<table>
<thead>
<tr>
<th>Site name</th>
<th>No. of Beaker postholes</th>
<th>No. of Beaker features</th>
<th>Other Beaker features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ardsallagh 4</td>
<td>1</td>
<td>1</td>
<td>none</td>
</tr>
<tr>
<td>Dunboyne 3</td>
<td>1</td>
<td>2</td>
<td>a pit</td>
</tr>
<tr>
<td>Moanduff 2</td>
<td>1</td>
<td>2</td>
<td>a spread</td>
</tr>
<tr>
<td>Danesfort 8</td>
<td>1</td>
<td>2</td>
<td>a pit</td>
</tr>
<tr>
<td>Curraheen 1</td>
<td>1</td>
<td>2</td>
<td>a pit</td>
</tr>
<tr>
<td>Caherabbey Upper 103.1</td>
<td>1</td>
<td>2</td>
<td>a pit</td>
</tr>
<tr>
<td>Caherabbey Upper 185</td>
<td>1</td>
<td>3</td>
<td>two pits</td>
</tr>
<tr>
<td>Ballydrehid 185.5</td>
<td>1</td>
<td>4</td>
<td>three pits</td>
</tr>
<tr>
<td>Skreen 3</td>
<td>1</td>
<td>5</td>
<td>four pits</td>
</tr>
<tr>
<td>Newtownlittle</td>
<td>1</td>
<td>9</td>
<td>seven pits and a spread</td>
</tr>
<tr>
<td>Laghaunstown Site 35</td>
<td>1</td>
<td>12</td>
<td>four pits, a hearth, a stone surface, a spread</td>
</tr>
<tr>
<td>Beaverstown</td>
<td>2</td>
<td>4</td>
<td>two pits</td>
</tr>
<tr>
<td>Charlesland Site A</td>
<td>2</td>
<td>5</td>
<td>three pits</td>
</tr>
<tr>
<td>Rathwilladoon</td>
<td>2</td>
<td>6</td>
<td>four pits</td>
</tr>
<tr>
<td>Mell</td>
<td>2</td>
<td>8</td>
<td>three spreads, two pits, a slot trench</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>2</td>
<td>14</td>
<td>nine pits, three spreads</td>
</tr>
<tr>
<td>Newtownbalregan 5</td>
<td>5</td>
<td>10</td>
<td>three pits, a slot trench</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>6</td>
<td>14</td>
<td>six pits, a spread, a slot trench</td>
</tr>
</tbody>
</table>

Table 3.1: The type and number of Beaker features found on sites with Beaker postholes
### Table 3.2: The number of sherds and vessels found in each posthole and their ratio

<table>
<thead>
<tr>
<th>Site name</th>
<th>Sherd count</th>
<th>vessel count</th>
<th>'fine' or 'domestic'</th>
<th>Sherd: vessel ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caherabbey Upper (185)</td>
<td>1</td>
<td>1</td>
<td>'domestic'</td>
<td>1:1</td>
</tr>
<tr>
<td>Caherabbey Upper 103.1;</td>
<td>1</td>
<td>1</td>
<td>'domestic'</td>
<td>1:1</td>
</tr>
<tr>
<td>Skreen 3</td>
<td>1</td>
<td>1</td>
<td>'domestic'</td>
<td>1:1</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>1</td>
<td>1</td>
<td>'fine'</td>
<td>1:1</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>1</td>
<td>1</td>
<td>'fine'</td>
<td>1:1</td>
</tr>
<tr>
<td>Beaverstown</td>
<td>1</td>
<td>1</td>
<td>'fine'</td>
<td>1:1</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>1</td>
<td>1</td>
<td>'fine'</td>
<td>1:1</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>1</td>
<td>1</td>
<td>'fine'</td>
<td>1:1</td>
</tr>
<tr>
<td>Laghaunstown Site 35</td>
<td>1</td>
<td>1</td>
<td>'fine'</td>
<td>1:1</td>
</tr>
<tr>
<td>Danesfort 8</td>
<td>2</td>
<td>2</td>
<td>'fine'</td>
<td>1:1</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>1</td>
<td>1</td>
<td>unknown</td>
<td>1:1</td>
</tr>
<tr>
<td>Beaverstown</td>
<td>2</td>
<td>1</td>
<td>'domestic'</td>
<td>2:1</td>
</tr>
<tr>
<td>Dunboyne 3</td>
<td>2</td>
<td>1</td>
<td>'fine'</td>
<td>2:1</td>
</tr>
<tr>
<td>Mell</td>
<td>2</td>
<td>1</td>
<td>'fine'</td>
<td>2:1</td>
</tr>
<tr>
<td>Newtownlittle</td>
<td>2</td>
<td>1</td>
<td>'fine'</td>
<td>2:1</td>
</tr>
<tr>
<td>Rathwilladoon</td>
<td>2</td>
<td>1</td>
<td>'fine'</td>
<td>2:1</td>
</tr>
<tr>
<td>Curraheen 1</td>
<td>3</td>
<td>1</td>
<td>'domestic'</td>
<td>3:1</td>
</tr>
<tr>
<td>Mell</td>
<td>3</td>
<td>1</td>
<td>'domestic'</td>
<td>3:1</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>3</td>
<td>1</td>
<td>'fine'</td>
<td>3:1</td>
</tr>
<tr>
<td>Moanduff 2</td>
<td>3</td>
<td>1</td>
<td>'fine'</td>
<td>3:1</td>
</tr>
<tr>
<td>Rathwilladoon</td>
<td>3</td>
<td>1</td>
<td>'fine'</td>
<td>3:1</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>3</td>
<td>1</td>
<td>unknown</td>
<td>3:1</td>
</tr>
<tr>
<td>Newtownbalregan 5</td>
<td>14</td>
<td>4</td>
<td>'fine'</td>
<td>3.5:1</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>7</td>
<td>2</td>
<td>'fine' and 'domestic'</td>
<td>3.5:1</td>
</tr>
<tr>
<td>Newtownbalregan 5</td>
<td>36</td>
<td>9</td>
<td>'fine'</td>
<td>4:1</td>
</tr>
<tr>
<td>Newtownbalregan 5</td>
<td>15</td>
<td>3</td>
<td>'fine'</td>
<td>5:1</td>
</tr>
<tr>
<td>Ballydrehid Site 185.5</td>
<td>10</td>
<td>2</td>
<td>'fine' and 'domestic'</td>
<td>5:1</td>
</tr>
<tr>
<td>Newtownbalregan 5</td>
<td>10</td>
<td>1</td>
<td>'fine'</td>
<td>10:1</td>
</tr>
</tbody>
</table>

### Table 3.3: The type and number of Beaker features found on sites with stakeholes

<table>
<thead>
<tr>
<th>Site name</th>
<th>No. of Beaker stakeholes</th>
<th>No. of Beaker features</th>
<th>Other Beaker features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rathwilladoon</td>
<td>1</td>
<td>7</td>
<td>four pits, two postholes,</td>
</tr>
<tr>
<td>Barnagore 2</td>
<td>1</td>
<td>2</td>
<td>A pit</td>
</tr>
<tr>
<td>Graigueshoneen Field 3</td>
<td>3</td>
<td>5</td>
<td>Two pits</td>
</tr>
</tbody>
</table>

Table 3.2: The number of sherds and vessels found in each posthole and their ratio

Table 3.3: The type and number of Beaker features found on sites with stakeholes
<table>
<thead>
<tr>
<th>Site name</th>
<th>Sherd count</th>
<th>Vessel count</th>
<th>'Fine' or 'domestic'</th>
<th>Sherd: vessel ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graigueshoneen Field 3</td>
<td>2</td>
<td>1</td>
<td>'fine'</td>
<td>2:1</td>
</tr>
<tr>
<td>Graigueshoneen Field 3</td>
<td>3</td>
<td>1</td>
<td>'fine'</td>
<td>3:1</td>
</tr>
<tr>
<td>Graigueshoneen Field 3</td>
<td>8</td>
<td>1</td>
<td>'fine'</td>
<td>8:1</td>
</tr>
<tr>
<td>Rathwilladoon</td>
<td>11</td>
<td>?</td>
<td>unclassifiable</td>
<td>?</td>
</tr>
<tr>
<td>Barnagore 2</td>
<td>1</td>
<td>1</td>
<td>unclassifiable</td>
<td>1:1</td>
</tr>
</tbody>
</table>

Table 3.4: The number of sherds and vessels found in stakeholes and their ratio

<table>
<thead>
<tr>
<th>Site name</th>
<th>Slot trench shape</th>
<th>Length</th>
<th>Width</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilbride</td>
<td>unknown</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rathmullan Site 10</td>
<td>Linear</td>
<td>1.2</td>
<td>0.16</td>
<td>0.08</td>
</tr>
<tr>
<td>Rathmullan Site 10</td>
<td>Linear</td>
<td>1.4</td>
<td>0.4</td>
<td>0.08</td>
</tr>
<tr>
<td>Newtownbalregan 5</td>
<td>curvilinear</td>
<td>2.33</td>
<td>1.1</td>
<td>0.15</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>Linear</td>
<td>5.6</td>
<td>0.84</td>
<td>0.29</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>curvilinear</td>
<td>0</td>
<td>0.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Kilbride</td>
<td>Linear</td>
<td>3.8</td>
<td>0.7</td>
<td>0.35</td>
</tr>
<tr>
<td>Ahanaglogh Field 2 Area 13</td>
<td>curvilinear</td>
<td>2.8</td>
<td>0.9</td>
<td>0.36</td>
</tr>
<tr>
<td>Mell</td>
<td>sub-rectangular</td>
<td>2</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Mell</td>
<td>sub-rectangular</td>
<td>2.1</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Mell</td>
<td>sub-rectangular</td>
<td>1.95</td>
<td>0.69</td>
<td>0.64</td>
</tr>
<tr>
<td>Mell</td>
<td>sub-circular</td>
<td>1.1</td>
<td>0.68</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Table 3.5: The shape and size of Beaker-associated slot trenches in metres

<table>
<thead>
<tr>
<th>Site name</th>
<th>No. of Beaker features</th>
<th>No. of Beaker linears</th>
<th>Other Beaker features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahanaglogh Field 2 Area 13</td>
<td>2</td>
<td>1</td>
<td>a pit</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>7</td>
<td>1</td>
<td>five pits and a spread</td>
</tr>
<tr>
<td>Kilbride</td>
<td>2</td>
<td>2</td>
<td>a spread</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>18</td>
<td>1</td>
<td>six pits, a spread, six postholes</td>
</tr>
<tr>
<td>Mell</td>
<td>8</td>
<td>4</td>
<td>two pits, a spread and postholes</td>
</tr>
<tr>
<td>Newtownbalregan 5</td>
<td>10</td>
<td>1</td>
<td>three pits, five postholes</td>
</tr>
<tr>
<td>Rathmullan Site 10</td>
<td>8</td>
<td>2</td>
<td>four pits and a spread</td>
</tr>
<tr>
<td>Ross Island</td>
<td>5</td>
<td>3</td>
<td>two spreads and a pit</td>
</tr>
</tbody>
</table>

Table 3.6: The number of slot trenches on site and types of other Beaker features occurring on the same sites
### Table 3.7: The number of sherds and vessels found in slot trenches and their ratio

<table>
<thead>
<tr>
<th>Site name</th>
<th>Sherd count</th>
<th>Vessel count</th>
<th>'fine' or 'domestic'</th>
<th>Sherd: vessel ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mell</td>
<td>1</td>
<td>?</td>
<td>'fine'</td>
<td>?</td>
</tr>
<tr>
<td>Newtownbalregan 5</td>
<td>2</td>
<td>1</td>
<td>'fine'</td>
<td>2:1</td>
</tr>
<tr>
<td>Ahanaglogh Field 2 A13</td>
<td>3</td>
<td>1</td>
<td>'domestic'</td>
<td>3:1</td>
</tr>
<tr>
<td>Ross Island</td>
<td>3</td>
<td>?</td>
<td>Unknown</td>
<td>?</td>
</tr>
<tr>
<td>Rathmullan Site 10</td>
<td>4</td>
<td>?</td>
<td>Unknown</td>
<td>?</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>5</td>
<td>3</td>
<td>'fine'</td>
<td>1.6:1</td>
</tr>
<tr>
<td>Mell</td>
<td>5</td>
<td>3</td>
<td>'fine' and 'domestic'</td>
<td>1.6:1</td>
</tr>
<tr>
<td>Rathmullan Site 10</td>
<td>5</td>
<td>?</td>
<td>Unknown</td>
<td>?</td>
</tr>
<tr>
<td>Kilbride</td>
<td>6</td>
<td>1</td>
<td>'fine'</td>
<td>6:1</td>
</tr>
<tr>
<td>Mell</td>
<td>6</td>
<td>2</td>
<td>'fine'</td>
<td>3:1</td>
</tr>
<tr>
<td>Kilbride</td>
<td>8</td>
<td>?</td>
<td>'fine'</td>
<td>?</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>10</td>
<td>?</td>
<td>'fine'</td>
<td>?</td>
</tr>
<tr>
<td>Ross Island</td>
<td>14</td>
<td>?</td>
<td>Unknown</td>
<td>?</td>
</tr>
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</table>

### Table 3.8: The range and quantity of finds from Beaker slot trenches

<table>
<thead>
<tr>
<th>ARTEFACT TYPE</th>
<th>Arefact Total</th>
<th>Pit Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convex scrapers</td>
<td>80</td>
<td>21</td>
</tr>
<tr>
<td>barbed and tanged arrowhead</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>polypod bowls</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>disc beads</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>Quern stones</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Hammer stones</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>polished stone axes</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

### Table 4.1: The numbers of artefacts found in Beaker pits.
### Table 4.2: The numbers of scrapers occurring in each Beaker pit on each site

<table>
<thead>
<tr>
<th>Site name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilgobbin</td>
<td>17</td>
</tr>
<tr>
<td>Coldwinters</td>
<td>16</td>
</tr>
<tr>
<td>Rathdown</td>
<td>7</td>
</tr>
<tr>
<td>Rathmullan, Site 9B</td>
<td>5</td>
</tr>
<tr>
<td>Rathdown</td>
<td>5</td>
</tr>
<tr>
<td>Burtonhall Demesne</td>
<td>4</td>
</tr>
<tr>
<td>Rathwilladoon</td>
<td>3</td>
</tr>
<tr>
<td>Broomfield</td>
<td>2</td>
</tr>
<tr>
<td>Burtonhall Demesne</td>
<td>2</td>
</tr>
<tr>
<td>Burtonhall Demesne</td>
<td>2</td>
</tr>
<tr>
<td>Burtonhall Demesne</td>
<td>1</td>
</tr>
<tr>
<td>Cloghers II</td>
<td>1</td>
</tr>
<tr>
<td>Corbally</td>
<td>1</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>1</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>1</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>1</td>
</tr>
<tr>
<td>Ballymoyle</td>
<td>1</td>
</tr>
<tr>
<td>Lisnasallagh 2</td>
<td>1</td>
</tr>
<tr>
<td>Templeraineey</td>
<td>1</td>
</tr>
<tr>
<td>Newtownbalregan 2</td>
<td>1</td>
</tr>
<tr>
<td>Newtownbalregan 2</td>
<td>1</td>
</tr>
<tr>
<td>Newtownbalregan 2</td>
<td>1</td>
</tr>
<tr>
<td>Paulstown</td>
<td>1</td>
</tr>
<tr>
<td>Paulstown</td>
<td>1</td>
</tr>
<tr>
<td>Paulstown</td>
<td>1</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>1</td>
</tr>
</tbody>
</table>

### Table 4.3: The numbers of arrowheads occurring in each Beaker pit on each site

<table>
<thead>
<tr>
<th>Site name</th>
<th>Find type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilgobbin</td>
<td>Sutton</td>
<td>1</td>
</tr>
<tr>
<td>Hill of Rath</td>
<td>barbed and tanged</td>
<td>1</td>
</tr>
<tr>
<td>Hill of Rath</td>
<td>barbed and tanged arrowhead</td>
<td>1</td>
</tr>
<tr>
<td>Hill of Rath</td>
<td>barbed and tanged</td>
<td>1</td>
</tr>
<tr>
<td>Corbally</td>
<td>barbed and tanged</td>
<td>1</td>
</tr>
<tr>
<td>Ballycuddy More 1</td>
<td>unknown</td>
<td>1</td>
</tr>
<tr>
<td>Rathmullan Site 12</td>
<td>Green Low</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.2: The numbers of scrapers occurring in each Beaker pit on each site

Table 4.3: The numbers of arrowheads occurring in each Beaker pit on each site
<table>
<thead>
<tr>
<th>Site name</th>
<th>Find type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coldwinters</td>
<td>anvil</td>
<td>3</td>
</tr>
<tr>
<td>Ross Island</td>
<td>anvil</td>
<td>5</td>
</tr>
<tr>
<td>Ballinaspig More 5</td>
<td>grinding stone</td>
<td>1</td>
</tr>
<tr>
<td>Cloghers II</td>
<td>grinding stone</td>
<td>1</td>
</tr>
<tr>
<td>Auginish</td>
<td>Hammerstone</td>
<td>1</td>
</tr>
<tr>
<td>Cloghers II</td>
<td>Hammerstone</td>
<td>1</td>
</tr>
<tr>
<td>Newtownbalregan 5</td>
<td>Hammerstone</td>
<td>1</td>
</tr>
<tr>
<td>Coldwinters</td>
<td>Hammerstone</td>
<td>1</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>Hammerstone</td>
<td>1</td>
</tr>
<tr>
<td>Monadreela Site 13</td>
<td>Hammerstone</td>
<td>1</td>
</tr>
<tr>
<td>Coldwinters</td>
<td>Hammerstone</td>
<td>3</td>
</tr>
<tr>
<td>Templarainey</td>
<td>pebble</td>
<td>1</td>
</tr>
<tr>
<td>Ross Island</td>
<td>quernstone</td>
<td>1</td>
</tr>
<tr>
<td>Barnagore 2</td>
<td>quernstone</td>
<td>1</td>
</tr>
<tr>
<td>Monadreela Site 13</td>
<td>quernstone</td>
<td>1</td>
</tr>
<tr>
<td>Barnagore 2</td>
<td>rubbing stones</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 4.4: The numbers of stone macro-tools occurring in each Beaker pit on each site
<table>
<thead>
<tr>
<th>Site name</th>
<th>Species</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnagore 2</td>
<td>barley</td>
<td>1</td>
</tr>
<tr>
<td>Barnagore 2</td>
<td>wheat</td>
<td>1</td>
</tr>
<tr>
<td>Caherabbey Upper (Site 185)</td>
<td>emmer wheat</td>
<td>102</td>
</tr>
<tr>
<td>Caherabbey Upper (Site 185)</td>
<td>Indeterminate</td>
<td>241</td>
</tr>
<tr>
<td>Cloghers II</td>
<td>barley</td>
<td>534</td>
</tr>
<tr>
<td>Cloghers II</td>
<td>barley</td>
<td>0</td>
</tr>
<tr>
<td>Cloghers II</td>
<td>wheat</td>
<td>0</td>
</tr>
<tr>
<td>Dunboyne 3</td>
<td>wheat</td>
<td>0</td>
</tr>
<tr>
<td>Dunmoon</td>
<td>barley</td>
<td>0</td>
</tr>
<tr>
<td>Gortore</td>
<td>barley</td>
<td>0</td>
</tr>
<tr>
<td>Gortore</td>
<td>wheat</td>
<td>0</td>
</tr>
<tr>
<td>Graigueshoneen Field 3</td>
<td>barley</td>
<td>77</td>
</tr>
<tr>
<td>Graigueshoneen Field 3</td>
<td>wheat</td>
<td>18</td>
</tr>
<tr>
<td>Johnstown 3</td>
<td>barley</td>
<td>116</td>
</tr>
<tr>
<td>Johnstown 3</td>
<td>wheat</td>
<td>5</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>barley</td>
<td>3</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>indeterminate</td>
<td>47</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>wheat</td>
<td>2</td>
</tr>
<tr>
<td>Laghaunstown Site 35</td>
<td>wheat</td>
<td>1</td>
</tr>
<tr>
<td>Mell</td>
<td>barley</td>
<td>74</td>
</tr>
<tr>
<td>Mell</td>
<td>indeterminate</td>
<td>86</td>
</tr>
<tr>
<td>Mell</td>
<td>oat</td>
<td>2</td>
</tr>
<tr>
<td>Mell</td>
<td>wheat</td>
<td>1</td>
</tr>
<tr>
<td>Rathdown</td>
<td>barley</td>
<td>4</td>
</tr>
<tr>
<td>Rathdown</td>
<td>bread wheat</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 4.5: The occurrence of cereals within Beaker-associated pits
### Table 4.6: Details of pits containing Beaker-associated hazelnuts

<table>
<thead>
<tr>
<th>Site name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auginish</td>
<td>1</td>
</tr>
<tr>
<td>Ballinaspig More 5</td>
<td>3</td>
</tr>
<tr>
<td>Caherabbey Upper</td>
<td>7</td>
</tr>
<tr>
<td>Cloghers II</td>
<td>unknown</td>
</tr>
<tr>
<td>Danesfort 8</td>
<td>unknown</td>
</tr>
<tr>
<td>Faughart 6</td>
<td>unknown</td>
</tr>
<tr>
<td>Frankfort</td>
<td>unknown</td>
</tr>
<tr>
<td>Gortore</td>
<td>unknown</td>
</tr>
<tr>
<td>Gortybrigane 1</td>
<td>1</td>
</tr>
<tr>
<td>Graigneshoneen Field 3</td>
<td>7</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>54</td>
</tr>
<tr>
<td>Laghaunstown Site 35</td>
<td>unknown</td>
</tr>
<tr>
<td>Monadreela Site 13</td>
<td>2</td>
</tr>
<tr>
<td>Paulstown</td>
<td>unknown</td>
</tr>
<tr>
<td>Rathdown</td>
<td>7</td>
</tr>
</tbody>
</table>

### Table 4.7: Details of pits containing Beaker-associated evidence for fruit

<table>
<thead>
<tr>
<th>Site name</th>
<th>Find type</th>
<th>Detail</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cloghers II</td>
<td>seed</td>
<td>blackberry</td>
<td>unknown</td>
</tr>
<tr>
<td>Gortore</td>
<td>fruit</td>
<td>apple pips</td>
<td>unknown</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>fruit</td>
<td>indeterminate</td>
<td>2</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>fruit</td>
<td>sloe stone</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.6: Details of pits containing Beaker-associated hazelnuts

Table 4.7: Details of pits containing Beaker-associated evidence for fruit
<table>
<thead>
<tr>
<th>Site name</th>
<th>Species</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aughinish</td>
<td>cremation</td>
<td>indeterminate</td>
</tr>
<tr>
<td>Dunboyne 3</td>
<td>sheep/goat</td>
<td>indeterminate</td>
</tr>
<tr>
<td>Dunboyne 3</td>
<td>unclassifiable</td>
<td>unclassifiable</td>
</tr>
<tr>
<td>Dunmoon</td>
<td>unclassifiable</td>
<td>unclassifiable</td>
</tr>
<tr>
<td>Faughart 6</td>
<td>unclassifiable</td>
<td>unclassifiable</td>
</tr>
<tr>
<td>Faughart 6</td>
<td>unclassifiable</td>
<td>unclassifiable</td>
</tr>
<tr>
<td>Johnstown 3</td>
<td>cow</td>
<td>foot bones</td>
</tr>
<tr>
<td>Johnstown 3</td>
<td>sheep</td>
<td>teeth</td>
</tr>
<tr>
<td>Johnstown 3</td>
<td>pig</td>
<td>jaw</td>
</tr>
<tr>
<td>Johnstown 3</td>
<td>cow</td>
<td>tooth</td>
</tr>
<tr>
<td>Johnstown 3</td>
<td>cow</td>
<td>foreleg</td>
</tr>
<tr>
<td>Johnstown 3</td>
<td>pig</td>
<td>tooth</td>
</tr>
<tr>
<td>Johnstown 3</td>
<td>cremation</td>
<td>animal bone</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>indeterminate</td>
<td>indeterminate</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>indeterminate</td>
<td>indeterminate</td>
</tr>
<tr>
<td>Newtownbalregan 2</td>
<td>indeterminate</td>
<td>indeterminate</td>
</tr>
<tr>
<td>Rathmullan Site 12</td>
<td>pig</td>
<td>indeterminate</td>
</tr>
<tr>
<td>Rathmullan Site 12</td>
<td>Vertebrate</td>
<td>indeterminate</td>
</tr>
</tbody>
</table>

**Table 4.8: Details of pits containing Beaker-associated faunal remains**

<table>
<thead>
<tr>
<th>Site name</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilgobbin</td>
<td>identified as probably human</td>
</tr>
<tr>
<td>Hill of Rath</td>
<td>need to confirm that bone is definitively human</td>
</tr>
<tr>
<td>Carnmore 5</td>
<td>Unfortunately the bone is unidentifiable due to small size but given its association with intact Bowl, it seems likely to be human</td>
</tr>
<tr>
<td>Gortcobies pit</td>
<td>none</td>
</tr>
<tr>
<td>Lismullin</td>
<td>No duplicated elements were found (MNI=1), nor were any parts which would indicate age or sex.</td>
</tr>
<tr>
<td>Monadreela Site 13</td>
<td>none</td>
</tr>
<tr>
<td>Kilbane Field 3</td>
<td>none</td>
</tr>
</tbody>
</table>

