Irish Passage Tombs

Neolithic Images, Contexts and Beliefs

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A thesis submitted in fulfilment of the requirements for a Ph. D. in Archaeology

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Summary

This thesis seeks to take the motifs on Irish Passage tombs beyond their traditional role as passive epiphenomenon and furthers understands them as performing active roles in the Neolithic. Rather than view the images through a textual representational analogy, I utilise visual cultural and neurological studies, set within a worldview perspective to paint a picture of the possible ambiguities of life and belief at some passage tomb locations. I explore the richness of evidence from the archaeological data and literature, to move beyond previous positions, and suggest new ways to deal with a past that develops multiple narratives. Such an account is thick with paradoxes, similarities, differences, tensions, emotions, life, death, pleasures and pain. Visions, context and belief layered together often generate ruptures in daily life that can facilitate new imaginings within the rhythms and sequences of images. Within such a perspective the Irish passage tomb motifs present fresh conditions for possibility and diverse understanding.

In combining broader and more fine-grained analysis of particular passage tomb sites located in the north, east and south of Ireland, I demonstrate that social complexities operate at all scales. Magnified via cosmological perspectives, images on passage tombs interact with spectators through two-way intimate engagements. The assemblages that accompany the motifs are not static, instead they display notions of material animacy. Humans do not control all these interactions, for the motifs and objects are dynamic montages. These actions can be enhanced via process, such as the sequential nature of some images or by the application of liquid solutions, especially when conducted at particular times and places. With passage tombs acting as ‘stages’ and ‘islandscapes’, I construct interpretations that include both carnivalesque and axis mundi environments, which subvert, disrupt and perpetuate social beliefs. Such performances may have created dialogues and myths about the specialness of these places. These conversations would in turn factor and texture new illusions and simulations of the world, whilst creating fresh opportunities for experience.
Declaration

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

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This thesis is the result of my own investigation, except where otherwise stated.
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Introductions

How do Irish passage tomb motifs influence? What are the politics of spectators engaging with depicted motifs on stone? How might people construct cosmologies, worldviews and beliefs from and with these entanglements? What are the consequences