**Table 4.9: Details of pits containing probable Beaker-associated human remains**
<table>
<thead>
<tr>
<th>Site name</th>
<th>Fine vessels</th>
<th>Domestic vessels</th>
<th>Fine sherds</th>
<th>Domestic sherds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilgobbin</td>
<td>74</td>
<td>6</td>
<td>565</td>
<td>95</td>
</tr>
<tr>
<td>Paulstown</td>
<td>18</td>
<td>7</td>
<td>120</td>
<td>44</td>
</tr>
<tr>
<td>Gortmakellis</td>
<td>11</td>
<td>5</td>
<td>173</td>
<td>212</td>
</tr>
<tr>
<td>Paulstown</td>
<td>11</td>
<td>3</td>
<td>126</td>
<td>11</td>
</tr>
<tr>
<td>Newtownbalregan 2</td>
<td>10</td>
<td>4</td>
<td>114</td>
<td>19</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>9</td>
<td>2</td>
<td>32</td>
<td>51</td>
</tr>
<tr>
<td>Monadreela Site 13</td>
<td>5</td>
<td>5</td>
<td>45</td>
<td>59</td>
</tr>
<tr>
<td>Faughart 6</td>
<td>5</td>
<td>1</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>Lisnasallagh 2</td>
<td>5</td>
<td>2</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Moneylawn Lower Site 13</td>
<td>4</td>
<td>2</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Rathwilladoon</td>
<td>4</td>
<td>1</td>
<td>28</td>
<td>9</td>
</tr>
<tr>
<td>Nugentstown 3</td>
<td>4</td>
<td>1</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td>Newtownlittle</td>
<td>3</td>
<td>3</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>Paulstown</td>
<td>3</td>
<td>1</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Newtownlittle</td>
<td>3</td>
<td>1</td>
<td>23</td>
<td>2</td>
</tr>
<tr>
<td>Frankfort</td>
<td>2</td>
<td>1</td>
<td>30</td>
<td>160</td>
</tr>
<tr>
<td>Curraheen 1</td>
<td>2</td>
<td>1</td>
<td>13</td>
<td>33</td>
</tr>
<tr>
<td>Gortore</td>
<td>2</td>
<td>1</td>
<td>49</td>
<td>25</td>
</tr>
<tr>
<td>Ballydrehid Site 185.5</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Monadreela Site 13</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Raheenagureen Site 26</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Gortybrigane 1</td>
<td>1</td>
<td>2</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td>Skreen 3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.10: The number of ‘fine’ and ‘domestic’ vessels and sherds of each type in mixed pits. Each of the entries above relates to a single pit.
<table>
<thead>
<tr>
<th></th>
<th>'fine' only</th>
<th></th>
<th></th>
<th>'domestic' only</th>
<th></th>
<th></th>
<th>'fine' and 'domestic'</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of artefacts</td>
<td>number of pits</td>
<td>% of pits</td>
<td>Number of artefacts</td>
<td>number of pits</td>
<td>% of pits</td>
<td>Number of artefacts</td>
<td>number of pits</td>
</tr>
<tr>
<td>No associated artefacts or ecofacts</td>
<td>n/a</td>
<td>14</td>
<td>27</td>
<td>n/a</td>
<td>17</td>
<td>62</td>
<td>n/a</td>
<td>4</td>
</tr>
<tr>
<td>Cremated human bone</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>1</td>
<td>3</td>
<td>n/a</td>
<td>2</td>
</tr>
<tr>
<td>Unidentifiable cremated bone/burnt animal bone</td>
<td>n/a</td>
<td>7</td>
<td>13</td>
<td>n/a</td>
<td>6</td>
<td>26</td>
<td>n/a</td>
<td>5</td>
</tr>
<tr>
<td>Charcoal</td>
<td>n/a</td>
<td>17</td>
<td>32</td>
<td>n/a</td>
<td>3</td>
<td>11</td>
<td>n/a</td>
<td>10</td>
</tr>
<tr>
<td>cereals</td>
<td>n/a</td>
<td>5</td>
<td>10</td>
<td>n/a</td>
<td>1</td>
<td>4</td>
<td>n/a</td>
<td>4</td>
</tr>
<tr>
<td>fruit</td>
<td>n/a</td>
<td>1</td>
<td>2</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>2</td>
</tr>
<tr>
<td>nuts</td>
<td>n/a</td>
<td>5</td>
<td>10</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
<td>7</td>
</tr>
<tr>
<td>arrowheads</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>scrapers</td>
<td>7</td>
<td>24</td>
<td>46</td>
<td>16</td>
<td>1</td>
<td>4</td>
<td>24</td>
<td>5</td>
</tr>
<tr>
<td>grinding stone</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>hammerstone</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>anvil</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>quernstone</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>polished stone axes</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>discbeads</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>23</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.11: The number and percentage of pits containing either ‘fine’, ‘domestic’ or ‘fine’ and ‘domestic’ pottery and at least one of each item.
<table>
<thead>
<tr>
<th>Site name</th>
<th>Total sherds from site</th>
<th>Total vessels from site</th>
<th>Number of sherds from a pit</th>
<th>Number of vessels from a pit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilgobbin</td>
<td>560</td>
<td>45</td>
<td>696</td>
<td>38</td>
</tr>
<tr>
<td>Gortmakellis</td>
<td>418</td>
<td>16</td>
<td>385</td>
<td>16</td>
</tr>
<tr>
<td>Paulstown</td>
<td>424</td>
<td>60</td>
<td>165</td>
<td>26</td>
</tr>
<tr>
<td>Paulstown</td>
<td>424</td>
<td>60</td>
<td>137</td>
<td>14</td>
</tr>
<tr>
<td>Windmill Site 36bii</td>
<td>332</td>
<td>27</td>
<td>258</td>
<td>19</td>
</tr>
<tr>
<td>Lismullin</td>
<td>234</td>
<td>6</td>
<td>205</td>
<td>1</td>
</tr>
<tr>
<td>Dunmoon</td>
<td>210</td>
<td>30</td>
<td>210</td>
<td>23</td>
</tr>
<tr>
<td>Frankfort</td>
<td>204</td>
<td>3</td>
<td>190</td>
<td>3</td>
</tr>
<tr>
<td>Cloghers II</td>
<td>256</td>
<td>13</td>
<td>140</td>
<td>11</td>
</tr>
<tr>
<td>Hill of Rath</td>
<td>123</td>
<td>32</td>
<td>156</td>
<td>30</td>
</tr>
<tr>
<td>Kilbane II, Fd 1</td>
<td>200</td>
<td>0</td>
<td>155</td>
<td>unknown</td>
</tr>
<tr>
<td>Templarainey</td>
<td>273</td>
<td>12</td>
<td>63</td>
<td>5</td>
</tr>
<tr>
<td>Newtownbalregan 2</td>
<td>133</td>
<td>11</td>
<td>133</td>
<td>11</td>
</tr>
<tr>
<td>Barnagore 2</td>
<td>125</td>
<td>10</td>
<td>126</td>
<td>7</td>
</tr>
<tr>
<td>Monadreela Site 13</td>
<td>135</td>
<td>12</td>
<td>84</td>
<td>10</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>121</td>
<td>12</td>
<td>82</td>
<td>10</td>
</tr>
<tr>
<td>Danesfort 8</td>
<td>47</td>
<td>11</td>
<td>44</td>
<td>9</td>
</tr>
<tr>
<td>Newtownbalregan 5</td>
<td>166</td>
<td>15</td>
<td>69</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 4.13: Details of sites with a pit containing high numbers of Beaker sherds or vessels

<table>
<thead>
<tr>
<th>Number of vessels</th>
<th>Number of Pits with One fill</th>
<th>%</th>
<th>Two fills</th>
<th>%</th>
<th>Three fills</th>
<th>%</th>
<th>Four fills or more</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>46</td>
<td>92</td>
<td>21</td>
<td>75</td>
<td>5</td>
<td>62</td>
<td>11</td>
<td>73</td>
</tr>
<tr>
<td>6-10</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>25</td>
<td>3</td>
<td>38</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11-15</td>
<td>1</td>
<td>2</td>
<td>7</td>
<td>25</td>
<td>3</td>
<td>38</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>16-20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>21-25</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>26-30</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4.14: Comparison of the number of Beakers found in pits containing various numbers of fills e.g eleven pits displaying four separate deposits contain between one and five vessels
### Table 4.15: The number of Beaker pits containing varying numbers of sherds derived from lone pots

<table>
<thead>
<tr>
<th>Number of sherds from a single vessel in pit</th>
<th>Number of pits in which this occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>one</td>
<td>29</td>
</tr>
<tr>
<td>two</td>
<td>4</td>
</tr>
<tr>
<td>three</td>
<td>11</td>
</tr>
<tr>
<td>four</td>
<td>2</td>
</tr>
<tr>
<td>five</td>
<td>2</td>
</tr>
<tr>
<td>six</td>
<td>3</td>
</tr>
<tr>
<td>seven</td>
<td>1</td>
</tr>
<tr>
<td>eight</td>
<td>3</td>
</tr>
<tr>
<td>fourteen</td>
<td>1</td>
</tr>
<tr>
<td>fifteen</td>
<td>1</td>
</tr>
<tr>
<td>seventeen</td>
<td>1</td>
</tr>
<tr>
<td>nineteen</td>
<td>1</td>
</tr>
<tr>
<td>forty eight</td>
<td>1</td>
</tr>
<tr>
<td>two hundred and five</td>
<td>1</td>
</tr>
</tbody>
</table>

### Table 4.16: The correlation between the number of Beaker pits on site and the occurrence of pits with sherd:vessel ratio of 1:1

<table>
<thead>
<tr>
<th>Number of Beaker pits occurring on a site where at least one pit displays sherd:vessel ratio of 1:1</th>
<th>Number of sites where this occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>one</td>
<td>6</td>
</tr>
<tr>
<td>two</td>
<td>7</td>
</tr>
<tr>
<td>three</td>
<td>0</td>
</tr>
<tr>
<td>four</td>
<td>4</td>
</tr>
<tr>
<td>five</td>
<td>0</td>
</tr>
<tr>
<td>six</td>
<td>3</td>
</tr>
<tr>
<td>seven</td>
<td>0</td>
</tr>
<tr>
<td>eight</td>
<td>0</td>
</tr>
<tr>
<td>nine</td>
<td>0</td>
</tr>
<tr>
<td>ten</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4.15: The number of Beaker pits containing varying numbers of sherds derived from lone pots

Table 4.16: The correlation between the number of Beaker pits on site and the occurrence of pits with sherd:vessel ratio of 1:1
<table>
<thead>
<tr>
<th>Site name</th>
<th>Finds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballinure</td>
<td>1 x blade</td>
</tr>
<tr>
<td>Ballycuddy More 1</td>
<td>1 x Arrowhead, 2 x Early Neolithic pot sherds</td>
</tr>
<tr>
<td>Ballymoyle</td>
<td>1 x scraper, 1 x retouched flake, 32 x Debitage pieces, 29 x Natural pieces</td>
</tr>
<tr>
<td>Carranstown Site 3</td>
<td>burnt bone</td>
</tr>
<tr>
<td>Carranstown Site 3</td>
<td>3 x debitage</td>
</tr>
<tr>
<td>Caherabbey Upper</td>
<td>a cache of cereal grain</td>
</tr>
<tr>
<td>Coolbeg Site 73</td>
<td>3 x debitage</td>
</tr>
<tr>
<td>Gortcobies pit</td>
<td>cremated human bone and 3 sherds of an Irish Bowl</td>
</tr>
<tr>
<td>Ballinaspig More 5</td>
<td>1 x grinding stone, 1 x nut, 2 x debitage</td>
</tr>
<tr>
<td>Charlesland Site A</td>
<td>6 x debitage</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>5 x debitage, 1 x scraper</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>1 x debitage, 1 x arrowhead</td>
</tr>
<tr>
<td>paulstown</td>
<td>1 x debitage, 1 x scraper</td>
</tr>
<tr>
<td>Rathwilladoon</td>
<td>1 x debitage</td>
</tr>
</tbody>
</table>

**Table 4.17:** The finds from pits containing a single sherd of Beaker pottery

<table>
<thead>
<tr>
<th>Site</th>
<th>Find Type</th>
<th>Sherd Count</th>
<th>Vessel Count</th>
<th>Ratio</th>
<th>Pot Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lismullin</td>
<td>incomplete pot</td>
<td>205</td>
<td>1</td>
<td>205:1</td>
<td>decorated Rockbarton</td>
</tr>
<tr>
<td>Russellstown</td>
<td>Sherds</td>
<td>48</td>
<td>1</td>
<td>48:1</td>
<td>n/a</td>
</tr>
<tr>
<td>Derver 1</td>
<td>Sherds</td>
<td>19</td>
<td>1</td>
<td>19:1</td>
<td>decorated Rockbarton</td>
</tr>
<tr>
<td>Skreen 3</td>
<td>Sherds</td>
<td>17</td>
<td>1</td>
<td>17:1</td>
<td>decorated Rockbarton</td>
</tr>
<tr>
<td>Graigneshoneen Field 3</td>
<td>Sherds</td>
<td>15</td>
<td>1</td>
<td>15:1</td>
<td>decorated</td>
</tr>
<tr>
<td>Kilmainham 1B</td>
<td>incomplete pot</td>
<td>15</td>
<td>1</td>
<td>15:1</td>
<td>decorated Rockbarton</td>
</tr>
</tbody>
</table>

**Table 4.18:** Details of Beaker pits with high sherd-vessel ratio
<table>
<thead>
<tr>
<th>Site name</th>
<th>No of Beaker features</th>
<th>No of Spreads</th>
<th>Year of excavation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowth</td>
<td>?</td>
<td>5</td>
<td>1990</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>14</td>
<td>3</td>
<td>2006</td>
</tr>
<tr>
<td>Lough Gur 1977-78</td>
<td>2</td>
<td>2</td>
<td>1977</td>
</tr>
<tr>
<td>Ross Island</td>
<td>5</td>
<td>2</td>
<td>1995</td>
</tr>
<tr>
<td>Rathmullan Site 10</td>
<td>8</td>
<td>2</td>
<td>2001</td>
</tr>
<tr>
<td>Mell</td>
<td>8</td>
<td>1</td>
<td>2005</td>
</tr>
<tr>
<td>Roughan Hill</td>
<td>1</td>
<td>1</td>
<td>1996</td>
</tr>
<tr>
<td>Rockbarton Bog Site 1</td>
<td>1</td>
<td>1</td>
<td>1942</td>
</tr>
<tr>
<td>Rockbarton Bog Site 2</td>
<td>1</td>
<td>1</td>
<td>1942</td>
</tr>
<tr>
<td>Rockbarton Bog Site 3</td>
<td>1</td>
<td>1</td>
<td>1942</td>
</tr>
<tr>
<td>Moneen</td>
<td>0</td>
<td>1</td>
<td>1952</td>
</tr>
<tr>
<td>Lough Gur Site D</td>
<td>0</td>
<td>1</td>
<td>1954</td>
</tr>
<tr>
<td>Downpatrick</td>
<td>1</td>
<td>1</td>
<td>1962</td>
</tr>
<tr>
<td>Longstone Cullen</td>
<td>0</td>
<td>1</td>
<td>1973</td>
</tr>
<tr>
<td>Monknewtown</td>
<td>2</td>
<td>1</td>
<td>1976</td>
</tr>
<tr>
<td>Newgrange 1984 Pit circle</td>
<td>1</td>
<td>1</td>
<td>1984</td>
</tr>
<tr>
<td>Kilbride</td>
<td>2</td>
<td>1</td>
<td>1997</td>
</tr>
<tr>
<td>Laghaunstown Site 35</td>
<td>12</td>
<td>1</td>
<td>2000</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>18</td>
<td>1</td>
<td>2003</td>
</tr>
<tr>
<td>Cornagleragh</td>
<td>1</td>
<td>1</td>
<td>2004</td>
</tr>
<tr>
<td>Newtownlittle</td>
<td>9</td>
<td>1</td>
<td>2005</td>
</tr>
<tr>
<td>Oldbridge 3</td>
<td>1</td>
<td>1</td>
<td>2005</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>10</td>
<td>1</td>
<td>2006</td>
</tr>
<tr>
<td>Gardenrath 2</td>
<td>2</td>
<td>1</td>
<td>2006</td>
</tr>
<tr>
<td>Moanduff 2</td>
<td>2</td>
<td>1</td>
<td>2007</td>
</tr>
<tr>
<td>Lismullin</td>
<td>6</td>
<td>1</td>
<td>2007</td>
</tr>
<tr>
<td>Newgrange</td>
<td>?</td>
<td>1</td>
<td>1980</td>
</tr>
<tr>
<td>Lough Gur Site 10</td>
<td>1</td>
<td>1</td>
<td>1952</td>
</tr>
<tr>
<td>Lough Gur Circle K</td>
<td>1</td>
<td>1</td>
<td>1952</td>
</tr>
<tr>
<td>Longstone Cullen</td>
<td>?</td>
<td>1</td>
<td>1973</td>
</tr>
</tbody>
</table>

Table 4.19: The number of Beaker spreads per site
<table>
<thead>
<tr>
<th>Site name</th>
<th>No. of Beaker features</th>
<th>No. of spreads</th>
<th>Other Beaker features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lough Gur Site D</td>
<td>1</td>
<td>1</td>
<td>none</td>
</tr>
<tr>
<td>Longstone Cullen</td>
<td>1</td>
<td>1</td>
<td>none</td>
</tr>
<tr>
<td>Rockbarton Bog Site 2</td>
<td>1</td>
<td>1</td>
<td>hearth</td>
</tr>
<tr>
<td>Roughan Hill</td>
<td>1</td>
<td>3</td>
<td>none</td>
</tr>
<tr>
<td>Rockbarton Bog Site 3</td>
<td>1</td>
<td>1</td>
<td>none</td>
</tr>
<tr>
<td>Downpatrick</td>
<td>1</td>
<td>1</td>
<td>none</td>
</tr>
<tr>
<td>Newgrange 1984 Pit circle</td>
<td>1</td>
<td>1</td>
<td>none</td>
</tr>
<tr>
<td>Cornagleragh</td>
<td>1</td>
<td>1</td>
<td>none</td>
</tr>
<tr>
<td>Oldbridge 3</td>
<td>1</td>
<td>1</td>
<td>none</td>
</tr>
<tr>
<td>Rockbarton Bog Site 1</td>
<td>1</td>
<td>1</td>
<td>spread</td>
</tr>
<tr>
<td>Moneen</td>
<td>2</td>
<td>1</td>
<td>cist and cairn</td>
</tr>
<tr>
<td>Monknewtown</td>
<td>2</td>
<td>1</td>
<td>large pit</td>
</tr>
<tr>
<td>Lough Gur 1977-78</td>
<td>2</td>
<td>2</td>
<td>none</td>
</tr>
<tr>
<td>Gardenrath 2</td>
<td>2</td>
<td>1</td>
<td>pit and spread</td>
</tr>
<tr>
<td>Moanduff 2</td>
<td>2</td>
<td>1</td>
<td>posthole</td>
</tr>
<tr>
<td>Kilbride</td>
<td>2</td>
<td>1</td>
<td>two linear gullies</td>
</tr>
<tr>
<td>Mell</td>
<td>4</td>
<td>1</td>
<td>two pits, a slot trench and postholes</td>
</tr>
<tr>
<td>Ross Island</td>
<td>5</td>
<td>2</td>
<td>2 slot trenches, 1 pit</td>
</tr>
<tr>
<td>Lismullin</td>
<td>6</td>
<td>1</td>
<td>pits</td>
</tr>
<tr>
<td>Rathmullan Site 10</td>
<td>8</td>
<td>2</td>
<td>four pits, two linear gullies</td>
</tr>
<tr>
<td>Newtownlittle</td>
<td>9</td>
<td>1</td>
<td>seven pits, a stakehole, a posthole</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>10</td>
<td>1</td>
<td>Eight pits, slot trench,</td>
</tr>
<tr>
<td>Laghaunstown Site 35</td>
<td>12</td>
<td>1</td>
<td>four pits, a hearth, a stone surface, a posthole</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>14</td>
<td>3</td>
<td>nine pits, two postholes</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>18</td>
<td>1</td>
<td>six pits, a slot trench, six postholes</td>
</tr>
<tr>
<td>Knowth</td>
<td>?</td>
<td>5</td>
<td>pits and postholes</td>
</tr>
</tbody>
</table>

Table 4.20: The types of other Beaker features occurring on sites with spreads.
<table>
<thead>
<tr>
<th>Site name</th>
<th>Length</th>
<th>Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mell</td>
<td>9.5</td>
<td>5</td>
<td>0.40</td>
</tr>
<tr>
<td>Rathmullan Site 10</td>
<td>5.1</td>
<td>2.05</td>
<td>0.25</td>
</tr>
<tr>
<td>Oldbridge 3</td>
<td>10</td>
<td>3.5</td>
<td>0.20</td>
</tr>
<tr>
<td>Newtownlittle</td>
<td>7.3</td>
<td>3.4</td>
<td>0.16</td>
</tr>
<tr>
<td>Gardenrath 2</td>
<td>8.95</td>
<td>3.2</td>
<td>0.15</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>26</td>
<td>9</td>
<td>0.10</td>
</tr>
<tr>
<td>Knowth Concentration D</td>
<td>21</td>
<td>12.5</td>
<td>0.10</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>7</td>
<td>4.6</td>
<td>0.10</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>5.7</td>
<td>3.1</td>
<td>0.10</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>5.5</td>
<td>5.5</td>
<td>0.08</td>
</tr>
<tr>
<td>Moanduff 2</td>
<td>1.25</td>
<td>1</td>
<td>0.08</td>
</tr>
<tr>
<td>Knowth Concentration B</td>
<td>17</td>
<td>15</td>
<td>0.07</td>
</tr>
<tr>
<td>Lismullin</td>
<td>3.44</td>
<td>1.68</td>
<td>0.05</td>
</tr>
<tr>
<td>Rathmullan Site 10</td>
<td>1.76</td>
<td>1.3</td>
<td>0.05</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>1.1</td>
<td>0.8</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Table 4.21: The size of Beaker spreads (in metres)
<table>
<thead>
<tr>
<th>Site name</th>
<th>Feature ID</th>
<th>Sherd count</th>
<th>Vessel count</th>
<th>Sherd: vessel ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moneen</td>
<td>379</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Lough Gur 1977-78</td>
<td>405</td>
<td>3</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Newgrange 1984 Pit circle</td>
<td>402</td>
<td>4</td>
<td>0</td>
<td>?</td>
</tr>
<tr>
<td>Laghaunstown Site 35</td>
<td>250</td>
<td>5</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Lough Gur 1977-78</td>
<td>406</td>
<td>5</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>338</td>
<td>9</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Kilmainedham 1C</td>
<td>315</td>
<td>9</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Kilbride</td>
<td>223</td>
<td>12</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Rockbarton Bog Site 1</td>
<td>392</td>
<td>20</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>21</td>
<td>37</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Rockbarton Bog Site 2</td>
<td>393</td>
<td>40</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Roughan Hill</td>
<td>369</td>
<td>178</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Lough Gur Circle K</td>
<td>394</td>
<td>1</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Monknewtown</td>
<td>376</td>
<td>5000</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Cornagleragh</td>
<td>188</td>
<td>1</td>
<td>1</td>
<td>1:1</td>
</tr>
<tr>
<td>Kilmainedham 1C</td>
<td>316</td>
<td>1</td>
<td>1</td>
<td>1:1</td>
</tr>
<tr>
<td>Rockbarton Bog Site 3</td>
<td>394</td>
<td>1</td>
<td>1</td>
<td>1:1</td>
</tr>
<tr>
<td>Moanduff 2</td>
<td>323</td>
<td>6</td>
<td>2</td>
<td>3:1</td>
</tr>
<tr>
<td>Lismullin</td>
<td>258</td>
<td>4</td>
<td>1</td>
<td>4:1</td>
</tr>
<tr>
<td>Ross Island mining spoil layer</td>
<td>387</td>
<td>50</td>
<td>12</td>
<td>4:1</td>
</tr>
<tr>
<td>Kilmainedham 1C</td>
<td>313</td>
<td>5</td>
<td>1</td>
<td>5:1</td>
</tr>
<tr>
<td>Oldbridge 3</td>
<td>372</td>
<td>26</td>
<td>5</td>
<td>5:1</td>
</tr>
<tr>
<td>Knowth E</td>
<td>242</td>
<td>341</td>
<td>45</td>
<td>7:1</td>
</tr>
<tr>
<td>Gardenrath 2</td>
<td>318</td>
<td>9</td>
<td>1</td>
<td>9:1</td>
</tr>
<tr>
<td>Knowth A</td>
<td>234</td>
<td>446</td>
<td>46</td>
<td>9:1</td>
</tr>
<tr>
<td>Ross Island occupation layer</td>
<td>388</td>
<td>182</td>
<td>18</td>
<td>10:1</td>
</tr>
<tr>
<td>Knowth B</td>
<td>238</td>
<td>300</td>
<td>30</td>
<td>10:1</td>
</tr>
<tr>
<td>Mell</td>
<td>38</td>
<td>471</td>
<td>37</td>
<td>12:1</td>
</tr>
<tr>
<td>Knowth C</td>
<td>239</td>
<td>1043</td>
<td>75</td>
<td>14:1</td>
</tr>
<tr>
<td>Newtown little</td>
<td>353</td>
<td>362</td>
<td>23</td>
<td>16:1</td>
</tr>
<tr>
<td>Newgrange ‘Beaker layers’</td>
<td>3600</td>
<td>200</td>
<td>104</td>
<td>18:1</td>
</tr>
<tr>
<td>Lough Gur Site 10</td>
<td>570</td>
<td>29</td>
<td>?</td>
<td>19:1</td>
</tr>
<tr>
<td>Knowth D</td>
<td>240</td>
<td>2072</td>
<td>104</td>
<td>19:1</td>
</tr>
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</table>

Table 4.22: The numbers of Beaker sherds and vessels found in each spread
<table>
<thead>
<tr>
<th>Artefact type</th>
<th>Total number of sites</th>
<th>Total number of objects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaker pottery</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Convex scrapers</td>
<td>7</td>
<td>152</td>
</tr>
<tr>
<td>polypod bowls</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>hollow-based arrowhead</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>B and T arrowhead</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>plate</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>lead rod</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>wrist-guard</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>gold disc</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lough Ravel axe</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Killaha bronze flat axe</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.23: The numbers of sites where spreads produce each of these artefacts

<table>
<thead>
<tr>
<th>Site name</th>
<th>Fine vessels</th>
<th>Domestic vessels</th>
<th>Fine sherds</th>
<th>Domestic sherds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lough Gur Site10</td>
<td>24</td>
<td>5</td>
<td>419</td>
<td>149</td>
</tr>
<tr>
<td>Mell</td>
<td>29</td>
<td>8</td>
<td>410</td>
<td>60</td>
</tr>
<tr>
<td>Newtownlittle</td>
<td>16</td>
<td>3</td>
<td>111</td>
<td>6</td>
</tr>
<tr>
<td>Lough Gur 1977</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Kilgobbin</td>
<td>?</td>
<td>1</td>
<td>36</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.24: The numbers of sherds and vessels from spreads containing both 'fine' and 'domestic' Beakers
<table>
<thead>
<tr>
<th>Vessel</th>
<th>No. of sherds</th>
<th>Rim</th>
<th>Neck</th>
<th>Base</th>
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Table 4.25: Sherd: vessel ratios for all Beakers within spread at Mell (based on table compiled by Eoin Grogan).
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<th>Body</th>
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Table 4.26: Sherd: vessel ratios for all Beakers within spread at Newtownlittle (based on table compiled by Eoin Grogan).
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<th>Vessel</th>
<th>No. of sherds</th>
<th>Frags</th>
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Table 4.27: The sherd: vessel ratio for Beakers in the spread at Knowth Concentration E.

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<th>County</th>
<th>Sherd totals</th>
<th>Vessel totals</th>
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<td>Charlesland Site1C</td>
<td>Wicklow</td>
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<td>Ahanaglogh Area 17</td>
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<td>Ballyvollane II</td>
<td>Limerick</td>
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Table 4.28: The total number of Beaker sherds and vessels from burnt mounds.
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<tr>
<td>Ballyvollane</td>
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</tr>
<tr>
<td>Ahanaglogh</td>
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</tr>
<tr>
<td>Charlesland</td>
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</tr>
<tr>
<td>Ballyclogh</td>
<td>37:1</td>
</tr>
<tr>
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<tr>
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Table 4.29: Sherd: vessel ratios for each Beaker vessel from a burnt mound.

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<th>Vessel Count</th>
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<td>75</td>
<td>2</td>
</tr>
<tr>
<td>Collinstown Site 16/17</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Kilmurry</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Ballinure</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ballymoyle</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Boherard 2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Broomfield</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Carnmore 5</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Carranstown Site 3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Carrignanonsrghag</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Charlesland RMP Site,</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Charlesland Site 1B</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Coolbeg Site 73</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Curragh More</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Derver 1</td>
<td>19</td>
<td>1</td>
</tr>
<tr>
<td>Farrandreg</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Kilfinnane</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Kilmainham 1B</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Milltown North</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ardagh</td>
<td>4</td>
<td>?</td>
</tr>
</tbody>
</table>

Table 4.30: The number of Beaker sherds and vessels occurring in isolated pits.
<table>
<thead>
<tr>
<th></th>
<th>Isolated pit</th>
<th></th>
<th>Cluster of pits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number of artefacts</td>
<td>number of pits</td>
<td>% of pits</td>
<td>number of artefacts</td>
</tr>
<tr>
<td>Cremated human bone</td>
<td>n/a</td>
<td>0</td>
<td>0</td>
<td>n/a</td>
</tr>
<tr>
<td>Unidentifiable cremated bone</td>
<td>n/a</td>
<td>1</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>or burnt animal bone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charcoal</td>
<td>n/a</td>
<td>8</td>
<td>26</td>
<td>n/a</td>
</tr>
<tr>
<td>cereals</td>
<td>n/a</td>
<td>2</td>
<td>6</td>
<td>n/a</td>
</tr>
<tr>
<td>fruit</td>
<td>n/a</td>
<td>1</td>
<td>3</td>
<td>n/a</td>
</tr>
<tr>
<td>nuts</td>
<td>n/a</td>
<td>3</td>
<td>10</td>
<td>n/a</td>
</tr>
<tr>
<td>scrapers</td>
<td>25</td>
<td>5</td>
<td>16</td>
<td>44</td>
</tr>
<tr>
<td>hammerstone</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>anvil</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>quernstone</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>polished stone axes</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>arrowhead</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>grinding stone</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>disc-beads</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>24</td>
</tr>
</tbody>
</table>

Table 4.31: Comparison of the occurrence of finds in isolated pits and groups of pits.

<table>
<thead>
<tr>
<th>Site name</th>
<th>Number of pits</th>
<th>Number of sherds</th>
<th>Number of vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kilgobbin</td>
<td>7</td>
<td>560</td>
<td>45</td>
</tr>
<tr>
<td>Hill of Rath</td>
<td>3</td>
<td>123</td>
<td>32</td>
</tr>
<tr>
<td>Dunmoon</td>
<td>2</td>
<td>210</td>
<td>30</td>
</tr>
<tr>
<td>Newtownbalregan 5</td>
<td>4</td>
<td>166</td>
<td>15</td>
</tr>
<tr>
<td>Cloghers II</td>
<td>2</td>
<td>256</td>
<td>13</td>
</tr>
<tr>
<td>Kilmainham 1C</td>
<td>4</td>
<td>121</td>
<td>12</td>
</tr>
<tr>
<td>Templarainey</td>
<td>3</td>
<td>273</td>
<td>12</td>
</tr>
<tr>
<td>Newtownbalregan 2</td>
<td>4</td>
<td>133</td>
<td>11</td>
</tr>
<tr>
<td>Rathwilladoon</td>
<td>2</td>
<td>62</td>
<td>10</td>
</tr>
<tr>
<td>Faughart 6</td>
<td>2</td>
<td>23</td>
<td>7</td>
</tr>
<tr>
<td>Haggardstown Site 13</td>
<td>4</td>
<td>62</td>
<td>7</td>
</tr>
<tr>
<td>Beaverstown</td>
<td>2</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td>Graigueshoney Field 3</td>
<td>2</td>
<td>43</td>
<td>6</td>
</tr>
<tr>
<td>Ballydrehid Site 185.5</td>
<td>2</td>
<td>21</td>
<td>5</td>
</tr>
<tr>
<td>Gortybrigane 1</td>
<td>4</td>
<td>37</td>
<td>5</td>
</tr>
<tr>
<td>Donaghmore 1</td>
<td>2</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Kilbane II, Fd 1</td>
<td>2</td>
<td>200</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4.32: The number of Beaker sherds and vessels found in clusters of pits.
<table>
<thead>
<tr>
<th>Site name</th>
<th>County</th>
<th>Sherds</th>
<th>Vessel count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aughrim</td>
<td>Cavan</td>
<td>?</td>
<td>5</td>
</tr>
<tr>
<td>Ballybriest</td>
<td>Derry</td>
<td>all near complete</td>
<td>6</td>
</tr>
<tr>
<td>Ballyedmonduff</td>
<td>Dublin</td>
<td>140</td>
<td>8</td>
</tr>
<tr>
<td>Baurnadomeeny</td>
<td>Tipperary</td>
<td>33</td>
<td>1</td>
</tr>
<tr>
<td>Carriglong</td>
<td>Waterford</td>
<td>18</td>
<td>?</td>
</tr>
<tr>
<td>Cashelbane cairn</td>
<td>Tyrone</td>
<td>A near complete pot and 48 sherds</td>
<td>10</td>
</tr>
<tr>
<td>Giants Grave (Loughash)</td>
<td>Tyrone</td>
<td>three near complete pots</td>
<td>4</td>
</tr>
<tr>
<td>Kilhoyle</td>
<td>Derry</td>
<td>48</td>
<td>4</td>
</tr>
<tr>
<td>Kilnagarns</td>
<td>Leitrim</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Labbacallee</td>
<td>Cork</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Largantea</td>
<td>Derry</td>
<td>Two near complete vessels and 15 sherds from three other Beakers</td>
<td>5</td>
</tr>
<tr>
<td>Lough Gur wedge tomb</td>
<td>Limerick</td>
<td>250</td>
<td>?</td>
</tr>
<tr>
<td>Moytirra</td>
<td>Sligo</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 5.1: The numbers of Beaker sherds and vessels in wedge tombs.
<table>
<thead>
<tr>
<th>Site name</th>
<th>Vessel</th>
<th>No. of sherds</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballyedmonduff</td>
<td>A</td>
<td>18 sherd</td>
<td>most of these were conjoined</td>
</tr>
<tr>
<td>Ballyedmonduff</td>
<td>B</td>
<td>16 sherd</td>
<td>at least 7 of these are conjoined</td>
</tr>
<tr>
<td>Ballyedmonduff</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Ballyedmonduff</td>
<td>3</td>
<td>1 sherd</td>
<td></td>
</tr>
<tr>
<td>Ballyedmonduff</td>
<td>4</td>
<td>4 sherd</td>
<td></td>
</tr>
<tr>
<td>Ballyedmonduff</td>
<td>5</td>
<td>16 sherds</td>
<td></td>
</tr>
<tr>
<td>Ballyedmonduff</td>
<td>6</td>
<td>9 sherds</td>
<td></td>
</tr>
<tr>
<td>Ballyedmonduff</td>
<td>7</td>
<td>6 sherds</td>
<td></td>
</tr>
<tr>
<td>Ballyedmonduff</td>
<td>8</td>
<td>15 sherds</td>
<td></td>
</tr>
<tr>
<td>Ballyedmonduff</td>
<td>9</td>
<td>2 sherds</td>
<td></td>
</tr>
<tr>
<td>Ballybriest</td>
<td>?</td>
<td>near complete</td>
<td>six near complete Beaker vessels</td>
</tr>
<tr>
<td>Baurnadomeeny</td>
<td>?</td>
<td>33</td>
<td>All from the same pot</td>
</tr>
<tr>
<td>Cashelbaine</td>
<td>A</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Cashelbaine</td>
<td>B</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Cashelbaine</td>
<td>c</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Cashelbaine</td>
<td>D</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Cashelbaine</td>
<td>E</td>
<td>almost complete</td>
<td></td>
</tr>
<tr>
<td>Cashelbaine</td>
<td>F</td>
<td>2</td>
<td>weathered sherds</td>
</tr>
<tr>
<td>Cashelbaine</td>
<td>G</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cashelbaine</td>
<td>L</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cashelbaine</td>
<td>M</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cashelbaine</td>
<td>O</td>
<td>near complete</td>
<td></td>
</tr>
<tr>
<td>Largantea</td>
<td>B1</td>
<td>near complete</td>
<td></td>
</tr>
<tr>
<td>Largantea</td>
<td>B2</td>
<td>near complete</td>
<td></td>
</tr>
<tr>
<td>Largantea</td>
<td>A1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Largantea</td>
<td>A2</td>
<td>9</td>
<td>many conjoined</td>
</tr>
<tr>
<td>Largantea</td>
<td>A3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Largantea</td>
<td>D1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Loughash</td>
<td>A</td>
<td>near complete</td>
<td>the entire base, nearly all the body and half of the neck</td>
</tr>
<tr>
<td>Loughash</td>
<td>B</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Loughash</td>
<td>C</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Loughash</td>
<td>D</td>
<td>near complete</td>
<td></td>
</tr>
<tr>
<td>Lough Gur</td>
<td>?</td>
<td>?</td>
<td>Most of the fragments are small and it was not possible to reconstruct any vessels</td>
</tr>
<tr>
<td>Kilhoyle</td>
<td>1</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Kilhoyle</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Kilhoyle</td>
<td>4</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Kilhoyle</td>
<td>7</td>
<td>18</td>
<td>Small sherds found throughout the tomb</td>
</tr>
<tr>
<td>Moytirra</td>
<td>A</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Moytirra</td>
<td>B</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Moytirra</td>
<td>C</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Moytirra</td>
<td>D</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Table 5.2: The number of sherds per Beaker in wedge tombs**
<table>
<thead>
<tr>
<th>Site</th>
<th>Beaker cremations</th>
<th>Beaker inhumations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballybriest</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Ballyedmonduff</td>
<td>?</td>
<td>0</td>
</tr>
<tr>
<td>Cashelbane</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Kilhoyle</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Labbacallee</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Baurnadomeeny</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Largantea</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Lough Gur</td>
<td>1?</td>
<td>5</td>
</tr>
<tr>
<td>Moytirra</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Totals</td>
<td>18</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 5.3: The number of Beaker-associated inhumations and cremations in wedge tombs.
<table>
<thead>
<tr>
<th>Site name</th>
<th>Lab code</th>
<th>yearBP</th>
<th>±</th>
<th>Cal BC</th>
<th>Sample material</th>
<th>Beaker associated?</th>
<th>comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Largantea</td>
<td>UB-7024</td>
<td>3877</td>
<td>34</td>
<td>2460-2211</td>
<td>Charcoal: oak</td>
<td>insecure</td>
<td>charcoal not contextually associated with Beaker pots but likely to have been deposited at same time</td>
</tr>
<tr>
<td>Largantea</td>
<td>UB-6977</td>
<td>3871</td>
<td>37</td>
<td>2467-2209</td>
<td>Burnt human bone</td>
<td>insecure</td>
<td>dated cremated bone not contextually associated with Beaker pots but likely to have been deposited at same time</td>
</tr>
<tr>
<td>Largantea</td>
<td>UB-6974</td>
<td>3837</td>
<td>35</td>
<td>2459-2200</td>
<td>Burnt human bone</td>
<td>reasonable</td>
<td>dated cremated bone not contextually associated with Beaker pots but likely to have been deposited at same time</td>
</tr>
<tr>
<td>Lough Gur</td>
<td>OxA-3274</td>
<td>3830</td>
<td>80</td>
<td>2401-2126</td>
<td>inhumation</td>
<td>insecure</td>
<td>Skeleton no. 18 - infant</td>
</tr>
<tr>
<td>Largantea</td>
<td>UB-6976</td>
<td>3828</td>
<td>37</td>
<td>2458-2147</td>
<td>Burnt human bone</td>
<td>reasonable</td>
<td>dated cremated bone not contextually associated with Beaker pots but likely to have been deposited at same time</td>
</tr>
<tr>
<td>Labbacallee</td>
<td>GrN-1135</td>
<td>3805</td>
<td>45</td>
<td>2458-2062</td>
<td>inhumation</td>
<td>reasonable</td>
<td>The single inhumation was not directly associated with the Beaker pot, but its skull was associated in the adjoining chamber.</td>
</tr>
<tr>
<td>Lough Gur</td>
<td>OxA-3270</td>
<td>3780</td>
<td>70</td>
<td>2459-2031</td>
<td>inhumation</td>
<td>insecure</td>
<td>Skeleton no. 9 - adult</td>
</tr>
<tr>
<td>Labbacallee</td>
<td>OxA-2759</td>
<td>3780</td>
<td>70</td>
<td>2459-2031</td>
<td>inhumation</td>
<td>reasonable</td>
<td>Skeleton B directly associated with Beaker sherds</td>
</tr>
<tr>
<td>Lough Gur</td>
<td>OxA-3269</td>
<td>3740</td>
<td>10</td>
<td>2464-1911</td>
<td>inhumation</td>
<td>insecure</td>
<td>Skeleton no. 8 - adult</td>
</tr>
<tr>
<td>Lough Gur</td>
<td>OxA-3272</td>
<td>3720</td>
<td>70</td>
<td>2341-1921</td>
<td>inhumation</td>
<td>insecure</td>
<td>Skeleton no. 14 - child</td>
</tr>
<tr>
<td>Lough Gur</td>
<td>OxA-3267</td>
<td>3710</td>
<td>70</td>
<td>2333-1901</td>
<td>inhumation</td>
<td>insecure</td>
<td>Skeleton no. 6 - adult</td>
</tr>
<tr>
<td>Labbacallee</td>
<td>OxA-2760</td>
<td>3630</td>
<td>70</td>
<td>2201-1775</td>
<td>inhumation</td>
<td>reasonable</td>
<td>Some question marks as this bone may have been disturbed by later activity or may even be in a secondary position.</td>
</tr>
<tr>
<td>Ballybriest</td>
<td>GrA-1327</td>
<td>3630</td>
<td>50</td>
<td>2139-1830</td>
<td>Burnt human bone</td>
<td>unequivocal</td>
<td>This date is from pit cutting into the late Beaker associated burial deposit so acts as a taq for it</td>
</tr>
<tr>
<td>Ballybriest</td>
<td>GrA-1325</td>
<td>3580</td>
<td>5</td>
<td>2114-769</td>
<td>Burnt human bone</td>
<td>reasonable</td>
<td>This date is from pit cutting into the late Beaker associated burial deposit so acts as a taq for it</td>
</tr>
</tbody>
</table>

**Table 5.4: Beaker-associated radiocarbon dates from wedge tombs.**

All 14 dates are from high quality samples obtained from single entity short life materials except for the charcoal sample from Largantea. The strength of association between the Beaker pottery and the actual sample is not as strong as desired for all the burials.
<table>
<thead>
<tr>
<th>Site name</th>
<th>MNI Beaker cremations</th>
<th>MNI Beaker inhumations</th>
<th>adult</th>
<th>adult male</th>
<th>adult female</th>
<th>juvenile</th>
<th>infant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballybriest</td>
<td>8</td>
<td>0</td>
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<td>1</td>
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<td>1</td>
</tr>
<tr>
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<td>0</td>
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<td></td>
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<td></td>
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<tr>
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<td>1</td>
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<td>0</td>
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<tr>
<td>Labbacallee</td>
<td>0</td>
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<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Loughash</td>
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<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Lough Gur</td>
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<td>5</td>
<td>3</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td></td>
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<tr>
<td>Moytirra</td>
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<td>6</td>
<td>5</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>1</td>
</tr>
<tr>
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<td>18</td>
<td>14</td>
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Table 5.6: The age and sex of Beaker burials in wedge tombs.
### Table 5.7: The number of Beaker vessels and sherds per court tomb

<table>
<thead>
<tr>
<th>Site</th>
<th>Vessel Quantity</th>
<th>Sherd Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrick East</td>
<td>3</td>
<td>?</td>
</tr>
<tr>
<td>Ballynichol</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Ballyglass</td>
<td>2</td>
<td>56</td>
</tr>
<tr>
<td>Goward</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Clontygora Large</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Creevykeel</td>
<td>1</td>
<td>4?</td>
</tr>
<tr>
<td>Aghanaglack</td>
<td>1</td>
<td>?</td>
</tr>
<tr>
<td>Ballyalton</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Ballybriest</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Ballyedmond</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Ballyreagh</td>
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<td>3</td>
</tr>
<tr>
<td>Legland</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Tamnyrankin</td>
<td>1</td>
<td>8</td>
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</tbody>
</table>

### Table 5.8: The sherd to vessel ratios of the Beaker pottery from Kerlogue, Co. Wexford

<table>
<thead>
<tr>
<th>Vessel I.D</th>
<th>Type</th>
<th>Number of sherds</th>
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</thead>
<tbody>
<tr>
<td>Vessel 7</td>
<td>'domestic'</td>
<td>10</td>
</tr>
<tr>
<td>Vessel 8</td>
<td>'domestic'</td>
<td>7</td>
</tr>
<tr>
<td>Vessel 9</td>
<td>'domestic'</td>
<td>3</td>
</tr>
<tr>
<td>Vessel 10</td>
<td>'domestic'</td>
<td>6</td>
</tr>
<tr>
<td>Vessel 11</td>
<td>'domestic'</td>
<td>Rockbarton</td>
</tr>
<tr>
<td>Vessel 12</td>
<td>'fine'</td>
<td></td>
</tr>
</tbody>
</table>
Table. 5.9: Comparison of the number of Beaker pots, burials and artefacts in relation to the quantity of funereal sites of each type that they occur on. Pits containing Beaker pottery and probable or definite human bone are included, some of which contain huge numbers of vessels that greatly distort the overall picture.

<table>
<thead>
<tr>
<th>context type</th>
<th>Court tomb</th>
<th>wedge tomb</th>
<th>portal tomb</th>
<th>passage tomb</th>
<th>cists</th>
<th>Pit-graves</th>
<th>ring ditch</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>number of sites with Beaker pot</td>
<td>14</td>
<td>13</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>n/a</td>
<td>2</td>
<td>38</td>
</tr>
<tr>
<td>total Beaker sherds</td>
<td>103</td>
<td>509</td>
<td>2</td>
<td>21</td>
<td>?</td>
<td>823</td>
<td>62</td>
<td>1520</td>
</tr>
<tr>
<td>total Beaker pots</td>
<td>19</td>
<td>51</td>
<td>1</td>
<td>2</td>
<td>11</td>
<td>97</td>
<td>8</td>
<td>189</td>
</tr>
<tr>
<td>number of sites with arrowheads</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>barbed and tanged arrowhead</td>
<td>6</td>
<td>7</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>hollow-based arrowhead</td>
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<td>3</td>
<td>1</td>
<td>0</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>number of sites with buttons</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>no of V-perforated buttons</td>
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<td>0</td>
<td>0</td>
<td>6</td>
<td>3</td>
<td></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>bone pin</td>
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<td>*</td>
<td>1</td>
<td></td>
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<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>number of sites with wristbracer</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Table 5.10: The average sherd: vessel ratio for Beakers in each context type. This is a very crude indicator and the results are quite skewed. For example, the average number of sherds per Beaker from passage tombs is 10.5, but this is not particularly representative of the fact that only two Beakers were found in this context, one of which was almost complete.

<table>
<thead>
<tr>
<th>Context</th>
<th>Sherds</th>
<th>Vessels</th>
<th>Ratio</th>
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<tbody>
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<td>Court tomb</td>
<td>103</td>
<td>19</td>
<td>5.42:1</td>
</tr>
<tr>
<td>wedge tomb</td>
<td>509</td>
<td>51</td>
<td>9.9:1</td>
</tr>
<tr>
<td>portal tomb</td>
<td>2</td>
<td>1</td>
<td>02:01</td>
</tr>
<tr>
<td>passage tomb</td>
<td>21</td>
<td>2</td>
<td>10.5</td>
</tr>
<tr>
<td>cists</td>
<td>?</td>
<td>11</td>
<td>2:1</td>
</tr>
<tr>
<td>ring ditch</td>
<td>62</td>
<td>9</td>
<td>6.8:1</td>
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</tbody>
</table>

Table 5.11: Details of the number and type of Beaker burials per site-type
Table 6.1: The depositional biography of each posthole forming Post Circle A at Paulstown, Co. Kilkenny. CB= Early Neolithic Carinated Bowl

<table>
<thead>
<tr>
<th>Context No.</th>
<th>Pipe Present</th>
<th>Packing Present</th>
<th>Extracted</th>
<th>Backfill?</th>
<th>Artefacts</th>
<th>Lithics Count</th>
<th>Sherd Count</th>
<th>Vessel Count</th>
<th>Sherd Condition</th>
<th>Tool</th>
<th>Other Finds</th>
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<td>Weight (g)</td>
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<td>C139</td>
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<td>VIII</td>
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<td>11</td>
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<td>Fine Beaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C176</td>
<td>C175</td>
<td>X</td>
<td>10</td>
<td>15</td>
<td>Fine Beaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td></td>
<td>19 sherds</td>
<td>62g</td>
<td>Min of two Vessels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C180</td>
<td>C177</td>
<td>Other</td>
<td>0</td>
<td>0.25</td>
<td>Fine Beaker</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C58</td>
<td>C57</td>
<td>V</td>
<td>1</td>
<td>3</td>
<td>Fine Beaker?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C62</td>
<td>V59</td>
<td>VI</td>
<td>3</td>
<td>11</td>
<td>Domestic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table 6.2: Sherd: vessel ratios for 'fine' and 'domestic' Beakers from timber circle A at Paulstown (after Grogan and Roche 2009).** 17 of these sherds are labelled as other as they were too abraded and/or fragmented to be assigned to a particular vessel.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Context</th>
<th>Location</th>
<th>Description</th>
<th>Vessel #</th>
<th>No of sherds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1329</td>
<td>13299</td>
<td>Cluster 1</td>
<td>Beaker: thin, fine, abraded body sherd</td>
<td>34</td>
<td>1</td>
</tr>
<tr>
<td>1369</td>
<td>13322</td>
<td>Cluster 2</td>
<td>Beaker; Small undiagnostic body sherd</td>
<td>35</td>
<td>1</td>
</tr>
<tr>
<td>1369</td>
<td>13790</td>
<td>Cluster 2</td>
<td>Small body sherd, possibly Beaker</td>
<td>45</td>
<td>1</td>
</tr>
<tr>
<td>1321</td>
<td>13244</td>
<td>Cluster 3</td>
<td>Neck and belly sherd of large domestic Beaker.</td>
<td>39</td>
<td>2</td>
</tr>
<tr>
<td>1321</td>
<td>13244</td>
<td>Cluster 3</td>
<td>Featureless, thick body sherd</td>
<td>40</td>
<td>1</td>
</tr>
<tr>
<td>1321</td>
<td>13244</td>
<td>Cluster 3</td>
<td>Beaker: around 10–15% of a large, fairly slender undecorated 'domestic' Beaker with an upright rim (estimated rim diameter c 170 mm) with two low cordons below it on the exterior, and a sinuous profile.</td>
<td>36</td>
<td>10</td>
</tr>
<tr>
<td>1321</td>
<td>13244</td>
<td>Cluster 3</td>
<td>Beaker: around 15% of a large decorated 'domestic' Beaker, with a sinuous profile, with incised diagonal lines on its neck framed top and bottom by horizontal lines; below it the lines extend down to the upper belly</td>
<td>37</td>
<td>10</td>
</tr>
<tr>
<td>1321</td>
<td>13244</td>
<td>Cluster 3</td>
<td>Beaker: around 15–20% of a Beaker, estimated rim diameter 160 mm, estimated belly diameter 140 mm, estimated height 166, with incised decoration on the exterior from just below the rim to the lower belly</td>
<td>38</td>
<td>10</td>
</tr>
<tr>
<td>1327</td>
<td>13278</td>
<td>Cluster 4</td>
<td>Beaker-body sherd with horizontal incised lines. 2 sherds and 3 frags</td>
<td>42</td>
<td>3</td>
</tr>
<tr>
<td>1327</td>
<td>13275</td>
<td>Cluster 4</td>
<td>Beaker; Small thin, fine abraded body sherd.</td>
<td>41</td>
<td>1</td>
</tr>
<tr>
<td>1353</td>
<td>13529</td>
<td>Four-Posthole Structure</td>
<td>Beaker; comb impressed</td>
<td>43</td>
<td>5</td>
</tr>
<tr>
<td>?</td>
<td>13160</td>
<td>Inner ring</td>
<td>Beaker body sherd; decorated with incised linear pattern</td>
<td>44</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 6.3: The number of sherds per Beaker vessel in relation to the context and feature in which it occurred at the Armalughey timber circle, Co. Tyrone (based on information supplied by Julie Lochrie)
Table 6.4: The number of sherds per Beaker vessel from the probable timber circle at Newtownbalregan 5, Co. Louth (after Grogan and Roche 2005)

<table>
<thead>
<tr>
<th>Vessel No.</th>
<th>Sherd Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>4</td>
<td>46</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 6.5: The number of Beaker sherds and vessels in each posthole forming the probable timber circle at Newtownbalregan. Note that sherds from vessel 2 and 4 occur in nearly every posthole.

<table>
<thead>
<tr>
<th>Posthole</th>
<th>Sherd Totals</th>
<th>Vessel Totals</th>
<th>Vessel I.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>C154</td>
<td>63</td>
<td>6</td>
<td>Vessels: 2, 3, 4, 5, 6, 7</td>
</tr>
<tr>
<td>C162</td>
<td>34</td>
<td>3</td>
<td>Vessels: 2, 3, 6</td>
</tr>
<tr>
<td>C174</td>
<td>59</td>
<td>5</td>
<td>Vessels: 3, 4, 6, 7, 10</td>
</tr>
<tr>
<td>C160</td>
<td>39</td>
<td>6</td>
<td>Vessels: 2, 3, 4, 6, 8, 9</td>
</tr>
<tr>
<td>C181</td>
<td>13</td>
<td>3</td>
<td>Vessels: 4, 6, 8</td>
</tr>
<tr>
<td>C166</td>
<td>11</td>
<td>1</td>
<td>Vessel: 10</td>
</tr>
<tr>
<td>C156</td>
<td>20</td>
<td>4</td>
<td>Vessels: 2, 4, 6, 10</td>
</tr>
</tbody>
</table>
### Table 6.6: The numbers of Beaker sherds and vessels found in each timber circle

<table>
<thead>
<tr>
<th>Site</th>
<th>Total sherds</th>
<th>Total vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newtownbalregan 5</td>
<td>166</td>
<td>15</td>
</tr>
<tr>
<td>Armalughey</td>
<td>50</td>
<td>12</td>
</tr>
<tr>
<td>Paulstown</td>
<td>69</td>
<td>11</td>
</tr>
<tr>
<td>Newgrange</td>
<td>18</td>
<td>6</td>
</tr>
</tbody>
</table>

### Table 6.7: The frequency of postholes from timber circles containing various amounts of Beaker sherds

<table>
<thead>
<tr>
<th>Site</th>
<th>1 vessel</th>
<th>2 vessels</th>
<th>3 vessels</th>
<th>4 vessels</th>
<th>5 vessels</th>
<th>6 vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paulstown</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Armalughey</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Newtownbalregan</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Newgrange</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

### Table 6.8: The frequency of postholes from timber circles containing various amounts of Beaker Vessels

<table>
<thead>
<tr>
<th>Site</th>
<th>1 vessel</th>
<th>2 vessels</th>
<th>3 vessels</th>
<th>4 vessels</th>
<th>5 vessels</th>
<th>6 vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paulstown</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Armalughey</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Newtownbalregan</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Newgrange</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Totals</td>
<td>9</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Beaker pottery</td>
<td>Beaker vessels</td>
<td>Wooden polypod bowls</td>
<td>Wrist bracers</td>
<td>V-perforated buttons</td>
<td>Arrowheads</td>
</tr>
<tr>
<td>----------</td>
<td>----------------</td>
<td>----------------</td>
<td>----------------------</td>
<td>---------------</td>
<td>----------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Bogs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rivers</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dryland</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lakes</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Caves</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tbody>
</table>

Table 7.1: The range and quantity of objects found in wet and dry natural contexts

Table 7.2: The range of items from each of the contexts categorised as natural places.

Table 7.3: The quantity of different types of objects from various ‘natural’ contexts
Table 7.4: The numbers of different Beaker objects found in various natural contexts, as well as the quantities of these found as single finds, within hoards and the number of hoards from each context.

<table>
<thead>
<tr>
<th>Context</th>
<th>S</th>
<th>H</th>
<th>N</th>
<th>S</th>
<th>H</th>
<th>N</th>
<th>S</th>
<th>H</th>
<th>N</th>
<th>S</th>
<th>H</th>
<th>N</th>
<th>S</th>
<th>H</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bogs</td>
<td>6</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>4</td>
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<td>5</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Rivers</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dryland</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Lakes</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Caves</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>2</td>
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<td>3</td>
<td>9</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

**KEY:** S = number of single finds, H = number of objects in hoards, N = number of hoards
<table>
<thead>
<tr>
<th>Name</th>
<th>Feature</th>
<th>Sample</th>
<th>Life-span</th>
<th>Degree of association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faughart 6 (Beta 217947)</td>
<td>pit</td>
<td>hazel charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Faughart 6 (Beta 217946)</td>
<td>pit</td>
<td>hazel charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Paulstown (UBA 15437)</td>
<td>pit</td>
<td>ash charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Dunboyne 3 (Beta-241273)</td>
<td>pit</td>
<td>alder charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Curraheen 1 (Beta-171422)</td>
<td>pit</td>
<td>alder charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Ballycuddy More 1 (Beta-244831)</td>
<td>spread</td>
<td>ash charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Mell (WK-17459)</td>
<td>pit</td>
<td>hazel charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Rathmullan 9 (SUERC-31910)</td>
<td>pit</td>
<td>hazel Charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Lismullin (SUERC-23489)</td>
<td>pit</td>
<td>Pig bone</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Rathmullan 12 (SUERC-31907)</td>
<td>pit</td>
<td>hazelnut shells</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Gortybrugane 1 (UBA-11745)</td>
<td>pit</td>
<td>Vertebrate</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Rathmullan 12 (SUERC-31908)</td>
<td>spread</td>
<td>Pig limb</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Rathmullan 10 (SUERC-31920)</td>
<td>posthole</td>
<td>hazel charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Laghaunstown 35 (OxA 12811)</td>
<td>pit</td>
<td>nut</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Danesfort 8 (UBA-11001)</td>
<td>pit</td>
<td>Oak charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Rathmullan 2 (SUERC-31897)</td>
<td>Wedge chamber - cremation</td>
<td>short</td>
<td>reasonable</td>
<td></td>
</tr>
<tr>
<td>Largantea (UB-6974 )</td>
<td>Wedge chamber - cremation</td>
<td>short</td>
<td>reasonable</td>
<td></td>
</tr>
<tr>
<td>Largantea (UB-6976)</td>
<td>Wedge chamber</td>
<td>inhumation</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Paulstown (UBA 15435)</td>
<td>Wedge chamber</td>
<td>inhumation</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Lismullin (SUERC-23551)</td>
<td>pit</td>
<td>hazel charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Cherrywood Area B (GrA-23011)</td>
<td>burnt mound deposit</td>
<td>animal tooth</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Labbacallee (OxA-2759)</td>
<td>Wedge chamber</td>
<td>inhumation</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Kilmainham 1C (UBA-14139)</td>
<td>pit</td>
<td>Carbonised residue</td>
<td>short</td>
<td>unequivocal</td>
</tr>
<tr>
<td>Newtownbalregan 2 (WK-18558)</td>
<td>pit</td>
<td>Alder charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Ballybriest (GrA-13273)</td>
<td>Wedge chamber</td>
<td>cremation</td>
<td>short</td>
<td>unequivocal</td>
</tr>
</tbody>
</table>

Table 8.1: Selection criteria for the highest quality dates, all of which are single entity samples
<table>
<thead>
<tr>
<th>Name</th>
<th>Feature</th>
<th>Sample</th>
<th>Life-span</th>
<th>Degree of association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broomfield (GrN-13879)</td>
<td>pit</td>
<td>oak charcoal</td>
<td>unknown</td>
<td>reasonable</td>
</tr>
<tr>
<td>Paulstown (UBA 15430)</td>
<td>posthole of timber circle</td>
<td>burnt human bone</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Coldwinters (GrA-32116)</td>
<td>pit</td>
<td>Cremated bone</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
<td>Largantea wedge tomb (UB-7024)</td>
<td>chamber -primary layer</td>
<td>oak charcoal</td>
<td>unknown</td>
<td>reasonable</td>
</tr>
<tr>
<td>Kilmainham 1A (UB12101)</td>
<td>spread</td>
<td>hazel charcoal</td>
<td>short</td>
<td>insecure</td>
</tr>
<tr>
<td>Paulstown (UBA 15437)</td>
<td>posthole of timber circle</td>
<td>ash charcoal</td>
<td>short</td>
<td>reasonable</td>
</tr>
<tr>
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<td>insecure</td>
</tr>
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<td>Rathdown (Beta 202304)</td>
<td>pit</td>
<td>alder charcoal</td>
<td>unknown</td>
<td>reasonable</td>
</tr>
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<td>Curraheen 1 (Beta-171422)</td>
<td>pit</td>
<td>alder charcoal</td>
<td>unknown</td>
<td>reasonable</td>
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<tr>
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<td>Pit</td>
<td>oak charcoal</td>
<td>unknown</td>
<td>reasonable</td>
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<td>Newgrange (GU-1622)</td>
<td>spread</td>
<td>charcoal</td>
<td>unknown</td>
<td>insecure</td>
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<td>Lismasallagh 2 (Beta-201077)</td>
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<td>Ross Island (GrN 19628)</td>
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<td>charcoal</td>
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<td>insecure</td>
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</tr>
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<tr>
<td>Ross Island (GrN 19627)</td>
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<td>charcoal</td>
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<td>stakehole</td>
<td>charcoal</td>
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<td>reasonable</td>
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<tr>
<td>Barnagore 2 (Beta-171410)</td>
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<td>oak charcoal</td>
<td>unknown</td>
<td>reasonable</td>
</tr>
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<td>Gorture (UB-6768)</td>
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<td>unknown</td>
<td>reasonable</td>
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<tr>
<td>Lough Gur wedge tomb (OxA-3274)</td>
<td>wedge tomb</td>
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<td>short</td>
<td>insecure</td>
</tr>
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<td>Newgrange (GrN-12828)</td>
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<td>charcoal</td>
<td>unknown</td>
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</tr>
<tr>
<td>Graigueshoneen (Beta 170160)</td>
<td>pit</td>
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<td>unknown</td>
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<td>inhumation</td>
<td>short</td>
<td>insecure</td>
</tr>
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<td>Ross Island (GrA 7512)</td>
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<td>cow</td>
<td>short</td>
<td>insecure</td>
</tr>
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<td>Armalughey (SUERC-20768)</td>
<td>Post pit of timber circle</td>
<td>charcoal</td>
<td>unknown</td>
<td>reasonable</td>
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<td>Lough Gur wedge tomb (OxA-3272)</td>
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</tr>
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<td>inhumation</td>
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<td>insecure</td>
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<td>short</td>
<td>insecure</td>
</tr>
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<td>Ahanaglogh (Beta 170159)</td>
<td>burnt mound</td>
<td>charcoal</td>
<td>Unknown</td>
<td>reasonable</td>
</tr>
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<td>unequivocal</td>
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<td>cremation</td>
<td>short</td>
<td>insecure</td>
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<td>Alder charcoal</td>
<td>short</td>
<td>insecure</td>
</tr>
<tr>
<td>Cappydonnell (UBA 10189)</td>
<td>cist</td>
<td>cremation</td>
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Table 8.2: Selection criteria for all dates of medium and high quality.
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<th>Name</th>
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<th>Cal BC</th>
<th>Feature type</th>
<th>Sample</th>
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<td>Faughart 6 (Beta 217947)</td>
<td>4070</td>
<td>50</td>
<td>2860 - 2470</td>
<td>pit</td>
<td>hazel charcoal</td>
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<td>Faughart 6 (Beta 217946)</td>
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<td>50</td>
<td>2850 - 2460</td>
<td>pit</td>
<td>hazel charcoal</td>
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<td>Dunboyne 3 (Beta-241273)</td>
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<td>40</td>
<td>2570 - 2340</td>
<td>pit</td>
<td>ash charcoal</td>
</tr>
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<td>Curraheen 1 (Beta-171422)</td>
<td>3920</td>
<td>70</td>
<td>2580 - 2200</td>
<td>pit</td>
<td>alder charcoal</td>
</tr>
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<td>Ballycuddy More 1 (Beta-244831)</td>
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<td>2480-2290</td>
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<td>alder charcoal</td>
</tr>
<tr>
<td>Mell (WK-17459)</td>
<td>3906</td>
<td>33</td>
<td>2470 - 2290</td>
<td>spread</td>
<td>ash charcoal</td>
</tr>
<tr>
<td>Rathmullan 9 (SUERC-31910)</td>
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<td>30</td>
<td>2470 - 2290</td>
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<td>hazel charcoal</td>
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<td>Lismullin (SUERC-23489)</td>
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<td>30</td>
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<td>hazel Charcoal</td>
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<td>Rathmullan 12 (SUERC-31907)</td>
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<td>2470 - 2280</td>
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<td>Pig bone</td>
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<tr>
<td>Gortybrigane 1 (UBA-11745)</td>
<td>3858</td>
<td>26</td>
<td>2461 - 2209</td>
<td>pit</td>
<td>hazelnut shells</td>
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<tr>
<td>Rathmullan 12 (SUERC-31908)</td>
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<td>Vertebrate</td>
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<td>Rathmullan 10 (SUERC-31920)</td>
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<td>30</td>
<td>2460 - 2200</td>
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<td>Pig limb</td>
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<td>Laghaunstown 35 (OxA12811)</td>
<td>3847</td>
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<td>2460 - 2200</td>
<td>posthole</td>
<td>hazel charcoal</td>
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<td>Danesfort 8 (UBA-11001)</td>
<td>3846</td>
<td>27</td>
<td>2457 - 2205</td>
<td>pit</td>
<td>nut</td>
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<td>30</td>
<td>2460 - 2200</td>
<td>pit</td>
<td>Oak charcoal</td>
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<tr>
<td>Largantea wedge tomb (UB-6974)</td>
<td>3837</td>
<td>35</td>
<td>2459-2200</td>
<td>chamber - cremation</td>
<td></td>
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<td>Largantea wedge tomb (UB-6976)</td>
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<td>37</td>
<td>2458-2147</td>
<td>chamber - cremation</td>
<td></td>
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<td>Paulstown (UBA 15435)</td>
<td>3821</td>
<td>26</td>
<td>2430-2147</td>
<td>pit</td>
<td>hazel charcoal</td>
</tr>
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<td>Labbacallee wedge tomb (GrN-11359)</td>
<td>3805</td>
<td>45</td>
<td>2458 - 2062</td>
<td>chamber</td>
<td>inhumation</td>
</tr>
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<td>Lismullin (SUERC-23551)</td>
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<td>30</td>
<td>2350 -2130</td>
<td>pit</td>
<td>hazel charcoal</td>
</tr>
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<td>Cherrywood (GrA-23011)</td>
<td>3800</td>
<td>40</td>
<td>2400 - 2100</td>
<td>burnt mound deposit</td>
<td>animal tooth</td>
</tr>
<tr>
<td>Labbacallee wedge tomb (OxA-2759)</td>
<td>3780</td>
<td>70</td>
<td>2459 - 2031</td>
<td>chamber</td>
<td>inhumation</td>
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<tr>
<td>Kilmainham 1C (UBA-14139)</td>
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<td>28</td>
<td>2287-2051</td>
<td>pit</td>
<td>Carbonised residue</td>
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<tr>
<td>Newtownbalregan 2 (WK-18558)</td>
<td>3649</td>
<td>49</td>
<td>2190 - 1890</td>
<td>pit</td>
<td>Alder charcoal</td>
</tr>
<tr>
<td>Ballybriest wedge tomb (GrA-13273)</td>
<td>3630</td>
<td>50</td>
<td>2139 - 1830</td>
<td>chamber</td>
<td>cremation</td>
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Table 8.3: The highest quality dates from single entity samples with short own-life
<table>
<thead>
<tr>
<th>Name</th>
<th>Year BP</th>
<th>±</th>
<th>Cal BC</th>
<th>Feature type</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broomfield (GrN-13879)</td>
<td>3880</td>
<td>30</td>
<td>2460 - 2310</td>
<td>pit</td>
<td>oak charcoal</td>
</tr>
<tr>
<td>Paulstown (UBA 15430)</td>
<td>4017</td>
<td>28</td>
<td>2617-2471</td>
<td>posthole of timber circle</td>
<td>burnt human bone</td>
</tr>
<tr>
<td>Coldwinters (GrA-32116)</td>
<td>4005</td>
<td>35</td>
<td>2620 - 2465</td>
<td>pit</td>
<td>Cremated bone</td>
</tr>
<tr>
<td>Largantea wedge tomb (UB-7024)</td>
<td>3877</td>
<td>34</td>
<td>2468-2211</td>
<td>chamber - primary layer</td>
<td>oak charcoal</td>
</tr>
<tr>
<td>Kilmainham 1A (UB12101)</td>
<td>3989</td>
<td>25</td>
<td>2571-2468</td>
<td>spread</td>
<td>hazel charcoal</td>
</tr>
<tr>
<td>Paulstown (UBA 15437)</td>
<td>3989</td>
<td>27</td>
<td>2573-2467</td>
<td>posthole of timber circle</td>
<td>ash charcoal</td>
</tr>
<tr>
<td>Haggardstown Site 13 (UBA-9853)</td>
<td>3974</td>
<td>45</td>
<td>2618-2310</td>
<td>pit</td>
<td>hazel charcoal</td>
</tr>
<tr>
<td>Rathdown (Beta 202304)</td>
<td>3870</td>
<td>40</td>
<td>2470-2210</td>
<td>pit</td>
<td>alder charcoal</td>
</tr>
<tr>
<td>Curraheen 1 (Beta-171422)</td>
<td>3920</td>
<td>70</td>
<td>2580 - 2200</td>
<td>pit</td>
<td>alder charcoal</td>
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<tr>
<td>Caherabby Upper (UB-7237)</td>
<td>3642</td>
<td>38</td>
<td>2135 - 1914</td>
<td>Pit</td>
<td>oak charcoal</td>
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<td>Newgrange (GU-1622)</td>
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<td>70</td>
<td>2585-2140</td>
<td>spread</td>
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<td>60</td>
<td>2490 - 2190</td>
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<td>oak charcoal</td>
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<td>35</td>
<td>2470-2213</td>
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<td>charcoal</td>
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<td>45</td>
<td>2470-2206</td>
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<td>charcoal</td>
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<td>3845</td>
<td>40</td>
<td>2467-2147</td>
<td>spread</td>
<td>charcoal</td>
</tr>
<tr>
<td>Newgrange (GrN-12828)</td>
<td>3820</td>
<td>35</td>
<td>2457-2142</td>
<td>spread</td>
<td>charcoal</td>
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<tr>
<td>Graigueshoneen (Beta 170161)</td>
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<td>40</td>
<td>2860 - 2490</td>
<td>stakehole</td>
<td>charcoal</td>
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<tr>
<td>Barnagore 2 (Beta-171410)</td>
<td>3840</td>
<td>70</td>
<td>2480 - 2050</td>
<td>pit</td>
<td>oak charcoal</td>
</tr>
<tr>
<td>Gortore (UB-6768)</td>
<td>3832</td>
<td>36</td>
<td>2458 - 2152</td>
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<td>charcoal</td>
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<td>80</td>
<td>2481-2126</td>
<td>wedge tomb chamber</td>
<td>inhumation</td>
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<tr>
<td>Newgrange (GrN-12828)</td>
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<td>30</td>
<td>2577-2468</td>
<td>pit</td>
<td>charcoal</td>
</tr>
<tr>
<td>Graigueshoneen(Beta 170160)</td>
<td>3860</td>
<td>40</td>
<td>2460 - 2200</td>
<td>pit</td>
<td>charcoal</td>
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<td>Lough Gur wedge tomb (OxA-3270)</td>
<td>3780</td>
<td>70</td>
<td>2459-2031</td>
<td>chamber</td>
<td>inhumation</td>
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<tr>
<td>Ross Island (GrA 7512)</td>
<td>3760</td>
<td>50</td>
<td>2345-2025</td>
<td>spread</td>
<td>cow</td>
</tr>
<tr>
<td>Armalughey (SUERC-20768)</td>
<td>3750</td>
<td>30</td>
<td>2290 - 2030</td>
<td>Post pit of timber circle</td>
<td>charcoal</td>
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<tr>
<td>Lough Gur wedge tomb (OxA-3272)</td>
<td>3720</td>
<td>70</td>
<td>2341-1921</td>
<td>chamber</td>
<td>inhumation</td>
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<td>Lough Gur wedge tomb (OxA-3267)</td>
<td>3710</td>
<td>70</td>
<td>2333-1901</td>
<td>chamber</td>
<td>inhumation</td>
</tr>
<tr>
<td>Ross Island (GrA-7523)</td>
<td>3690</td>
<td>50</td>
<td>2271-1937</td>
<td>slot trench</td>
<td>cow</td>
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<tr>
<td>Ahanaglogh (Beta 170159)</td>
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<td>40</td>
<td>2300 - 2040</td>
<td>burnt mound</td>
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<td>Labbалалие wedge tomb (OxA-2760)</td>
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<td>70</td>
<td>2201-1775</td>
<td>chamber</td>
<td>inhumation</td>
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<tr>
<td>Ballybriest wedge tomb (GrA-13254)</td>
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<td>50</td>
<td>2114 - 1769</td>
<td>antechamber</td>
<td>cremation</td>
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<td>Nugentstown 3 (UB 12068)</td>
<td>3517</td>
<td>23</td>
<td>1915-1759</td>
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<td>Alder charcoal</td>
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<td>Cappydonnell (UBA 10189)</td>
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<td>2029 - 1887</td>
<td>cist</td>
<td>cremation</td>
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Table 8.4: The medium quality dates, excluding those of high or low quality
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<th>Context</th>
<th>Number of sites</th>
<th>Number of features</th>
<th>Number of sherds</th>
<th>Number of vessels</th>
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<td>177</td>
<td>4436</td>
<td>472</td>
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<td>spreads</td>
<td>30</td>
<td>39</td>
<td>9721</td>
<td>567</td>
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<td>postholes</td>
<td>34</td>
<td>19</td>
<td>132</td>
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<td>3</td>
<td>25</td>
<td>?</td>
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<td>linear</td>
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<td>72</td>
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<td>?</td>
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<td>caves</td>
<td>2</td>
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<td>?</td>
<td>3</td>
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Table 9.1: The number of sites and features of different type to have produced Beaker pottery, as well as the numbers of sherds and vessels to occur in each of these types.

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<thead>
<tr>
<th>Context</th>
<th>Settlement</th>
<th>Ceremonial</th>
<th>Funeral</th>
<th>Natural</th>
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<td>x</td>
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<td>x</td>
<td>x</td>
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<td>x</td>
<td>x</td>
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<td>x</td>
<td>x</td>
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<tr>
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<td>x</td>
<td>0</td>
<td>x</td>
</tr>
<tr>
<td>Gold disc</td>
<td>0</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Convex end scraper</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Copper axe</td>
<td>0</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Wristbracer</td>
<td>0</td>
<td>x</td>
<td>0</td>
<td>x</td>
</tr>
</tbody>
</table>

Table 9.2: The presence /absence of other artefacts with Beaker pottery in each contextual category
presence= 0, absence =x
Table 9.3: The co-occurrence of Beaker pottery with other artefacts within a range of contextual sub-categories.

<table>
<thead>
<tr>
<th>Context</th>
<th>Find place</th>
<th>No. of single finds</th>
<th>No. of buttons with other objects</th>
<th>No. of hoards</th>
<th>No. of buttons from hoards</th>
<th>Total find spots</th>
<th>Total finds</th>
</tr>
</thead>
<tbody>
<tr>
<td>bog</td>
<td>wet</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>24</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>passage tomb</td>
<td>dry</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>cist</td>
<td>dry</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
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<td>mountain</td>
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<td>0</td>
<td>1</td>
<td>12</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
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<td>unknown</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 9.4: The contexts in which V-perforated buttons occur as single or multiple finds or as hoards, as well as the number of findspots and the number of buttons.
### Table 9.5: The numbers of bracers from each context.

<table>
<thead>
<tr>
<th>Context</th>
<th>Findplace</th>
<th>Total find spots</th>
<th>No. of bracers</th>
</tr>
</thead>
<tbody>
<tr>
<td>bog</td>
<td>wet</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>spread</td>
<td>dry</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>cist</td>
<td>dry</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>megalith</td>
<td>dry</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>other burials</td>
<td>dry</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

### Table 9.6: The contexts in which lunulae occur as single finds and hoards as well as the number of findspots and the number of lunulae

<table>
<thead>
<tr>
<th>Context</th>
<th>Findplace</th>
<th>single finds</th>
<th>No. of hoards</th>
<th>No. of lunulae from hoards</th>
<th>Total findspots</th>
<th>Total finds</th>
</tr>
</thead>
<tbody>
<tr>
<td>bog</td>
<td>wet</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>lake</td>
<td>wet</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Field</td>
<td>Wet</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>megalith</td>
<td>dry</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Gravel</td>
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<td>4</td>
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<td>4</td>
</tr>
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<td>0</td>
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<td>0</td>
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<td>dry</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
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<td>Field</td>
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<td>3</td>
</tr>
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<td>Unknown</td>
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<td>2</td>
<td>60</td>
<td>61</td>
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<tr>
<td>Findplace</td>
<td>context</td>
<td>No. of single finds</td>
<td>No. of hoards</td>
<td>No. of Sundiscs from hoards</td>
<td>Total findspots</td>
<td>Total Finds</td>
</tr>
<tr>
<td>-----------</td>
<td>---------------</td>
<td>---------------------</td>
<td>---------------</td>
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<td>-----------------</td>
<td>-------------</td>
</tr>
<tr>
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<td>4</td>
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<tr>
<td>dry</td>
<td>Field</td>
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<td>6</td>
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</tr>
<tr>
<td>dry</td>
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<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
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<tr>
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<td>Unknown</td>
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<td>4</td>
<td>2</td>
<td>5</td>
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</table>

Table 9.7: The contexts in which sundiscs occur as single finds and as hoards, as well as the number of findspots and the number of sundiscs.

<table>
<thead>
<tr>
<th>Context</th>
<th>Pits</th>
<th>Spread</th>
<th>Undeclassified megalith</th>
<th>Wedge tomb</th>
<th>Court tomb</th>
<th>Portal tomb</th>
<th>Passage tomb</th>
<th>Clst</th>
<th>Timber circle</th>
<th>Cave</th>
<th>Burnt mound</th>
<th>Bog</th>
<th>River</th>
<th>Lake</th>
<th>Dryland</th>
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<tr>
<td>Beaker pottery</td>
<td>0</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>barb and tang ar.head</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>hol-based ar.head</td>
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<td></td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
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<td>Convex scrapers</td>
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<td>0</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polypod Bowls</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrist bracer</td>
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<td>0</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Copper daggers</td>
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<td>0</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>gold discs</td>
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<td>0</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gold head Orns.</td>
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<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>lunulae</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Table 9.8: The range of Beaker items occurring in each context.
<table>
<thead>
<tr>
<th>Artefact Type</th>
<th>Pits</th>
<th>Spread</th>
<th>Wedge tomb</th>
<th>Court tomb</th>
<th>Portal tomb</th>
<th>Passage tomb</th>
<th>Cist</th>
<th>Timber circle</th>
<th>Cave</th>
<th>Burnt mound</th>
<th>Bog</th>
<th>River and lakes</th>
<th>Dry land (natural)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaker pots</td>
<td>472</td>
<td>567</td>
<td>51</td>
<td>19</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>50</td>
<td>3</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Beaker sherds</td>
<td>443</td>
<td>9721</td>
<td>509</td>
<td>103</td>
<td>2</td>
<td>21</td>
<td>?</td>
<td>303</td>
<td>?</td>
<td>15</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Barb and tanged arrowhead</td>
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<td>5</td>
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<td>6</td>
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<td>3</td>
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<td>0</td>
<td>Yes</td>
</tr>
<tr>
<td>Hollow-based arrowhead</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>Yes</td>
<td>0</td>
<td>Yes</td>
</tr>
<tr>
<td>Disc beads</td>
<td>24</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Ceramic Polypod Bowls</td>
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<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>Wooden Polypod Bowls</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wrist bracer</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Copper daggers</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>V-perforated buttons</td>
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<tr>
<td>Gold discs</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>4</td>
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<td>6</td>
</tr>
<tr>
<td>Gold head ornaments</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
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<tr>
<td>Lunulae</td>
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<td>0</td>
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<td>0</td>
<td>14</td>
<td>1</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

Table 9.9: The number of each artefact type found in each context type (all 24 discbeads are probably from the same necklace)
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Chart 8.10: Summed probability distribution for all 61 Beaker-associated radiocarbon determinations of medium quality or higher.

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Chart 9.2: The proportion of sites of different type to have produced Beaker pottery.

Chart 9.3: The proportion of Beaker sherds to have been deposited within a range of specific features.

Chart 9.4: The proportion of Beaker vessels to have been deposited within a range of specific features.

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Chart 9.8: The percentage of polypod bowls (n=16) found in each context type.

Chart 9.9: The contexts of buttons and the numbers of examples from each.

Chart 9.10: The percentage of V-perforated buttons (n=50) found in each context type.

Chart 9.11: The percentage of bracers (n=112) found in each context type.

Chart 9.12: The percentage of tanged copper daggers (n=17) found in each context type.

Chart 9.13: The percentage of lunulae (n=91) found in each context type.

Chart 9.14: The percentage of sundiscs (n=22) found in each context type.
Chart 9.15: The numbers of various Beaker objects occurring as single finds, multiple finds or in hoards

Chart 9.16: The associations between different Beaker objects

Chart 9.17: The number of all Beaker objects from wet and dry contexts

Chart 9.18a: The numbers of each object type occurring in wet or dry places including unknowns

Chart 9.18b: The numbers of each object type occurring in wet or dry places excluding unknowns

Chart 9.19a: The frequency of occurrence of various objects within natural compared to manmade contexts including the unknowns

Chart 9.19b: The frequency of occurrence of various objects within natural compared to manmade contexts excluding the unknowns

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Gazetteer of Sites that Have Produced Beaker Pottery

The information in this gazetteer is presented in terms of the following categories: sitename, townland, county, national grid reference, excavator, year of excavation, licence number for the excavation (for sites excavated from 1992 onwards) and the details of discovery of Beaker pottery on each site.

County Antrim

Bay farm, Bay farm, Co. Antrim


Two Beaker sherds were found in a disturbed context alongside glass bottles during the excavation of a ringditch, they were retrieved from a layer overlying the ringditch and stakeholes. Food Vessels and Collared Urns were also discovered in association with the ringditch (Jim Mallory pers. comm.).

Goodland, Goodland, Co. Antrim,

319080, 441800, Humphrey Case, 1959.

Beaker sherds were discovered in an unstratified location during excavations of this Neolithic site (Case 1961, 205; 1969b, 42).

Lyles Hill, Tobernagee, Co. Antrim,

324780, 382900, E. E. Evans, 1953.

Excavations of a low mound revealed a centrally located cist grave (that may have been disturbed) that appeared to have been sealed beneath a kerbed cairn (Evans 1953). The cist and cairn had been built over a pre-existing Neolithic deposit. The cist contained residual sherds of Early and Middle Neolithic pottery, a hollow scraper, a leaf-shaped arrowhead or foliate knife, a quartz core, the cremated remains of a child and two sherds
of Beaker pottery (Evans 1953; Apsimon 1969; Case 1961, 224; Eoin Grogan pers. comm.). Cremated human remains, red deer bone and a Beaker sherd (Evans 1953, fig. 18.87; Case 1961, 202; Case 1966, 168, Eoin Grogan pers. comm.) were found beside the central cist, but within the cairn. The excavator suggested they may have been disturbed from the grave (see Section 5.6.2).

**Steeple, Steeple, Co. Antrim,**

321606, 388220, Robert Chapple, 2008, AE/08/099.

A near complete Beaker vessel was found within a pit during the excavation of a site which was mainly dated to the early medieval period (Robert Chapple pers. comm.).

**County Armagh**

**Clontygora Large, Clontygora Large, Co. Armagh,**

309860, 319420, O. Davies and U. Patterson, 1936.

Excavation of this court tomb resulted in the discovery of three sherds from a Beaker vessel within a deposit situated inside one of the chambers. The layer, within which the sherds were found also contained charcoal, cremated human bone, sherds from an Early Neolithic Carinated Bowl in addition to other pots, as well as a polished stone axe, concave and convex scrapers. The deposit was sealed under a black layer containing a bipartite Bowl, Vase Urn, Cordoned Urn, concave scrapers and cremated human bone. (Davies and Patterson 1937; Herity 1987, 183).

**County Carlow**

**Moanduff 2, Moanduff, Co. Carlow,**


Nine worn Beaker sherds representing at least three fine vessels were retrieved from a spread and a posthole on this multi-period site (Phelan 2010).
Russellstown, Russellstown, Co. Carlow,


56 sherds from at least two vessels were found in a pit forming part of a cluster of pits on this multi-period site, which included elements from various periods including the Early Neolithic, Late Neolithic and Early Bronze Age. An aceramic pit contained a roughout for a barbed and tanged arrowhead, while another pit contained burnt bone, a polished stone axe and charcoal that returned a radiocarbon date of 2480-2298 BC. Grooved Ware was also recovered from other features on this site (O'Connell 2009b).

County Cavan

Aughrim, Aughrim, Co. Cavan,

227357, 321177, John Channing, 1992, 92E0116.

Excavation of a wedge tomb resulted in the discovery of Beaker and Food Vessel pottery within the chamber along with inhumed and cremated human bone. Further details remain unavailable (Channing 1993).

Cornagleragh, Cornagleragh, Co. Cavan,

242690, 302720, Christopher Read, 2004, 04E0343.

A Beaker sherd was found in a spread of charcoal-enriched soil. No other features were discovered during this investigation (Read 2006).

Gortnacargy, Gortnacargy, Co. Cavan,

219497, 319044, Breandan Ó Ríordáin, 1957.

A total of 156 Beaker sherds along with four Vase/Bowl sherds, 31 scrapers, 37 flakes and some waste fragments of flint were found during investigations at this site. Ten pit graves were discovered, each of which contained extended inhumations with hands crossed over
the pelvis. Most of the Beaker sherds came from “other other parts of the excavated area” (Ó Riordáin 1967, 63), but a small amount were found in the fills of the graves. The Beaker pottery is generally not considered to be contemporary with the burials (Waddell 1990; O Riordáin and Waddell 1993, 92) and the excavator posited that the cemetery had been dug into the remains of an earlier habitation deposit (Ó Riordáin 1967, 63).

**County Clare**

**Coolnatullagh, Coolnatullagh, Co. Clare,**


Partial excavation of a kerbed cairn led to the discovery of a central cist containing the remains of three individuals, which included the scapula of a juvenile, a cremation deposit comprising adult long and cranial bones, as well as an adult inhumation that returned a radiocarbon date of 2460–2140 BC (OxA–10530, 3835±45 BP). Two small fragments of Beaker pottery were found in the cairn (Eogan, J. 2002, 130, see Section 5.6).

**Mooghaun Fort, Mooghaun South, Co. Clare,**

140800, 170600, Eoin Grogan, 1992-95, 92E0093.

Two residual sherds were recovered during the excavation of the Late Bronze Age hill fort at Mooghaun, Co. Clare (Grogan 2005d, 323–27).

**Poulawack, Poulawack, Co. Clare,**

123073, 198181, H. O'Neill Hencken, 1935.

Excavation of this kerbed cairn led to the discovery of a number of cists. A sherd of Beaker pottery was found in one of these cists containing a collective burial comprising the cremated remains of an adult male and the unburnt bones of an adolescent and a child. A bone from the adolescent returned a radiocarbon date of 2185–1772 BC (OxA-3263: 3600±65 BP) (see Section 5.6.1; Hencken 1935, Brindley and Lanting 1991/1992, 16).
Poulnabrone, Poulnabrone, Co. Clare,


Two sherds of Beaker pottery - identified by Eoin Grogan - were found in a disturbed deposit within the interior of this portal tomb whose contents also included Early and Middle Neolithic pottery as well as a hollow-based arrowhead and disarticulated human remains ranging in date from 3880 to 1412 BC (Lynch 1987; Lynch and Ó Donnabháin 1994; Hedges et al. 1990).

Roughan Hill, Parknabinnia, Co. Clare,

125162, 192064, Carleton Jones, 1996, 95E0061.

254 sherds of Beaker pottery were found during the excavation of an enclosed settlement which was ascribed a Beaker date (but see Section 3.7.1). Most of the pottery came from the remains of a midden, parts of which had been disturbed and incorporated into later features dating to the Middle Bronze Age and the Iron Age (see Section 3.7.1; Jones 1996, 1998a and b; 2008, Jones et al. 2010).

County Cork

Ballinaspig More 5, Ballinaspig More, Co. Cork,

162860, 69150, Ed Danaher, 2002, 02E1033.

Two Beaker-associated features were discovered on this multi-period site, which comprised activity dating from the Early Neolithic through to the post medieval period. These included an isolated pit containing occupational debris: flint debitage, quartz fragments, a possible handheld grinding stone, charcoal, nutshells and one sherd of Beaker pottery. The other was a possible hearth which produced two Beaker sherds (Danaher 2004a).
Ballinure, Ballinure, Co. Cork,

172388, 70463, Avril Purcell, 2003, 03E0060.

A pit that was found among other multi-period features contained a Beaker sherd and a flint blade (Avril Purcell pers. comm.; Purcell 2005).

Ballyhooly South, Ballyhooly South, Co. Cork,


An uncontexted sherd of Beaker pottery was discovered during the monitoring of in topsoil removal (Cotter 2000).

Ballynamona 2, Ballynamona, Co. Cork,


69 sherds representing 14 Beakers were discovered with flint debitage in five pits among a cluster of other pits on this multi-period site (Hegarty 2011).

Barnagore 2, Barnagore, Co. Cork,

156190, 69641, Ed Danaher, 2002, 02E0383.

An isolated pit contained 125 Beaker sherds, derived from 7-10 vessels, and a small number of stone objects, including a saddle quern, water rolled stones and two pieces of flint debitage (Danaher 2003). A stakehole beside this feature also contained a Beaker sherd.

Carrigrohane 4, Carrigrohane, Co. Cork,

160918, 71035, Ed Danaher, 2002, 02E0890.

Three features were discovered at this site, one of these was a pit containing 65 sherds from two Beaker pots (Danaher 2005).
Two features produced 48 sherds from at least four Beakers on this multi-phased site that included evidence for Early Neolithic, Late Bronze Age, Iron Age and medieval activity. One of these Beaker features was a posthole which contained five Beaker sherds. The other was a large keyhole shaped pit that contained over forty sherds of Beaker pottery, flint debitage, charcoal and (unidentified) burnt bone inclusions (Danaher 2004b).

An isolated Beaker-associated stone-lined pit was found on this site, which mainly comprised Early Neolithic features. The pit contained 75 sherds from three Beakers, twenty-five pieces of worked flint, fragments of hazelnut shell, barley wheat and unidentified cereal grains, apple/pear pips, possible flax bolls and weed seeds (Kiely 2006; O’Donoghue 2010).

A posthole forming part of a Late Bronze Age house contained three Beaker sherds which appear to be residual. A stakehole produced one Beaker sherd (Sherlock 2005).

The excavation of test trenches revealed an isolated pit containing six Beaker sherds (Avril Purcell pers. comm.).

A well-preserved wedge tomb contained 12 sherds from a Beaker in association with the skeletal remains of three individuals (an adult female and male and a child), burnt animal
bone (pig, cattle, sheep) and a bone pin in its primary deposits (Leask and Price 1936; see Chapter Five). The direct contextual association between the burials and the Beaker pottery is confirmed by dating evidence (Brindley and Lanting 1991).

**Lisnasallagh 2, Lisnasallagh, Co. Cork,**


This site consisted of two pits. One of these contained 14 sherds from at least seven Beakers, a flint thumbnail scraper, flint debitage and inclusions of oak charcoal which was radiocarbon dated to 2490–2190 BC (Beta-201077: 3890±60 BP) (O’Neill 2005).

**Mondaniel 1, Mondaniel, Co. Cork,**

180036, 93089, Eamon Cotter, 2003, 03E0981.

Three sherds of Beaker pottery were found in the topsoil on a site, which consisted of two medieval pits (Cotter 2005).

**Moneen, Moneen, Co. Cork,**


Excavation of a cairn at Moneen, Co. Cork, revealed a centrally located sub-megalithic cist that contained the partial remains of two unaccompanied inhumations, as well as cremated human bone. The excavator observed that this cist had been constructed upon an ‘old turf layer’ (O’Kelly 1952, 141). A charcoal rich spread containing two or three early Beaker pots as well as human skull fragments was also considered to be sealed beneath the ‘old turf layer’, though this is questionable (see Section 5.6.4). Oak charcoal from the spread produced a radiocarbon date of 2560–2390 BC (GrN10629: 3960±60 BP) (Brindley et al 1987/8). Bone from one of the inhumation burials was radiocarbon dated to 2260–2140 BC (GrN-11904: 3755 ±30 BP) (Brindley et al 1987/8). Sherds of a late Beaker and Food Vessels were found at the base of the cairn material (O’Kelly 1952, 128; Brindley et al 1987/8).
**County Derry**

**Ballybriest, Ballybriest, Co. Derry,**

276400, 388600, Declan Hurl, 1997.

Six Beakers were found in the ante-chamber and chamber of this wedge tomb in association with the cremated remains of at least eight people (Hurl 2001; see Section 5.2).

**Ballywoolen/Castlerock, Co. Derry,**

278000, 435000

Beaker sherds were found on a few occasions during the removal of sand dunes in this area (May and Batty 1948, Apsimon 1969).

‘**Carnanbane’, Ballybriest, Co. Derry,**

276170, 388570, Evans, 1939.

A stone-lined pit that was dug into the cairn at Ballybriest, Co. Co. Derry, contained the cremated remains of an adult male and eight sherds from a Beaker pot (Evans 1939, 10; Helen Roche pers. comm. Herity 1987, 154; see Section 5.3)

**Carrick east, Carrick east, Co. Derry,**

270440, 417380, J.B. Mullin and O. Davies, 1937.

14 sherds from three Beakers were found in chronologically mixed deposits in the southern chamber of this court tomb along with Middle Neolithic pottery and cremated human bone (Mullin and Davies 1938; Herity 1982, 285 and 332, Herity 1987, 194; see Section 5.3).
**Gortcobies, Gortcobies, Co. Derry,**

274000, 425600, A. McL May, 1938.

Excavation of an oval cairn (6.4m x 4.87m) revealed a large rectangular sub-megalithic chamber at its centre that may or may not been roofed (see Section 5.6.4). The cairn incorporated some of the standing stones from a stone circle. This internal structure contained a number of large stones described by the excavator as “sealing stones” and was filled by a deposit of “fine brown soil” (May 1947, 17) that had inclusions of hazel and lesser amounts of oak and willow charcoal. Small fragments of undated cremated human bone and two worked flints: a rough blade with cortex on its edge and a flake were also recovered from this fill. Sherds from seven Beakers were found in the chamber “under the shelter of the south and west walls” (May 1947, 17). The partial remains of one pot came “from the south wall, parts of another vessel were found in the west side of the chamber and part of another pot lay immediately over the latter (ibid, 17). Parts of other Beaker vessels were also found in the chamber as was a pyrmgy Bowl/accessory vessel (10 cm diameter, 7cm high). The Bowl was standing upright and contained eight small stones that were piled on top of each other. 12 Beaker sherds were also found in the cairn material. Some of the Beakers are of a late style (Apsimon 1969, 33)

Near the cairn (9m away), sherds from six Beakers and some Early Neolithic Carinated Bowls were found in association with two ‘hearth’ (May 1950, 30). No further information about this context is available (Gibson 1982; Mallory and McNeill 1991; Case 1993).

Also nearby but sealed under the mound of a ringbarrow, a Beaker sherd was found with Bowl sherds and cremated bone in a pit that had been disturbed by the insertion of a collared urn containing a cremation burial ((May 1947; see Section 5.7).
Beaker that was also present in the. Radiocarbon dating suggests that at least three burials from the wedge tomb may well represent Beaker-associated deposits (see Section 5.2).

**Kilhoyle, Kilhoyle, Co. Derry,**

275240, 416190, I. J. Herring and A. McL May, 1937.

Excavations at Kilhoyle revealed a wedge tomb whose chamber contained chronologically mixed deposits which produced Beaker, Bowls, Vases and some Late Bronze Age pottery, some lithics including a barbed and tanged arrowhead and four convex scrapers, as well as the undated cremated remains of three individuals (two adult females and an adult male) (Herring and McL May 1937, Brindley and Lanting 1991, 25; see Section 5.2). It was observed that the cremated remains of Skeleton 1- an adult female - were very closely associated with Beaker sherds on the floor of the main chamber (Herring and McL May 1937, 45-6). In total, 48 sherds from four Beakers were found scattered throughout the tomb. All the pottery was broken into small pieces, this and the degree to which some pots were scattered suggests that the tomb had been considerably disturbed.

**Tamnyrankin, Tamnyrankin, Co. Derry,**

283390, 410250, I. J. Herring, 1941.

A chamber of this court tomb contained a layer that produced an admixture of pottery including eight sherds from a single Beaker vessel, as well as Middle Neolithic globular bowls, two convex and a concave scraper (Herring 1941; Herity 1987, 197).

**County Down.**

**Ballyalton, Ballyalton, Co. Down,** 353090, 344800, E. E. Evans and O. Davies, 1933.

Beaker sherds were found inside this Early Neolithic court tomb, as well as within a bank of stones and earth in the court area right in front of the gallery entrance (Evans and Davies 1934; Herity 1987, 154; 205-7). Cremated bone from the tomb has been dated to 2300-2000 BC (Schulting and Murphy in prep).
Ballyedmond, Ballyedmond, Co. Down,

320570, 315090, E. E. Evans, 1937.

In the destroyed court tomb, at least 3 sherds of a Beaker were found along with sherds of an Early Neolithic Carinated Bowl “under the top flags of the southern wall” (Evans 1938, 52). The excavator suggested that these sherds had been deliberately placed there (Evans 1938, 54; Herity 1987, 209).

Ballynichol, Ballynichol, Co. Down,

345920, 366880, A.E.P. Collins, 1938.

Only the stone sockets of the chamber of this court tomb survived. Five sherds from three Beakers were found within the vicinity of the portal stones and may have been associated with a flint blade (Collins 1956, 118, Herity 1982, 285; 1987, 210).

Meadowlands, Downpatrick, Co. Down,


Beaker pottery was found in the primary deposit of a small charcoal-rich spread, which also contained burnt stone, and possibly also Cordoned Urns. Some Beaker pottery may also have been found in a pit occurring beneath the deposit. Charcoal from the deposit produced a radiocarbon date of 2460-1980 BC (UB472: 3795±75BP). This was sealed beneath a layer containing Cordoned Urns that was associated with two Early Bronze Age structures (Pollock and Waterman 1964; Simpson 1971, 135; O’Kelly 1989, 218; Waddell 1998, 151).

Dundrum Site 8, Dundrum, Co. Down,


Five sherds of a Beaker pot were found in a chronologically mixed coastal sandhills deposit containing Middle Neolithic Impressed Ware and a Food Vessel sherd (Collins 1959; Case 1961, 208, 1966; Herity 1982, 285).
**Dundrum Site 9, Dundrum, Co. Down,**


Three Beaker sherds were retrieved from “the turf-line” – presumably out of context – during the excavation of the sandhills deposit at Site 9 (Collins 1960, Fig. 9; Apsimon 1969; 58; Herity 1982, 363).

**Goward, Goward, Co. Down,**

323740, 329640, O. Davies and E. E. Evans, 1933.

At least two Beaker sherds were found within basal deposit of brown earth, underlying stone filling, in chamber three of this court tomb (Herity 1987, 211 and 269, Fig 36: 8) while another Beaker sherd came from the court (Davies and Evans 1933).

**Inch/Ballyrenan, Inch/Ballyrenan, Co. Down,**

347200, 346450, Liam McQuillan, 1999.

A near complete late style Beaker was discovered among the roots of a hedge during the removal of a post-medieval field boundary using a machine. No identifiable features were discerned in the immediate vicinity and it is believed that the pot was disturbed from its original position during the creation of the field division (Liam McQuillan pers. comm.)

Nine sherds from four Beakers were recovered from two postholes. These were identified by the excavator as forming part of an irregular ring (15m) of postholes with a western entrance façade. These features had been severely truncated by later activity dating from the Iron Age and post-medieval period, but the excavator suggested that the postholes represented the remains of a timber circle. Radiocarbon determinations on charcoal from two of the postholes returned dates ranging between 2400 and 2200 BC (Liam McQuillan pers. comm.).
## County Dublin

**Blackglen, unknown, Co. Dublin,**
Two polypod bowls (represented by seven sherds) came from a disturbed deposit at Blackglen, Co. Dublin (Grogan and Roche 2009d).

**Ballycullen, Ballycullen, Co. Dublin,**
311300, 225750, Ellinor Larsson, 2002, 02E1374
A small sherd of Beaker pottery was found out of context in the western area of the site.

**Ballyedmonduff, Ballyedmonduff, Co. Dublin,**
318669, 221330, Sean P. Ó Riordáin and Ruarí de Valera, 1945.
140 sherds from eight Beakers were found in the antechamber (three sherds), the main chamber (40 sherds representing four pots lying directly on the paving), and the inner end chamber (16 sherds), as well as in the cairn of this wedge tomb. Small quantities of cremated human bone were found in a posthole within the western chamber. The only other artefacts found in the tomb were a few flint flakes and split pebbles (Ó Riordáin and de Valera 1952; see Section 5.2).

**Balrothery, Glebe South, Co. Dublin,**
Six sherds from a Beaker were found in a pit on this multi-period site (Grogan 2006).

**Beaverstown, Beaverstown, Co. Dublin,**
322696, 250188, Ines Hagen, 2003, 03E1634.
22 sherds from six Beakers were found in two pits and two postholes during the excavation of this multi-period site alongside features dating from the Early Neolithic and the Late Bronze Age (Hagen 2006a).
Broomfield, Broomfield, Co. Dublin,


Sealed beneath internal bank of modern tree ring was an oval pit that showed signs of burning and was filled with burnt clay and silt. It yielded three sherds of Beaker pottery, a quantity of charcoal, two flint scrapers and one flake as well as unidentifiable cremated bone (O'Brien 1988).

Carrickmines Castle, Carrickmines Great, Co. Dublin,

321851, 224082, Mark Clinton, 2000, 00E0525.

During excavations of a medieval castle, Beaker pottery was recovered from a cluster of pits and postholes thought to represent the remains of a structure (Mark Clinton pers. comm.). Grooved Ware was present in other pits and postholes in the same cluster. More detailed information is unavailable.

Carrickmines Site 63, Carrickmines Great, Co. Dublin

322439, 223623, Gary Conboy, 2002, 02E0700.

Beaker pottery was found in pits that formed part of a cluster of pits and postholes on this site which produced a large number of lithics and has been described as a flint knapping area. It has not been possible to obtain information about this site.

Cherrywood Area B, Cherrywood, Co. Dublin,


Excavations revealed a spread of charcoal-rich soil containing a high proportion of burnt stones and consisting of two layers. It produced 42 Beaker sherds from one pot, 33 lithics including a convex scraper and two hammer stones and an animal tooth which returned a radiocarbon date of 2400–2100 BC (GrA-23011: 3800±40BP). Sealed under the mound were eight troughs, one of these pits (contained sherds of Grooved Ware among its fill of large boulders and firing debris (O’Neill 2000).
Coldwinters, Coldwinters, Co. Dublin,

319443, 251886, Kieran Campbell, 2001, 01E1062.

Investigations on this site resulted in the discovery of a large isolated pit containing 75 sherds from two domestic Beakers, burnt stone, and burnt bone within dark charcoal-enriched deposits, as well as 320 lithics. These flint pieces, predominantly comprised debitage, but included convex scrapers and a flint nodule. Charcoal from the deposit containing most of the pottery and flint produced a date of 2620 - 2465 BC (GrA-32116: 4005±35BP).

Dalkey Island, Dalkey Island, Co. Dublin,

327846, 226326, G.D Liversage, 1958.

At least 50 Beakers were found during excavations of sites II and V on this island, but their contextual details are very unclear. Most of the Beakers seem to come from a black layer in a midden on Site V known as the "Beaker shells", which seem to be chronologically mixed and include Late Bronze Age pottery (Liversage 1968; Leon 2005)

Kilgobbin, Kilgobbin, Co. Dublin,

318881, 224552, Ines Hagen, 2003, 03E0306.

Excavations of this multi-period site revealed evidence for activity dating from the Early Neolithic through to the Late Bronze Age. In the course of these, 560 sherds from 45 Beakers were found in 18 features including seven widely dispersed pits, a very extensive surfaced deposit, and various clusters of postholes. Some Beaker artefacts from the spread were incorporated into later Bronze Age features. One pit contained a single sherd of Beaker pottery, a flint flake and a flint barbed-and-tanged arrowhead. Another pit contained over 1400 artefacts including 600 sherds representing a minimum number of 38 Beaker pots (see Chapter Four).

Kilmahuddrick, Kilmahuddrick, Co. Dublin, 304420, 231665, Ian Doyle, 2000, 00E0448

One Beaker sherd was found with a Late Bronze Age cremation burial in a pit enclosed by a Late Bronze Age ringditch (Doyle 2001).
Kilshane, Kilshane, Co. Dublin,

311000, 242900, Dermot Moore, 2003, O3E1359.

Two Beaker sherds were found in topsoil during the excavation of a Middle Neolithic enclosure which had been reused for Early Bronze Age burial activity associated with the use of Bowls, Vases, Encrusted Urns and Cordoned Urns (Roche and Grogan 2005c).

Laughanstown Site 35, Laughanstown, Co. Dublin,

323508, 222719, Mathew Seavers, 2000, 00E0283.

120 Beaker sherds from 12 features thought to represent the remains of an Early Bronze Age occupation, were found during the excavation of a plough-damaged Late Bronze Age ring-cairn which was located 50m southeast of the wedge tomb at Laughanstown. Investigations of this enclosure revealed small amounts of much worn Beaker pottery within the stones forming the cairn and in six pits and five postholes located under the bank of the monument, as well as inside and outside it. Beaker pottery was also found in a surface deposit under the stone-banks of the cairn and in other areas in the vicinity of the enclosure. In the southwest of the same field, beside a (later) Early Bronze Age cairn, a cist was found to contain the cremated remains of an adult male radiocarbon dated to 2500-1950 BC (OxA-12797) (Seaver 2001; 2001; Seaver and Keeley 2003).

Laughanstown Site 78, Laughanstown, Co. Dublin,

322892, 223026, Mathew Seavers, 2002, 02E1133.

81 sherds from 58 Beakers were found along with sherds from Vases and Cordoned Urns in a series of deposits of midden material which were mainly located within a hollow (Seaver 2004b and 2005).

Lusk, Lusk, Co. Dublin,

321700, 254300, Steve Johnson, 2002, 02E1529.

Eight sherds from two Beakers were found in a pit alongside Late Bronze Age features.
Excavations produced 451 sherds of Beaker pottery from a range of features including pits, postholes and a spread. The spread of occupational debris contained 350 sherds from at least 20 Beaker pots including two polypod Bowls (Ward 2006).

Two Beaker sherds found out of context.

Sherds from Beakers, Vases and Bowls were all found in a burnt mound deposit.

105 sherds from 19 Beakers were found during excavations in the immediate vicinity of a portal tomb. A few of these came from a pit, lined with large stones, but most of the pottery was uncontexted or from disturbed positions (Lynch, R. 2000).

Beaker materials were almost certainly discovered in pits and spreads by Valerie. J. Keeley during her mysterious excavations of the portal tomb and its surroundings, but this remains unverifiable due to the inaccessibility of this archive (Keeley 1989).

During the excavation of this court tomb, a deposit in one of the western chambers produced two Green Low type, barbed and tanged arrowheads and an Early Neolithic...
Carinated Bowl. Sherds of a Beaker pot were found in another of the western chambers (Davies 1938).

**Ballyreagh, Ballyreagh, Co. Fermanagh,**

231450, 350410, O. Davies, 1941.

Sherds of a Beaker pot were found in this court tomb within Chamber 2 of the eastern gallery. These occurred in the only deposit in that chamber alongside Early Neolithic Carinated Bowls (Davies 1942; Herity 1987, 216).

**Errisallagh, Co. Fermanagh,**

214000, 332016,  
Poorly contexted sherds representing a near-complete pot were found in this townland (Sweetman 1976b).

**County Galway**

**Curragh More, Curragh More, Co. Galway,**

155470, 224090, 2006, 06E2520

Two pits were found during this excavation, one of which contained cremated human bone of Middle Bronze Age date, while the other contained 13 sherds from an Early Neolithic Carinated Bowl and three sherds from a Beaker (Grogan 2008).

**Rathwilladoon Site 2, Rathwilladoon, Co. Galway,**


62 sherds from 10 Beakers were found during the excavation of a cluster of pits and postholes. One of these pits contained 37 sherds from five Beakers as well as chert flakes
and two chert convex scrapers. The rest of the pottery came from four postholes and another pit (Lyne 2009).

**County Kerry**

**Ardagh, Ardagh, Co. Kerry,**

98250, 88700, Lar Dunne, 2001, 01E0296.

Excavation of largely post-medieval activity led to the discovery of an isolated pit containing four Beaker sherds (Dunne 2003).

**Cloghers II, Cloghers, Co. Kerry,**

83730, 113000, Jacinta Kiely, 2000, 00E0065.

Excavation of this multi-period site produced activity dating from the Early Neolithic to the Late Bronze Age. A total of 256 sherds from 13 Beakers in 10 features comprising various clusters of pits and postholes. One pit contained a flint scraper, chert, quartz flakes, cremated bone (possibly human), a cache of seeds and 140 sherds from 11 Beaker vessels. Another pit contained 11 flint flakes, two Beaker sherds, 534 barley grains and a stone axe manufacturing kit. Some of the Beaker pottery was found in the postholes of apparently Later Bronze Age Four roundhouses, some of these sherds refitted with others from neighbouring structural postholes but radiocarbon dates on charcoal from the postholes returned dates of 2890±90 BP: 1371-845 BC and 3150±70 BP: 1607-1260 BC (MBA/LBA). Fragments of vessel 12 found in postholes and pits in around structures A and B. Fragments of Vessel 13 found in postholes of structure B and D despite the fact that they were 200m apart (Kiely and Dunne 2005)

**Gortalea, Gortalea and Flemby, Co. Kerry,**

91148, 110119, Frank Coyne, 2000, 00E0769.

One pit in a series of pits produced over thirty sherds of Beaker pottery and portion of a greenstone axe-head (Coyne 2003).
Ross Island, Ross Island, Co. Kerry,

An occupation associated with ore-processing and other metallurgical activities was excavated beside the Early Bronze Age copper mine at Ross Island. This led to the discovery of 456 sherds from 25 Beaker pots, stone tools and animal bone, most of which were found in surface deposits (O’Brien 2004, 173-215). The details of this excavation are explored in Section 3.7.2.

County Kildare

Burtonhall Demesne, Burtonhall Demesne, Co. Kildare,

Among other multi-period features, eight Beaker sherds came from two pits (Stephenson 2009).

Collinstown Site 16/17, Collinstown, Co. Kildare,
2986648, 236784, Fiona Reilly, 2001, 01E0893.

A linear pit contained five sherds from two Beaker pots and unidentifiable cremated bone were found on this multi-period site (Reilly 2009).

Corbally, Brownstown, Co. Kildare,
285000, 213000, Avril Purcell, 1997, 97E449.

During the excavation of a site mainly comprising Early Neolithic houses, 61 sherds from seven Beakers were found. Some of these came from two pits which formed part of a pit-cluster. One pit contained a thumbnail scraper, unidentifiable cremated bone and two sherds from a Beaker pot. The other pit produced unidentifiable cremated bone, 18 sherds
from two Beakers and a barbed and tanged arrowhead. The rest of the Beaker sherds were found during topsoil stripping of the site (Purcell, 2002).

**County Kilkenny**

**Baysrath, Baysrath, Co. Kilkenny,**


Excavation of this multi-period site produced 133 sherds representing 20 fine Beakers which came from a cluster of pits (Grogan and Roche 2008c).

**Danesfort 8, Danesfort, Co. Kilkenny,**


45 Beaker sherds representing 11 vessels were found in an isolated stone-filled pit along with five pieces of flint (Jennings. 2009).

**Glashare, Glashare, Co. Kilkenny,**

232700, 71400, Colum Hardy, 2006, E2394

17 sherds of a Beaker were found on top of the natural subsoil after removal of topsoil (Roche and Grogan. 2008b).

**Paulstown, Paulstown, Co. Kilkenny,**

265664, 158651, Ruth Elliot, 2007, AR146.

A series of features containing a total of 424 sherds from 60 Beakers were excavated on this site including various clusters of pits, as well as the postholes forming one of three Late Neolithic timber circles. The Beaker-associated deposits present within one of the timber circles produced 69 sherds representing 11 Beaker vessels, 64 lithics including three scrapers, a knife, a quernstone and a rubbing stone, as well as carbonised plant
remains and small amount of burnt bone (see Chapter Six). The remaining Beakers came from nine pits. A cluster of three of these pits displayed clear evidence for being redug and backfilled on a number of occasions and produced a total of 315 sherds from at least 38 vessels, charred plant remains and 24 small stone disc-shaped beads (see Chapter Four; Carlin forthcoming).

**County Laois**

**Boherard 2, Boherard, Co. Laois,**


An isolated pit produced six sherds from a Beaker vessel, a flint scraper and a possible hammerstone (Roche and Grogan 2008c).

**Parknahoun 5, Parknahoun, Co. Laois,**


Excavation of an early medieval enclosure led to the discovery of a Beaker pot – represented by 81 sherds - in a secondary position within alluvial deposits (O’Neill 2007).

**County Leitrim**

**Kilnagarns, Kilnagarns, Co. Leitrim,**


Excavation of this disturbed wedge tomb produced a single Beaker sherd from a black layer inside the chamber (Corcoran 1964).
**County Limerick**

**Aughinish Site 3, Aughinish, Co. Limerick,**


An isolated pit contained 43 sherds from five Beakers, a hammerstone, flint debitage, burnt bone (unidentifiable), seashells, and hazelnuts (Cleary 2006).

**Ballingoola 2, Ballingoola, Co. Limerick,**

163634, 142952, M. MacDermott, 1949.

Beaker artefacts were discovered during the excavation of two ring barrows (Site I and II). An irregular raised charcoal-rich stony deposit occurred underneath and immediately north of barrow II (MacDermott 1949). This deposit contained burnt animal bone, sherds of Early Neolithic Carinated Bowl and Beaker pottery, lithics and polished stone axe chips. On the eastern edge of the stony deposit were two pits. One pit contained charcoal and burnt bone. The other yielded pottery and flints and was sealed under a stone setting thought to represent a hearth. Over 200 sherds of pottery came from the stony area. Five sherds of Early Neolithic Carinated Bowl was represented by several rims, 195 sherds of Fine and Domestic Beaker. Two barbed and tanged arrowheads (MacDermott 1949a, fig 15:19, 20) classified as Sutton types by Green (1980, 414) were found somewhere during the excavation. The occurrence of the charcoal spread under the barrow bank indicates that this cluster of features almost certainly pre-dates the enclosure.

**Ballyvollane II, Ballyvollane, Co. Limerick,**

163800, 159100, Frank Coyne, 2002, 02E1403.

A burnt spread sealed an oval pit filled with a black silty clay deposit with frequent burnt stone and charcoal that contained one Beaker sherd. This pit appeared to cut another pit which contained a wooden artefact which may have been a shovel (Coyne 2002).
**Caherguillamore, Caherguillamore, Co. Limerick,**

161309, 140168, J. Hunt 1948.

At this rock shelter, a deep deposit contained a mix of artefacts from different periods including two Beakers, two Middle Neolithic vessels, and a probable Late Bronze Age pot, the unburnt remains of 13 individuals as well as four stone and four shell disc beads. Unfortunately, it is not currently possible to discern any secure associations between the Beaker pottery and the burials or the beads. At least one of the skeletons - a crouched inhumation in a pit containing a Globular bowl - dates to the Middle Neolithic. The excavator records that “most of the small finds were found near the floor level”. Some sherds from one of the two Beakers were also found with a convex scraper on a shelf in the cliff above the burials (Hunt 1967).

**Dunmoon, Dunmoon, Co. Limerick,**

169600, 130600, Christine Tarbett, 1986.

This site comprised an undated ring-ditch and spatially associated pits. 210 sherds from 30 Beakers were retrieved from two of the pits. One pit contained two hundred sherds derived from of the remains of up to 23 Beaker pots, as well as 3 heat shattered flint pieces and a greenstone axe. A radiocarbon date of 2468-2210 BC (GrN-15396, 3875±35 BP) came from this feature. A keyhole-shaped pit contained several small sherds from seven pots and pieces of burnt clay similar to the fabric of some of the pottery from the site (Gowen 1988, see Chapter Four).

**Grange stone circle, Grange, Co. Limerick,**

163300, 140500, S. P. Ó Riordáin, 1951.

1231 sherds of Beaker pottery were found with convex scrapers (Ó Riordáin 1951, fig 3; 32), a barbed and tanged arrowhead (Ó Riordáin 1951, fig 3:6), and hollow based arrowheads (Ó Riordáin 1951, fig 3: 1 and fig 3:2) and other chronologically-mixed artefacts in Late Bronze Age contexts during the excavation of the embanked stone circle at Grange at Lough Gur, Co. Limerick (Ó Riordáin 1951; Roche 2004, 115; see Section 6.3).
Kilbane Field 2, Kilbane, Co. Limerick,
161590, 156280, Avril Purcell, 2004, 04E1454.
Two residual Beaker sherds were found in the ditch of a Late Bronze Age enclosure (Purcell 2005b).

Kilbane Field 3 Kilbane, Co. Limerick,
161580, 156300, Avril Hayes, 2003, 02E1787 ext
Excavations revealed a cluster of three pits containing 43 sherds of Beaker pottery and cremated bone, at least some of which is human (Hayes 2003b, Lynch pers. Comm.).

Kilbane Field 1, Kilbane, Co. Limerick,
161590, 156280, Avril Hayes, 2002, 02E1787.
Two pits out of a cluster of five contained 200 sherds of Beaker pottery and cremated bone that may be human. 155 of these sherds came from one of the pits along with chert lithics (Hayes 2003a).

Kilfinnane, Kilfinnane, Co. Limerick,
168147, 122866, Julianna O'Donoghue,, 2005, 05E0703.
An isolated pit contained seven sherds and a complete base of a Beaker pot as well as 33 sherds from two Cordoned Urns and burnt bone. Beaker sherds showed much greater ware than the urns indicating that they had been exposed to the elements for a length of time before deposition within the pit (O'Donoghue 2006).

Lough Gur 1977-78, Knockadoon, Co. Limerick,
A charcoal-rich spread containing three Beaker sherds and two convex scrapers was found in association with a pit containing a Food Vessel sherd. Further spreads occurred 10m to
the southeast – and these contained sherds of Early Neolithic Carinated Bowl and Beakers (Cleary 1982).

**Lough Gur Circle K, Knockadoon, Co. Limerick,**

164531, 140198, S. P. Ó Riordáin, 1948.

500 sherds of Beaker pottery were found during the excavation of a Late Bronze Age enclosed settlement. Most of the Beaker pottery -394 sherds- came from a layer of habitation debris (see Section 3.2.1, see Grogan and Eogan 1987, 336-462).

**Lough Gur Circle L, Knockadoon, Co. Limerick,**

164531, 140199, S. P. Ó Riordáin, 1948.

Excavation of the enclosed later Bronze Age settlement site at Circle L resulted in the discovery of 1110 Beaker sherds from 38 Beaker vessels, as well as Early and Middle Neolithic and Later Bronze Age pottery in chronologically mixed deposits. Contextual details are lacking for most of these artefacts (Grogan and Eogan 1987; see Section 3.2.1)

**Lough Gur Site 10, Knockadoon, Co. Limerick,**

164531, 140202, S. P. Ó Riordáin, 1948.

At Site 10, 570 sherds from 29 Beakers, as well as a hollow-based and a barbed and tanged arrowhead were discovered within an extensive but chronologically mixed deposit containing Early Neolithic pottery, Vases of the Food Vessel tradition and Cordoned Urns (Grogan and Eogan 1987, 453-4; Grogan 2005a, 51; see Section 3.2.1).

**Lough Gur Site C, Knockadoon, Co. Limerick,**

164531, 140204, S. P. Ó Riordáin, 1940.

A small assemblage of Beaker pottery (Ó Riordáin 1954, 340) was found in a chronologically mixed deposit along with two barbed and tanged arrowheads, as well as
Early and Middle Neolithic ceramics, Food Vessels and later Bronze Age pottery (ibid, 321-341; Grogan and Eogan 1987, 336-462: Grogan 2005a, 50-53)

**Lough Gur Site D, Knockadoon, Co. Limerick,**

164531, 140205, S. P. Ó Riordáin, 1940.

2000 Beaker sherds were found mainly within a deposit of habitation debris containing an admixture of different pot types including Early Neolithic and Later Bronze Age ‘Class II’ ceramics, as well as Lough Ravel copper axe and a small undecorated gold disc (Ó Riordáin 1954, 410-11; see Section 3.2.1).

**Lough Gur Site H, Knockadoon, Co. Limerick,**

164531, 140206, S. P. Ó Riordáin, 1950.

Three Beaker sherds were found in a disturbed position on a later Bronze Age site.

**Lough Gur wedge tomb, Knockadoon, Co. Limerick,**

164531, 140207, S. P. Ó Riordáin and G. Ó h-Icedha, 1938.

Excavation of this badly disturbed wedge tomb led to the discovery of 250 Beaker sherds from the antechamber and chamber along with three or four Food Vessels (two simple Bowls, two sherds from a Vase, sherds from an encrusted urn and also possibly another urn of Vase type. Nine separate skeletons could be identified from the bones which were found scattered in highly disturbed deposits throughout the main chamber (O Riordáin and Ó h-Icedha 1955, 47). Five of these returned radiocarbon dates that overlap with the currency of Beakers and were probably deposited in conjunction with each. The exact locations of the artefacts from the tomb are unknown (Ó Riordáin and Ó h-Icedha 1955, see Section 5.2).
Milltown North, Milltown North, Co. Limerick,

133799, 147709, Graham Hull, 2002, 02E0644.

An isolated irregular shaped pit contained one Beaker sherd. Charcoal from the feature produced a radiocarbon date of 2479-2290 cal. BC (UB-6065, 3895±34 BP) (Grogan et al. 2007).

Rathjordan 3, Rathjordan, Co. Limerick,

167720, 142540, S.P Ó Ríordáin, 1946.

A sub-rectangular enclosure defined by a shallow ditch and a low external bank demarcated a flat oval area where a number of pits, dark spreads and postholes were discovered. 250 potsherds including a few sherds of Early Neolithic Carinated Bowl, 50 Beaker sherds, a few Vases and some Late Bronze Age coarseware, as well as lithics – two hollow based arrowheads and eight fragments of polished stone axes - and unidentifiable burnt bone were retrieved from the pits, charcoal spreads and the bank (Ó Riordáin 1948, 22-8). Exact contextual details are lacking for many of these artefacts, but in some instances, Early Neolithic, Early Bronze Age and later Bronze Age pottery all occurred together. One pit occurred under the bank and this prompted the excavator to interpret all the pits as pre-dating the enclosure (Ó Riordáin, 1947, 1948).

Rathjordan Bog, Rathjordan, Co. Limerick,

167853, 142461, S.P. Ó Riordáin and T. Lucas, 1946.

Two hearths were found in peat that had developed over an artificial mound, with a former marsh – one of these produced a single Beaker sherd (O'Sullivan 1998, Ó Riordáin and Lucas 1946-47; Grogan 1989).

Rockbarton Bog, Rockbarton, Co. Limerick,

163082, 141302, G. F. Mitchell and S.P Ó Riordáin 1942.

Three ephemeral Beaker-associated spreads were found on the edge of an extensive marshy area (Mitchell and Ó Riordáin 1942; Grogan 1989, 80). One spread of ash
produced 20 Beaker sherds, another spread of charcoal and ash that was associated with a small mound/pile/heap of burnt stone yielded 45 Beaker sherds, a scraper and a piece of unidentified burnt bone. The other spread of charcoal and ash contained sherds of a single Beaker and a few flints.

County Louth

Carnmore 5, Carnmore, Co. Louth,

304912, 310860, David Bayley, 2003, 03E0873.

Seven highly fragmented sherds from a Beaker were found in the upper fill of a pit containing an intact Bowl and unidentifiable cremated bone (Bayley 2005; Grogan and Roche 2005e). This pit was sealed under a poorly preserved cairn. Two small sherds from a possible Beaker/Bowl hybrid were discovered in the cairn material (Grogan and Roche 2005e). A number of cist burials surrounded the cairn, four of which produced Bowls. The Beaker sherds may have been in a residual position.

Donaghmore 1, Donaghmore, Co. Louth,

301980, 307190, Brian O'Donnchadha, 2002, 02E1330.

Two pits containing a total of 8 sherds from three Beakers occurred as part of a spatially discrete cluster of pits and postholes dating to the Early and Middle Neolithic (Bailey and Ryan 2006; Grogan and Roche 2006d).

Farrandreg, Farrandreg, Co. Louth,

303430, 307840, Teresa Bolger, 2000, 00E0299.

One pit in a discrete cluster of pits and post-holes contained three sherds of Beaker pottery and a possible collared urn (Bolger 2002).
Faughart, Faughart, Co. Louth,
A single Beaker sherd was found out of context (John ‘Sinclair’ Turrell pers. comm.)

Faughart 6, Faughart, Co. Louth,
306206, 311037, Avril Hayes, 2004, 04E0811.
Excavations revealed seven similar pits, two of which contained 23 sherds representing seven Beakers, cremated animal bone and hazelnut shells, (Hayes 2007; Roche and Grogan 2006; see Section 4.2.9).

Haggardstown Site 13, Haggardstown, Co. Louth,
305560, 303090, Gill Mc Loughlin, 2006, 06E0485.
A total of 62 sherds from seven Beaker vessels were retrieved from five pits, a slot trench and a spread occurring within a concentration of features on this multi-period site (Mc Loughlin 2009b, Grogan and Roche 2008d).

Haynestown 16, Co. Louth,
Four Beakers represented by 10 sherds were retrieved from two pits. One pit produced eight Beaker sherds. The other pit contained two Beaker sherds, five lithics and six sherds from a Bowl Food Vessel. Charcoal (alder) from this pit produced a radiocarbon date of 2397-2058 BC (UBA 10538: 3793±36 BP) (McLoughlin 2009c, Grogan and Roche 2009h).

Haynestown Site 8, Co. Louth,
Among features dating from the Early Neolithic through to the Late Bronze Age, sherds from three Beakers were recovered from three postholes, a spread and a pit (Mc Loughlin 2009a).
Hill of Rath, Hill of Rath, Co. Louth,
305410, 278218, Carmel Duffy, 2000, 00E0535.

Three Beaker-associated pits were excavated on this multi-period site. One stone lined pit containing cremated bone was accompanied by 30 sherds from three Beakers, as well as lithics and residual Early Neolithic pottery. Another stone lined pit contained 127 sherds representing at least 30 Beakers (two of which were identified as being of Maritime type), seventy-five pieces of flint including blades, scrapers and two barbed and tanged arrowheads (one partial and one complete), as well as fragments of burnt bone and charcoal (Brindley 2000; Duffy 2002).

Mell, Mell, Co. Louth,
306290, 276467, Melanie McQuade, 2005, 05E0072.

Among other things, excavations revealed a Beaker-associated occupation spread and, metalled surface that produced 491 sherds from 38 Beakers including a polypod bowl (see Section 4.3.3; McQuade 2005; Roche and Grogan 2005a). A lead rod, fired clay wasters, burnt bone, carbonised cereals and lithics including 26 flakes, 8 convex scrapers and a flint knife were all associated with this pottery. Nearby was a prone inhumation that was found within a partially stone lined grave and that has been radiocarbon dated to 2490-2200 BC (Wk-17463, 3894±50 BP). The body was that of adult female and was east-west oriented; her head lay to the west and she was accompanied by animal bone and two convex scrapers (see Section 5.8).

Newtownbalregan 2, Newtownbalregan, Co. Louth,
301993, 308377, David Bayley, 2003, 03E0113.

This excavation revealed a cluster of pits and postholes. The only artefactual material within most of these features was worked and unworked flint; however, one of the pits contained 133 sherds from 11 Beaker vessels and associated lithics including two scrapers, while another contained a near-complete polypod bowl (see Section 4.2.9; Bayley 2009a Grogan and Roche 2005a).
Newtownbalregan 5, Newtownbalregan, Co. Louth,  
302115, 308829, David Bayley, 2003, 03E0114.  
The Beaker-associated features on this multi-period site consist of a slot-trench and a 
cluster of pits and postholes, some of which may form the remains of a structure. 166 
sherds from 15 Beakers and associated lithics comprising flint lumps, debitage and a 
scraper were all found within these (see Section 6.2.3; Bayley 2009; Grogan and Roche 
2005b).

County Mayo

Ardcloon, Ardcloon, Co. Mayo,  
Two Beaker sherds and a flint flake were found in a pit during excavation of an early 
medieval enclosure (Rynne 1956).

Ballyglass, Ballyglass, Co. Mayo,  
109650, 338200, Ó Nualláin, 1972.  
56 sherds from two Beakers were found in the front chamber of the eastern gallery of this 
court tomb. These occurred within a layer that included cremated human bone, Middle 
Neolithic and Late Bronze Age pottery. Two flint barbed and tanged arrowheads were 
found in the cairn (Ó Nualláin et al. forthcoming).

County Meath

Ardsallagh 4, Ardsallagh, Co. Meath,  
288160, 263695, Linda Clarke, 2007, A008/037.  
The multi-period site at Ardsallagh 4 incorporated 14 postholes, five pits and a hearth. A 
single sherd of Beaker pottery was recovered from the fill of one posthole (Clarke 2008).
**Berrilstown, Berrilstown, Co. Meath,**


Seven sherds from two Beakers were found in a residual position within a post-medieval circular enclosure (Grogan and Roche 2006b).

**Blundelstown 1, Blundelstown, Co. Meath,**


A hollow on a multi-phased site contained 24 sherds of pottery ranging in date from the Early Neolithic to the Early Bronze Age including two Beaker sherds (Danaher 2009; Grogan and Roche 2007b).

**Carranstown Site 3, Carranstown, Co. Meath,**

305502, 271298, Ellen O’Carroll, 2004, 04E0714

Among other features, two pits joined by gully contained 1 Domestic Beaker sherd, two pieces of flint debitage and small burnt bone pieces (O’Carroll 2004).

**Colp, Colp, Co. Meath,**


A single Beaker sherd was found out of context during topsoil stripping (Linda Clarke pers. comm.).

**Cookstown, Cookstown, Co. Meath,**

304850, 253000, R. Clutterbuck, 2004, 03E1252.

A small assemblage of four Beaker sherds was uncovered within the fill of two pits on a site dominated by Iron Age activity (Clutterbuck 2004).

**Derver 1, Derver, Co. Meath,**


An isolated pit contained 19 sherds from a Beaker pot (Rathbone and Ginn 2008; Grogan and Roche 2007b).

Beaker sherds were recently found in pits and postholes which seem to form part of a Grooved Ware associated timber circle (Antoine Giacometti pers. comm.).

**Donore 6/Rathmullan 2, Rathmullan, Co. Meath,**

306100, 274300, E. Stafford, 2001, 01E0373.

Four pits were found, one of which produced Beaker pottery and lithic debitage (Stafford 2002). Oak charcoal from this pit produced a radiocarbon date of 2460-2200 BC (SUERC-31897: 3840 ± 30 BP).

**Dunboyne 3, Dunboyne, Co. Meath,**

302054, 243345, Rob O'Hara, 2005, E3035.

A kidney-shaped pit contained cremated bone (species unidentifiable), flint and chert debitage, a flint knife, 25 sherds from six Beaker vessels and (seven sherds of) residual Early Neolithic pottery. It was flanked by three postholes – one of which contained Beaker pottery and a piece of debitage (O Hara 2008, Grogan and Roche 2007b).

**Gardenrath 2, Gardenrath, Co. Meath,**

275071, 274190, David Bayley, 2006, E3145.

12 worn Beaker sherds were found in a spread and a pit among other features of Early Neolithic date (Bayley 2010b; Grogan and Roche 2009f).

**Harlockstown Site 19, Harlockstown, Co. Meath,**


Eight Beaker sherds from six vessels were found in a range of features including a posthole and a spread associated with an Early Bronze Age ringditch encircling two Bowl-associated inhumations. Beaker sherds also came from an upper fill of the ringditch (O'Connor 2005; Roche and Grogan 2005d).
**Johnstown 3, Johnstown, Co. Meath,**

295580, 251708, Stuart Elder, 2006, A008/037.

A large pit contained a number of deposits of charcoal-rich material, burnt cattle, sheep/goat and pig bones and pottery from four different traditions: Beaker, Vase, Vase Urn, and Cordoned Urn. Two radiocarbon determinations suggest a date for the deposition of material into this pit between 1960–1680 BC (Beta 236023: 3530±40 BP and Beta 237578, 3460±40 BP). Most of the sherds including the seven sherds from two Beakers represent residual material that was incorporated, perhaps deliberately into this feature (Elder 2008; Grogan and Roche 2007b).

**Kilmainham 1A, Kilmainham, Co. Meath,** 275495, 274034, E. Lyne, 2006, E3141

On this multi-period site, a single Beaker sherd was found in a pit containing Early Neolithic pottery that returned radiocarbon determinations dating from the Beaker period and the Middle Bronze Age (Lyne 2010).

**Kilmainham 1B, Kilmainham, Co. Meath,**


A near complete Beaker pot was found in a pit among other features (Bayley 2010a; Grogan and Roche 2009b).

**Kilmainham 1C, Kilmainham, Co. Meath,**

275672, 27409, F. Walsh, 2006, E3140.

Excavation of this vast multi-period site led to the discovery of 14 Beaker-associated features predominantly comprising pits and spreads that produced 121 sherds from 12 Beakers. One of the six Beaker pits contained 82 Beaker sherds representing at least 10 of these vessels (Walsh 2009; Grogan and Roche 2009e).
**Kiltoom, Kiltoom, Co. Meath,**


Five sherds from two Beakers were found within a posthole on this multi-period site (Gallagher 2009; Grogan and Roche 2010b). Another four sherds were found in a mixture of residual and disturbed contexts.

**Knowth, Knowth, Co. Meath,**


A total of 4307 sherds from 293 Beakers were found at the passage tomb cemetery at Knowth (Eogan 1984; Eogan and Roche 1997; Roche and Eogan 2001). Most of these were found in surface deposits of occupational debris that surrounded the tombs and probably representing the remains of middens (Concentrations A-E; see Section 3.2.4). A total of 1,500 lithics comprising debitage and 198 modified tools, including 160 scrapers and three (two barbed and tanged and one hollow-based) arrowheads were associated with the Beaker pottery. Beaker sherds were also retrieved from the interior of Tombs 2; 15 and 17 (see Section 5.4).

**Lismullin, Lismullin, Co. Meath,**


A total of 234 sherds from six Beakers were found within six different features during the excavation of this important multi-period site which included an Iron Age timber circle. The Beaker pottery came from four pits, a spread and a ditch (O’Connell 2007; 2009; Grogan and Roche 2009c).

One of these pits formed part of a series of intercutting pits (O’Connell 2007, 53). The stratigraphically earliest of these contained Early and Middle Neolithic pottery as well as cremated human bone. The latest of these contained 19 sherds deriving from two Beaker vessels, two residual sherds from an Early Neolithic Carinated Bowl, cremated human bone and a broken polished Bush Barrow type macehead. This type of macehead was current from 1825-1700 BC (Simpson 1988 and 1989; Lanting and Van der Plicht 2001) and almost certainly post-dates the use of the Beaker pottery. Hazel charcoal from this fill returned a radiocarbon date of 2470-2290 BC (SUERC-23489: 3905±30 BP).
Unfortunately none of the human bone was radiocarbon dated. Earlier materials seem to have become incorporated within later pits when these features were dug into pre-existing pit deposits. These pits were sealed by a deposit containing yet more undated human bone.

Most of the Beaker pottery – 205 sherds – was derived from a single large vessel that was found within an apparently isolated pit. Only a single worn sherd was found in the ditch and that feature is unlikely to be of Early Bronze Age date.

**Monknewtown, Monknewtown, Co. Meath,**


5000 sherds of Beaker pottery were recovered from a spread and a large pit-like depression within the interior of the undated embanked enclosure at Monknewtown (Sweetman 1976). Very little contextual information has been published about these artefacts and few reliable conclusions can be drawn about their deposition (see Sections 3.2.3; 6.3).

**Newgrange, Newgrange, Co. Meath,**


3600 sherds from 200 Beakers were recovered from a range of features at Newgrange, but predominantly from surface deposits occurring at the entrance to the main passage tomb (O'Kelly et al. 1983). These deposits comprised an admixture of materials, possibly representing millennia of activity. Published contextual details are lacking from this site and it is difficult to identify genuine associations between the Beaker pottery and other artefacts or features. This has been discussed in detail in the thesis, please see Sections 1.4.4; 1.5.1; 2.8; 3.2.2; 3.7; 4.3; 5.4; 6.7.

Five sherds of Beaker pottery were found in a spread within the interior of the arc of pits and postholes forming the large pit circle situated to the southeast of the main passage tomb at Newgrange (Sweetman 1985, see Section 6.2.5).

18 sherds deriving from at least six Beakers and other finds including convex scrapers were found in a secondary context within the deposits filling four of the pits which are believed to form part of a timber circle (approx 20m in diameter). These are located 30m
west of the main passage tomb mound (Sweetman 1987). This site is examined in detail in Section 6.2.4.

**Nugentstown 3, Nugentstown, Co. Meath,**

277072, 272659, P. Lynch, 2006, E3134.

Excavations revealed a cluster of pits and postholes. One of the pits contained heat-shattered stone and produced 38 sherds from five Beaker vessels as well as lithic debitage, burnt and unburnt animal bone (Lynch 2008; Grogan and Roche 2009g).

**Oldbridge 3, Oldbridge, Co. Meath,**

305000, 275150, M. Seavers, 2005, 03E1759.

A midden or deposit containing 26 sherds from five Beakers sealed a Late Bronze Age posthole. This deposit appears to have been disturbed and spread within the soil over the site (Seaver 2008).

**Rathmullan Site 9, Rathmullan, Co. Meath,**


This excavation revealed a number of pits, one of which contained Beaker pottery. It produced 225 sherds representing at least 13 Beaker vessels, 5 flint scrapers and a hammer stone (Nelis 2002; Grogan and Roche 2011a).

**Rathmullan Site 10, Rathmullan, Co. Meath,**

307099, 273392, T. Bolger, 2001, 00E0813.

Among a range of evidence for Early Bronze Age activity, three pits contained Beaker pottery and a series of overlying deposits of occupational debris produced a fragmented (Type A – red) wrist-guard, 250 beaker sherds and a number of feet from a Polypod bowl (Bolger 2001a and b; 2003a).
Among other features, three pits were found to contain the remains of 24 Beakers (Bolger 2001a and c, 2003b). One of the pits included 389 sherds from 18 Beaker pots, as well as the remains of four polypod bowls (Grogan and Roche 2011b), 31 pieces of worked flint including one blade, three scrapers, and one barbed and tanged arrowhead, as well as burnt pig bone (Bolger 2003b). Another pit contained 35 Beaker sherds, including one polypod foot, and a near complete Grooved Ware vessel.


70 sherds representing the remains of nine Beakers were retrieved from a scatter of four pits and a posthole that formed part of a much greater array of features on this predominantly Later Bronze Age site.

A single Beaker sherd was found in a residual context during the excavation of the Late Bronze Age enclosed settlement at Stamullin (Ní Lionain 2008).

A cist on this multi-period site was found to contain four fragments from a Beaker vessel and fragments of cremated human bone radiocarbon dated to 2029-1887 BC (UBA 10189: 3589±30 BP) within its primary deposit (Tim Coughlan pers. comm.). This was sealed by another deposit containing three sherds and three fragments from a Vase of the Food
Vessel Tradition. The excavator has suggested that the cist contents were heavily disturbed.

**Castleroan 1, Castleroan, Co. Offaly,**

206324 182969, 2007, E3909, John Tierney

Three Beaker sherds were found in a pit during excavation of a Middle Bronze Age settlement (Kiely et al 2011)

**County Roscommon**

**Clooongownagh, Clooongownagh, Co. Roscommon,**


Eight sherds from a Beaker were found. Their context is unknown

**County Sligo**

**Creevykeel, Creevykeel, Co. Sligo,**

171920, 354568, Hencken, 1938.

During excavations of this court tomb, a few sherds of Beaker pottery were found in the court area, just outside the entrance to the gallery (Hencken 1939; Case 1995a, 25; Herity 1987, 275, fig. 42)

**County Tipperary**

**Ballycuddy More 1, Ballycuddy More, Co. Tipperary,**

179840, 175000, Edel Ruttle and Kate Taylor, 2007, E2483, A026/405

Among other features from various periods, a single Beaker sherd was found in pit with two early Neolithic Carinated Bowl, a leaf-shaped chert arrowhead and alder charcoal that
returned a date of 2480-2290 cal. BC (Beta-244831, 3910±40 BP) (Ruttle and Taylor 2008).

Ballydrehid Site 185.5, Ballydrehid, Co. Tipperary,
204290, 126280, Melanie McQuade, 2006, A035/000 (E2267).
21 sherds from five Beakers were found in two pits, and two postholes in proximity to a Middle Bronze Age structure on this multi-period site (McQuade et al. 2009).

Ballylegan Site 207.2, Ballylegan, Co. Tipperary,
208395, 126348, Melanie McQuade, 2006, A035/000.
10 sherds from five Beakers were found during the excavation of this multi-period site. Three sherds came from a pit and a hearth, but the rest of it was found in a disturbed position within Late Bronze Age structural features (McQuade et al. 2009).

Ballynacarriga 3, Ballynacarriga, Co. Tipperary,
181470, 102601, John Lehane, 2007, E2412
Three sherds from three Beakers were found during the excavation of a multi-phased prehistoric site with evidence for Late Neolithic settlement and for Early Bronze Age cremation burials that were associated with two ring-ditches. One sherd was found in a pit among a cluster of pits and postholes, another sherd was found in a residual context within an Iron Age pit, while the other was found in topsoil. Most of the Early Bronze Age burials were deposited with Vases and/or Encrusted urns, however an aceramic cremation burial in a pit returned a dates of 2460–2206 (UBA-14777), while charcoal from an empty cist produced a date of 2461–2211 cal BC (UB-13165), both of which are contemporary with the use of Beaker pottery (Lehane et al. 2011).

Baurnadomeeny, Baurnadomeeny, Co. Tipperary,
184648, 160073, O'Kelly, 1959.
A cist that was built against the southern side of this wedge tomb contained undated cremated human bone and 33 sherds of Beaker pottery (O'Kelly 1960).
Boscabell, Boscabell, Co. Tipperary,
209880, 144121, Anne-Marie Lennon, 2002, 02E0376
A Beaker sherd was found in a pit (Lennon 2004). Further details are unknown

Boscabell Site 18, Boscabell, Co. Tipperary,
209660, 141412, Joanne Hughes, 2003, 03E0425
Nine sherds from two Beakers were found in two pits (Grogan and Roche 2006a).

Boscabell Site 20, Boscabell, Co. Tipperary,
209678, 141244, John Kavanagh, 2003, 03E0470.
Four sherds from two Beakers were apparently found within two pits and a gully (Grogan and Roche 2006a).

Caherabbey Upper (Site 185), Caherabbey, Co. Tipperary,
204228, 125914, Bernice Molloy, 2006, E2298.
Three sherds from three Beakers were found in a pit and two postholes alongside Early Neolithic features. The pit contained a sherd from a developed Beaker as well as oak charcoal that produced a radiocarbon date of 2135-1914 BC (UB 7237:3642±38 BP) (McQuade et al. 2009).

Caherabbey Upper Site 103.1; Caherabbey, Co. Tipperary,
204228, 125913, Bernice Molloy, 2006, E2299.
Two Beaker sherds from two vessels were found in a pit and a posthole (McQuade et al. 2009).

Caherdrinny 3, Caherdrinny, Co. Tipperary,
180360, 108157, Nik Bower and Linda Hegarty, 2007 E2422.
Six sherds from two Beakers were found in three widely dispersed features comprising two pits and a stakehole on this multi-period site (Bower et al. 2011).
Chancellorsland, Chancellorsland Co. Tipperary,
176322, 136241, Martin Doody, 1995.
Three Beaker sherds were found in a residual position at the base of the later Bronze Age enclosure ditch (Cleary 2008).

Farranamanagh Site38ii, Farranamanagh, Co. Tipperary,
52 sherds from eight Beakers were found in four pits (Grogan and Roche 2006a).

Farranamanagh Site39, Farranamanagh, Co. Tipperary,
37 sherds from three Beakers were found within a pit and a ditch (Grogan and Roche 2006a).

Gortmakellis, Gortmakellis, Co. Tipperary,
An isolated large pit (6m x 3m x 1m) contained 418 sherds from at least 16 Beakers (Roche and Grogan 2008a).

Gortnahown 2, Gortnahown, Co. Tipperary,
A small amount of Beaker pottery – five sherds from three Beakers - was found in seven features on this multi-period site including five pits, a posthole and a slot trench (Kiely and O'Donoghue 2011).

Gortybrigane 1, Gortybrigane, Co. Tipperary,
37 sherds representing at least five Beakers were found in four pits on this multi-period site (Long and O’Malley 2008).
Hughes' Lot East Site 25iii, Hughes' Lot East, Co. Tipperary,

209367, 140534, Joanne Hughes, 2003, 03E0807.

A pit contained a Beaker sherd (Grogan and Roche 2006a). Further details are unknown.

Lisheen, Lisheen, Co. Tipperary,

221173, 166663, 1997.

Three sherds of Beaker pottery were found in a disturbed context (Gowen et al. 2005).

Longstone Cullen, Longstone Cullen, Co. Tipperary,


Beaker pottery was found within a surface deposit that was sealed under an Early Bronze Age burial cairn within the interior of this earthen enclosure. At least some of the Beaker pottery was found in a residual context. The Beaker evidence forms part of a complex sequence of activity dating from the Middle and Late Neolithic through to the Early and Late Bronze Age. A fragment of a red two-holed bracer was found with an encrusted urn and a cremation burial (Helen Roche pers. comm.).

Monadreela Site 13, Monadreela, Co. Tipperary,

209670, 141696, O'Flanagan, N., 2002, 03E0378.

Two pits were found to contain an assemblage of 135 Beaker sherds from 12 Beakers. One of these contained a polished stone axe and cremated human bone (see Chapter Four; (Grogan and Roche 2006a).

Touknockane 1, Touknockane, Co. Tipperary,

170671, 166032, MacLeod, 2006, E2309.

A single residual Beaker sherd was found sealed beneath the primary layer of a Middle Bronze Age burnt mound (MacLeod and Madigan 2008).
Windmill Site36bii, Windmill, Co. Tipperary,

Excavation revealed 10 pits dispersed across the site, six of which contained Beaker pottery comprising 332 sherds from 27 vessels. One of these pits contained 258 sherds from at least 19 Beakers, as well as burnt bone (Grogan and Roche 2006a).

Windmill Site36i, Windmill, Co. Tipperary,
207008, 139138, Joanne Hughes, 2002, 03E0675.

A pit beside a structure of probable later Bronze Age date contained 11 sherds from four Beakers (Grogan and Roche 2006a).

County Tyrone.

Armalughey 1 (Site3), Armalughey, Tyrone,
264050, 356850, Kirsty Dingwall, 2007, AE/06/278.

75 sherds from 11 Beakers were found in five pits and postholes that formed part of a cluster of these features. Grooved Ware was also found in similar features on this site. (Dingwall 2010b; Sheridan et al. 2010)

Armalughey 2 (Site4), Armalughey, Tyrone,
264300, 356700, Kirsty Dingwall, 2007, AE/06/276.

Excavations at Armalughey 2 revealed a Grooved Ware associated Late Neolithic timber circle. 50 sherds from 12 Beakers were retrieved from secondary contexts within six of the features forming part of the timber circle, mainly within the four posts forming an internal square arrangement at the centre of the timber circle (Dingwall 2010a, Carlin 2010; see Section 6.2.2)
Ballynagilly, Ballynagilly, Tyrone,

274300, 383600, Arthur Apsimon, 1966.

Beaker pottery was found with scrapers and barbed and tanged arrowheads within pits and spreads during the excavation of this site which also revealed evidence for Early Neolithic, Middle Neolithic and Late Neolithic habitation. Exact details of the Beaker discoveries from this excavation remain unknown (Apsimon 1969, 35; 1976).

Barnes Lower, Barnes Lower, Tyrone,


Excavation of this court tomb revealed a chronologically mixed deposit from within one of the chambers which consisted of a concentration of cremated bone in black soil along with a Middle Neolithic bipartite bowl, three sherds of a Beaker and two burnt flakes (Collins 1966; Herity 1987, 233).

Cashelbane cairn, Loughash, Tyrone,

251700, 401300, O. Davies and J. B Mullin, 1939.

Sherds from 10 Beakers were discovered in the forecourt, antechamber, main chamber and two subsidiary chambers during the excavation of the Cashelbane wedge tomb (Davies and Mullin 1940). Most of these were found in a primary deposit at the rear of the tomb’s main chamber along with two barbed and tanged arrowheads and the cremated remains of at least four individuals; representing a juvenile, two adult females and an adult male (Davies and Mullin 1940). Two Bowls were found in secondary positions within this deposit. Two small cists containing large quantities of cremated bone were present at the rear of the main chamber. In one of the cists, the upper deposit produced a probable Beaker sherd and burnt bone, while the primary deposit contained another probable Beaker sherd a flint flake as well as the cremated remains of an adult male. From the upper horizon of the other cist came burnt bone and a convex scraper. Underneath this, the primary layer contained a small Beaker sherd and “a great deal” of burnt bone which may be human, but could not be identified as such (ibid, 151; see Section 5.2). Lithics from this excavation included six scrapers, six retouched flakes and 15 flakes,
contextual details for these are vague though some of there were certainly found in the primary deposit in the main chamber.

**Cluntyganny, Cluntyganny, Tyrone,**


Sherds representing the remains of a near-complete Beaker were found in a disturbed context (Brennan et al. 1978).

**Giants Grave, Loughash, Tyrone,**

248300, 400800, O. Davies, 1938.

Excavation of this wedge tomb revealed sherds from four Beakers, three of which represent near-complete vessels. These were found in mixed deposits along with the cremated remains of at least four individuals, as well as an Encrusted Urn, Vase Urn and Late Bronze Age pottery (Davies 1939a).

**Kinkit, Kinkit, Tyrone,**


A two-compartment cist grave contained the undated cremated remains of a two young adults of indeterminate sex - one from each compartment - a bone V-perforated button and a bone pin (Glover 1975, see Section 5.6.4). Willow charcoal from one of the compartments returned a radiocarbon determination of 3830±280 B.P.

**Legland, Legland, Tyrone,**

236130, 379630, O. Davies, 1940.

Four sherds from a Beaker were found in a chronologically mixed deposit in a chamber of this court tomb along with sherds of an Early Neolithic Carinated Bowl and a Middle Neolithic Globular Bowl (Davies 1940).
**Tullywiggan, Co. Tyrone,** 281600, 375600, H. Bamford and S. Briggs. 1971

An unknown quantity of Beaker pottery was found, predominantly within a large ditch which may represent an enclosure (Steven Briggs pers. comm.). Early Neolithic and Middle Neolithic pottery was also retrieved during this excavation.

**County Waterford**

**Ahanaglogh Field 1 Area 16, Ahanaglogh, Co. Waterford,**

237760, 104470, John Tierney, 1998, 98E0575

A residual Beaker sherd was found among evidence for ironworking (Johnston et al 2008).

**Ahanaglogh Field 1 Area 17, Ahanaglogh, Co. Waterford,**

237965, 104635, John Tierney, 1998, 98E0575

Small burnt mound consisting of an oval trough and a very shallow spread of burnt stone that produced one Beaker sherd and a date of 2300–2040 BC (Beta 170159: 3790±40 BP) (Johnston et al. 2008).

**Ahanaglogh Field 2 Area 13, Ahanagloch, Co. Waterford,**

238093, 104674, John Tierney, 1998, 98E0575

A slot trench contained three Beaker sherds. A nearby pit yielded eight sherds from another Beaker (Johnston et al. 2008).

**Carriglong, Carriglong, Co. Waterford,**

259050, 105028, T. Powell, 1941.

Eighteen Beaker sherds, cremated bone and three convex scrapers were recovered from the chamber of this wedge tomb (Powell 1941).
**Carrignanonshagh, Carrignanonshagh, Co. Waterford,**


An isolated small circular pit contained a single Domestic Beaker sherd (Johnston *et al.* 2008).

**Gracedieu West 4, Gracedieu West, Co. Waterford,**

257534, 113907, Ian Russell, 2003, 03E0590.

Nine sherds of Beaker pottery were found in a residual position within early medieval features (Russell 2006).

**Graigueshoneen Field 3, Graigueshoneen, Co. Waterford,**


This excavation revealed a Beaker associated structure that consisted of three concentric rings of stakeholes and three internal pits that produced 34 sherds from six Beaker fine and domestic pots (see Section 3.7.3; Johnston *et al.* 2008). One of the pits contained charcoal, burnt clay, burnt stone, seven sherds from a Beaker, as well as hazelnut shells, barley and wheat returned a date of 2460-2200 BC (Beta 170160) (Johnston *et al.* 2008).

**Oonaglour Cave, Bridgequarter, Co Waterford,**

215640, 95328.

Four sherds of Beaker pottery were recovered from disturbed strata within the cave (Dowd 2004, 164; Forsayeth 1906, 107).

**Scrahan, Scrahan, Co. Waterford,**


An isolated small circular pit contained a charcoal rich fill, burnt stones and two Beaker sherds (Johnston *et al.* 2008).
**County Wexford**

**Ask (Site 40), Ask, Co. Wexford,**  
317528, 162677, Nick Bower, 2005, A003/036.  
Two Beaker sherds were found in a disturbed context (Bower 2006).

**Frankfort, Frankfort, Co. Wexford,**  
One pit on this multi-period site contained 190 sherds from three Beakers. It had been repeatedly used as a fire-pit and then backfilled with broken Beaker sherds, hazelnuts and charred grain (Devine 2006).

**Kerlogue, Kerlogue, Co. Wexford,**  
305243, 119143, Catherine McLoughlin, 2002, 02E0606.  
Evidence for activity ranging in date from the Early Neolithic to the Late Bronze Age was found at this site. This included the discovery of a ringditch containing 52 sherds from five Beakers and a chert bead (see Chapter Six). Beside this, was a rectangular pit containing a Bowl that lacked direct evidence for burial (McLoughlin 2002a and b).

**Moneylawn Lower Site 13, Moneylawn Lower, Co. Wexford,**  
313586, 156545, Liam McKinstry, 2005, A003/015.  
Found among a cluster of pits, one such feature contained 54 sherds from at least six Beaker vessels (McKinstry 2007).

**Raheenagureen Site 26, Raheenagureen, Co. Wexford,**  
316405, 158050, Thaddeus Breen, 2005, A003/044 E3490.  
Among other features, excavations revealed a shallow kidney-shaped pit that produced some pieces of waste flint and 14 sherds from three Beaker pots (Breen 2007).
Raheenagureen Site 27, Raheenagureen, Co. Wexford,

Excavation of this multi-period site revealed a shallow rectangular hearth which contained 29 Beaker sherds from a Late Beaker vessel, as well as Early Neolithic and Late Bronze Age pottery, thereby suggesting that the Beaker is in a disturbed context. A barbed-and-tanged flint arrowhead was also found in/on a metalled surface (Breen 2007).

**County Wicklow**

**Ballyclogh, Ballyclogh North, Co. Wicklow,**
327781, 191888, Yvonne Whitty, 2006, A022/046.
38 sherds from two Beakers were found in a pit sealed by a burnt mound (see Chapter Four; Whitty 2006a).

**Ballymoyle, Ballymoyle, Co. Wicklow,**
327444, 179244, Yvonne Whitty, 2006, A022/019.
An isolated large irregular pit contained a Beaker sherd and 85 lithics (Whitty 2006b).

**Charlesland RMP Site, Charlesland, Co. Wicklow,**
329560, 210020, Bernice Molloy, 2004, 04E0744.
Excavation of an early medieval enclosure resulted in the discovery of a single sherd from a Beaker in a pit that was cut by a furrow (Molloy 2004b).

**Charlesland Site A, Charlesland, Co. Wicklow,**
329210, 210240 Bernice Molloy, 2003, 03E0018.
Seven sherds of Late Beaker pottery came from a cluster three pits and two postholes on this multi-period site (Molloy 2003).
Charlesland Site 1B, Charlesland, Co. Wicklow,
329480, 210240, Bernice Molloy, 2004, 04E0188.
Excavation of a site comprising evidence from multiple periods led to the discovery of an isolated pit containing three sherds from a Beaker and 16 sherds from two Early Neolithic Carinated Bowls (Molloy 2004a).

Charlesland Site 1C and D, Charlesland, Co. Wicklow,
Investigations of a burnt mound resulted in the recovery of 72 sherds from five Beakers within a deposit that underlay the mound. A further 13 sherds were found within the main mound material (Phelan 2004).

Coolbeg Site 73, Coolbeg, Co. Wicklow,
This excavation revealed a scatter of pits, postholes and stakeholes, some of which contained sherds of a domestic variant of the Cordoned Urn. A single sherd of Beaker pottery was recovered from one of the pits (Tobin 2006a).

Kilbride, Kilbride, Co. Wicklow,
323517, 174733, Thaddeus Breen, 1997, 97E0324.
20 sherds from four late-style Beakers were found in two elongated oblong pits on a site with features containing Vases and Cordoned Urns (Breen 1997).

Kilmurry, Kilmurry, Co. Wicklow,
Investigations at this location revealed two elongated oblong pits, one of which contained three sherds from two Beakers (Tobin 2007).
Rathdown, Rathdown, Co. Wicklow,


A range of features including a habitation surface, pits, stakeholes, and a linear ditch were discovered here. A total of 25 sherds from 8 Beaker vessels were recovered. Three Vase sherds were found in a pit. A notable discovery was a circular pit which contained dark, friable, charcoal-flecked clays containing burnt nuts, burnt stones, burnt bone, burnt and unburnt struck flints, and 20 sherds of seven Beaker pots (see Chapter Four; Eogan and O’Brien 2005).

Templerainey, Templerainey, Co. Wicklow,


The excavation of a spread resulted in the discovery of three pits containing cremated bone and 273 sherds derived from 12 Beaker vessels (Roche 2004). One pit was stone-lined and contained 64 sherds deriving from four Beaker vessels, charcoal and a fragment of bone. Another pit yielded 63 sherds representing five Beaker vessels, 35 pieces of flint including a convex scraper. A stone-lined pit produced 24 pieces of flint as well as 23 sherds from at least three vessels and some fragments of bone (B. Ó Riordáin, 1997).
## Catalogues of Beaker Objects in Ireland

### Catalogue 1: Sundiscs

<table>
<thead>
<tr>
<th>Find Place</th>
<th>County</th>
<th>NGR</th>
<th>Qty</th>
<th>Object Detail</th>
<th>Context Of Discovery</th>
<th>Context Details</th>
<th>Method Of Discovery</th>
<th>Reference</th>
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<td>ploughing</td>
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<td>Monaghan</td>
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<td>Wexford</td>
<td>315760, 140303</td>
<td>2</td>
<td>hoard</td>
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<td>unrecorded</td>
<td>Cahill 1994, 53-109; Taylor 1980, 114</td>
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<td>multiple find</td>
<td>Surface deposit</td>
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<td>excavation</td>
<td>Eogan 1994, 19; O’ Riordáin 1954, 410-11</td>
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<td>hoard</td>
<td>unrecorded</td>
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<td>Becker 2007; Cahill 1994, 65</td>
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<td>Case 1977b; Harbsion 1976; Cahill 2005</td>
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<td>Antiq. Invest.</td>
<td>Taylor 1980, 102, 131; Case 1977b; Eogan 1994, 21</td>
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<td>wet</td>
<td>bocutting</td>
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## Catalogue 2: Tanged copper daggers (after Harbison 1969b)

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<th>Find type</th>
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<th>Object Detail</th>
<th>Method of Discovery</th>
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<td>hoard</td>
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<td>Case 1966, 162; Harbison 1969b, 7 and 18</td>
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<tr>
<td>Whitespots</td>
<td>Down</td>
<td>348937, 375899</td>
<td>1</td>
<td>Listack</td>
<td>rock crevice</td>
<td>hoard</td>
<td>unknown</td>
<td>Case 1966, 162; Harbison 1969b, 7 and 18</td>
</tr>
<tr>
<td>Annagh</td>
<td>Kerry</td>
<td>80057, 112229</td>
<td>1</td>
<td>Listack</td>
<td>unknown</td>
<td>single find</td>
<td>unknown</td>
<td>Case 1966</td>
</tr>
<tr>
<td>Dunshaughlin</td>
<td>Meath</td>
<td>297157, 251797</td>
<td>1</td>
<td>Knocknagur</td>
<td>unknown</td>
<td>single find</td>
<td>unknown</td>
<td>Harbison 1969b, 7</td>
</tr>
<tr>
<td>Tirliffin</td>
<td>Cavan</td>
<td>236753, 309295</td>
<td>1</td>
<td>Knocknagur</td>
<td>unknown</td>
<td>single find</td>
<td>unknown</td>
<td>Harbison 1969b, 7</td>
</tr>
<tr>
<td>Unprovenanced</td>
<td>Limerick</td>
<td>150000, 135000</td>
<td>1</td>
<td>Knocknagur</td>
<td>unknown</td>
<td>single find</td>
<td>unknown</td>
<td>Harbison 1969b, 7</td>
</tr>
<tr>
<td>Unprovenanced</td>
<td>unknown</td>
<td>0</td>
<td>1</td>
<td>Knocknagur</td>
<td>unknown</td>
<td>single find</td>
<td>unknown</td>
<td>Harbison 1969b, 7</td>
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<td>3</td>
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<td>unknown</td>
<td>single find</td>
<td>unknown</td>
<td>Harbison 1969b, 8</td>
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<tr>
<td>Knocknagur, Kilcreavant</td>
<td>Galway</td>
<td>161987, 222358</td>
<td>1</td>
<td>Knocknagur</td>
<td>Bog</td>
<td>hoard</td>
<td>unknown</td>
<td>Harbison 1969b, 7</td>
</tr>
<tr>
<td>Blacklands Bog, nr Fivemiletown</td>
<td>Tyrone</td>
<td>244127, 347915</td>
<td>1</td>
<td>Knocknagur</td>
<td>Bog</td>
<td>single find</td>
<td>bogcutting</td>
<td>Harbison 1978, 333-335</td>
</tr>
<tr>
<td>Kilnagarnagh</td>
<td>Offaly</td>
<td>214168, 230126</td>
<td>1</td>
<td>Knocknagur</td>
<td>Bog</td>
<td>single find</td>
<td>unknown</td>
<td>Harbison 1969b, 7</td>
</tr>
<tr>
<td>Clontymore</td>
<td>Fermanagh</td>
<td>223983, 334044</td>
<td>1</td>
<td>Knocknagur</td>
<td>Bog</td>
<td>single find</td>
<td>unknown</td>
<td>Harbison 1969b, 7</td>
</tr>
<tr>
<td>Derrynamanagh</td>
<td>Galway</td>
<td>163264, 228514</td>
<td>1</td>
<td>Knocknagur</td>
<td>Bog</td>
<td>single find</td>
<td>bogcutting</td>
<td>Rynne 1972, 240-243</td>
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<td>Listack</td>
<td>Donegal</td>
<td>214266, 405960</td>
<td>1</td>
<td>Listack</td>
<td>Bog</td>
<td>single find</td>
<td>bogcutting</td>
<td>Harbison 1969b, 8</td>
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<tr>
<td>Shannonbridge</td>
<td>Offaly</td>
<td>196600, 225300</td>
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<td>unclassifiable</td>
<td>river</td>
<td>single find</td>
<td>unknown</td>
<td>Harbison, 1969, 18</td>
</tr>
<tr>
<td>River Skene</td>
<td>Meath</td>
<td>299000, 247000</td>
<td>1</td>
<td>unclassifiable</td>
<td>river</td>
<td>single find</td>
<td>unknown</td>
<td>Harbison 1969b, 18</td>
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<tr>
<td>Jamestown</td>
<td>Leitrim</td>
<td>198099, 297115</td>
<td>1</td>
<td>Listack</td>
<td>river bed</td>
<td>single find</td>
<td>Unknown</td>
<td>Case 1966</td>
</tr>
<tr>
<td>Sillees River, Ross</td>
<td>Tyrone</td>
<td>213500, 365880</td>
<td>1</td>
<td>Listack</td>
<td>river bed</td>
<td>single find</td>
<td>dredging</td>
<td>Sheridan and Northover 1993</td>
</tr>
<tr>
<td>Find place</td>
<td>Co.</td>
<td>Ngr</td>
<td>Qty</td>
<td>Object Detail</td>
<td>Context</td>
<td>Material</td>
<td>Harbison Type</td>
<td>Reference</td>
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<td>---------------</td>
<td>------------------</td>
<td>----------</td>
<td>---------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ballyboley</td>
<td>Antrim</td>
<td>337743, 403130</td>
<td>12</td>
<td>hoard</td>
<td>mountain side</td>
<td>unknown</td>
<td>conical</td>
<td>Harbison 1976, 35; Millen 1856, 271; Woodmartin 1895, 534.</td>
</tr>
<tr>
<td>Skeagh</td>
<td>Cavan</td>
<td>237020, 317017</td>
<td>10</td>
<td>hoard</td>
<td>Bog</td>
<td>bone</td>
<td>unknown</td>
<td>Harbison 1976, 15</td>
</tr>
<tr>
<td>Drumeague</td>
<td>Cavan</td>
<td>266458, 303224</td>
<td>14</td>
<td>hoard</td>
<td>Bog</td>
<td>jet</td>
<td>unknown</td>
<td>Harbison 1976, 15</td>
</tr>
<tr>
<td>Md. of the hostages</td>
<td>Meath</td>
<td>292000, 259800</td>
<td>1</td>
<td>multiple find</td>
<td>passage tomb</td>
<td>anthracite</td>
<td>conical</td>
<td>Harbison 1976, 14; Wood-Martin 1888, 68; Glover 1975, 151.</td>
</tr>
<tr>
<td>Md. of the hostages</td>
<td>Meath</td>
<td>292000, 259800</td>
<td>1</td>
<td>multiple find</td>
<td>passage tomb</td>
<td>mudstone</td>
<td>conical</td>
<td>O'Sullivan 2005, 105, 272; Harbison 1976, 14; Wood-Martin 1888, 68;</td>
</tr>
<tr>
<td>Carrowmore Site 49</td>
<td>Sligo</td>
<td>168598, 319890</td>
<td>1</td>
<td>multiple find</td>
<td>passage tomb</td>
<td>steatite</td>
<td>conical</td>
<td>Harbison 1976, 14; Wood-Martin 1888, 68; Glover 1975, 151.</td>
</tr>
<tr>
<td>Kinkit</td>
<td>Tyrone</td>
<td>231713, 388373</td>
<td>1</td>
<td>multiple find</td>
<td>cist</td>
<td>bone</td>
<td>conical</td>
<td>Harbison 1976, 14 and 34; Glover 1975</td>
</tr>
<tr>
<td>Md. of the hostages</td>
<td>Meath</td>
<td>292000, 259800</td>
<td>1</td>
<td>n/a</td>
<td>passage tomb</td>
<td>anthracite</td>
<td>conical</td>
<td>O'Sullivan 2005, 105, 272; Harbison 1976, 14; Wood-Martin 1888, 68;</td>
</tr>
<tr>
<td>unknown</td>
<td>?</td>
<td>0</td>
<td>10</td>
<td>n/a</td>
<td>unknown</td>
<td>Albertite</td>
<td>hemi-spherical</td>
<td>Harbison 1975, 34.</td>
</tr>
<tr>
<td>Ballymena, nr</td>
<td>Antrim</td>
<td>310750, 403150</td>
<td>1</td>
<td>single find</td>
<td>unknown</td>
<td>steatite</td>
<td>conical</td>
<td>Harbison 1976, 34</td>
</tr>
<tr>
<td>Lurgan bog, near Dromore</td>
<td>Down</td>
<td>313463, 319068</td>
<td>1</td>
<td>single find</td>
<td>Bog</td>
<td>jet</td>
<td>conical</td>
<td>Harbison 1976, 34; Munro 1902.</td>
</tr>
<tr>
<td>Dowth</td>
<td>Meath</td>
<td>302855, 274002</td>
<td>1</td>
<td>single find</td>
<td>passage tomb</td>
<td>jasper</td>
<td>star-shaped</td>
<td>Harbison 1976, 14; Woodmartin 1895, 533.</td>
</tr>
<tr>
<td>Knocknarea</td>
<td>Sligo</td>
<td>162220, 334090</td>
<td>1</td>
<td>single find</td>
<td>mountain side</td>
<td>jet</td>
<td>conical</td>
<td>Harbison 1976, 14 and 35.</td>
</tr>
<tr>
<td>Lissan</td>
<td>Tyrone</td>
<td>279610, 359237</td>
<td>1</td>
<td>single find</td>
<td>unknown</td>
<td>stone</td>
<td>Conical</td>
<td>Harbison 1976, 34</td>
</tr>
<tr>
<td>Lough Crew</td>
<td>Meath</td>
<td>257174, 277413</td>
<td>1</td>
<td>passage tomb</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
### Catalogue 4: Sheet gold head ornaments

<table>
<thead>
<tr>
<th>Find place</th>
<th>Co.</th>
<th>Ngr</th>
<th>Qty</th>
<th>Find type</th>
<th>Find details</th>
<th>Context</th>
<th>Museum Catalogue No.</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belville</td>
<td>Cavan</td>
<td>238467, 299607</td>
<td>1</td>
<td>gold band</td>
<td>a putative diadem composed of four fragments</td>
<td>riverbed</td>
<td>(NMI W78–81)</td>
<td>Cahill 2005, 273; Case 1977b, 25; Armstrong 1933, 91</td>
</tr>
<tr>
<td>Belville</td>
<td>Cavan</td>
<td>238467, 299607</td>
<td>4</td>
<td>gold band</td>
<td>(two pairs) perforated sub-rectangular round ended plaques</td>
<td>riverbed</td>
<td>(NMI W71, W72, W75, W76)</td>
<td>Cahill 2005, 273; Case 1977b, 25; Armstrong 1933, 91</td>
</tr>
<tr>
<td>(Deehommed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unprovenanced</td>
<td>unknown</td>
<td>0</td>
<td>2</td>
<td>basket-shaped</td>
<td>earring</td>
<td>unknown</td>
<td>NMI W73 and W74</td>
<td>O’Connor 2004, Eogan 1994, 19</td>
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</tbody>
</table>
### Catalogue 5: polypod bowls

<table>
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<tr>
<th>Find place</th>
<th>Co.</th>
<th>NGR</th>
<th>Qty</th>
<th>Find type</th>
<th>Object Detail</th>
<th>Context</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tirkernaghan</td>
<td>Tyrone</td>
<td>245070, 400250</td>
<td>1</td>
<td>wooden vessel</td>
<td>single</td>
<td>Bog</td>
<td>Earwood 1991</td>
</tr>
<tr>
<td>Corragole</td>
<td>Fermanagh</td>
<td>226000, 329800</td>
<td>1</td>
<td>wooden vessel</td>
<td>single</td>
<td>Bog</td>
<td>Earwood 1991</td>
</tr>
<tr>
<td>Lecklevera</td>
<td>Monaghan</td>
<td>257300, 327600</td>
<td>1</td>
<td>wooden vessel</td>
<td>single</td>
<td>Bog</td>
<td>Earwood 1991</td>
</tr>
<tr>
<td>Moor</td>
<td>Roscommon</td>
<td>169143, 281479</td>
<td>1</td>
<td>wooden vessel</td>
<td>single</td>
<td>Bog</td>
<td>Earwood 1991</td>
</tr>
<tr>
<td>Unprov.</td>
<td>Unprov.</td>
<td>0</td>
<td>2</td>
<td>wooden vessel</td>
<td>single</td>
<td>Bog</td>
<td>Earwood 1991</td>
</tr>
<tr>
<td>Newtownbalregan 2</td>
<td>Louth</td>
<td>301993, 308377</td>
<td>1</td>
<td>Complete Pot</td>
<td>single</td>
<td>pit</td>
<td>Bayley, D. 2005b</td>
</tr>
<tr>
<td>Rathmullan Site 12</td>
<td>Meath</td>
<td>307117, 273301</td>
<td>1</td>
<td>Feet</td>
<td>multiple</td>
<td>pit</td>
<td></td>
</tr>
<tr>
<td>Newtownlittle</td>
<td>Dublin</td>
<td>318789, 224552</td>
<td>2</td>
<td>sherds and foot</td>
<td>multiple</td>
<td>spread</td>
<td>Ward 2006</td>
</tr>
<tr>
<td>Mell</td>
<td>Louth</td>
<td>306290, 276467</td>
<td>1</td>
<td>Sherds</td>
<td>multiple</td>
<td>spread</td>
<td>McQuade 2005</td>
</tr>
<tr>
<td>Newgrange 1983</td>
<td>Meath</td>
<td>300784, 272687</td>
<td>2</td>
<td>Incomplete Pot</td>
<td>multiple</td>
<td>spread</td>
<td>O'Kelly et al. 1983</td>
</tr>
<tr>
<td>Rathmullan Site 10</td>
<td>Meath</td>
<td>307099, 273392</td>
<td>1</td>
<td>Feet</td>
<td>multiple</td>
<td>spread</td>
<td>Bolger 2001a</td>
</tr>
<tr>
<td>Blackglen</td>
<td>Dublin</td>
<td>317060, 225710</td>
<td>2</td>
<td>Sherds and feet</td>
<td>multiple</td>
<td>topsoil</td>
<td>Grogan and Roche 2009d</td>
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</table>
Catalogue 6: Bracers with contextual details

<table>
<thead>
<tr>
<th>Find Place</th>
<th>Context</th>
<th>Object Detail</th>
<th>Type</th>
<th>Condition</th>
<th>Material</th>
<th>Colour</th>
<th>Comments and Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rathmullan Site 10</td>
<td>spread</td>
<td>multiple find</td>
<td>Type A2 -2TPC</td>
<td>fragmented</td>
<td>jasper?</td>
<td>red</td>
<td>The spread contained 250 beaker sherds and a number of feet from a polypod bowl (Bolger 2001)</td>
</tr>
<tr>
<td>Furness</td>
<td>cist</td>
<td>multiple find</td>
<td>Type A2 -2TPC</td>
<td>fragmented</td>
<td>trachyte?</td>
<td>unknow n</td>
<td>sub-megalithic cist containing a possible disc bead, a sherd of a possible domestic Beaker and the cremated remains of two adults (Macalister et al 1913)</td>
</tr>
<tr>
<td>Ballywholan</td>
<td>court tomb</td>
<td>single find</td>
<td>Type A2 -2TPC</td>
<td>complete</td>
<td>unknown</td>
<td>red</td>
<td>in tomb (Kelly 1985)</td>
</tr>
<tr>
<td>Longstone Cullen</td>
<td>Archaeological site</td>
<td>multiple find</td>
<td>Type A2 -2TPC</td>
<td>fragmented in half</td>
<td>unknown</td>
<td>red</td>
<td>found with an encrusted urn and seems to have been an heirloom (Helen Roche pers comm)</td>
</tr>
<tr>
<td>Tirmony</td>
<td>single find</td>
<td>Type A2 -2TPC</td>
<td>broken perf</td>
<td>porcellane</td>
<td>dark</td>
<td></td>
<td>Old label says dug out of an old fort...1846 (Harbison 1976)</td>
</tr>
<tr>
<td>Fourknocks</td>
<td>unstratified in topsoil</td>
<td>single find</td>
<td>Type A2 -2SPC</td>
<td>fragmented in half</td>
<td>siltstone</td>
<td>red</td>
<td>discovered in topsoil 500m east of the Fourknocks passage tombs (King 1999).</td>
</tr>
<tr>
<td>Newtown</td>
<td>unstratified in topsoil</td>
<td>single find</td>
<td>Type B2</td>
<td>?</td>
<td>Flint?</td>
<td>white</td>
<td>found within 400 km of cairn K @ Carnbane West (Lough Crew) (Cooney 1987)</td>
</tr>
<tr>
<td>Corran</td>
<td>Bog hoard</td>
<td>Type B1-2SPC</td>
<td>complete</td>
<td>siltstone/mudstone</td>
<td>grey</td>
<td></td>
<td>Found in a bog at Corran in a box bound with a gold band, together with some gold circular plates and several jet beads of various shapes. Only the bracers survive. (Case 1977b, Harbsion 1976, Cahill 2005.)</td>
</tr>
<tr>
<td>Corran</td>
<td>Bog hoard</td>
<td>Type B1-2SPC</td>
<td>fragmented</td>
<td>siltstone/mudstone</td>
<td>grey</td>
<td></td>
<td>See above</td>
</tr>
<tr>
<td>Carrowkeel</td>
<td>blanket bog</td>
<td>single find</td>
<td>Type A2 -2SPC</td>
<td>complete</td>
<td>Siltstone</td>
<td>red</td>
<td>found a few cm from the base of the peat, in close proximity to the Carrowkeel passage tomb cemetery (Watts 1960, 115; Harbison 1976, 2)</td>
</tr>
<tr>
<td>Ironpool</td>
<td>Bog single find</td>
<td>Type A2 -2TPC</td>
<td>complete</td>
<td>dark</td>
<td></td>
<td></td>
<td>found in bog while turf cutting (Costello 1944)</td>
</tr>
</tbody>
</table>
### Catalogue 7: Bracers (after Woodward and Roe 2009, Harbison 1976 with additions)

<table>
<thead>
<tr>
<th>Site</th>
<th>Co.</th>
<th>NGR</th>
<th>Hole</th>
<th>Type</th>
<th>Colour group</th>
<th>Material</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fallintra, Glenariff</td>
<td>Antrim</td>
<td>323800, 425300</td>
<td>4</td>
<td>B2</td>
<td>grey-brown</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Cushendall</td>
<td>Antrim</td>
<td>323700, 427600</td>
<td>4</td>
<td>C1</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Foot of Slemish</td>
<td>Antrim</td>
<td>314800, 406400</td>
<td>2</td>
<td>C2</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Newtown Crommelin</td>
<td>Antrim</td>
<td>314200, 417300</td>
<td>2</td>
<td>C2</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>nrp</td>
<td>Antrim</td>
<td>315000, 410000</td>
<td>A</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>nrp</td>
<td>Antrim</td>
<td>315000, 410000</td>
<td>2</td>
<td>A</td>
<td>grey-brown</td>
<td>Sandstone;</td>
<td>complete</td>
</tr>
<tr>
<td>Moss side</td>
<td>Antrim</td>
<td>294500, 435500</td>
<td>2</td>
<td>A</td>
<td>unknown</td>
<td>?</td>
<td>complete</td>
</tr>
<tr>
<td>Glenwhirry</td>
<td>Antrim</td>
<td>321900, 401300</td>
<td>2</td>
<td>C2</td>
<td>grey/brown</td>
<td>Sedimentary?</td>
<td>complete</td>
</tr>
<tr>
<td>nrp</td>
<td>Antrim</td>
<td>315000, 410000</td>
<td>2</td>
<td>A</td>
<td>grey-brown</td>
<td>Mudstone or siltstone</td>
<td>reworked</td>
</tr>
<tr>
<td>Craignageera gh</td>
<td>Antrim</td>
<td>302882 402867</td>
<td>A</td>
<td>?</td>
<td>?</td>
<td>?</td>
<td>?</td>
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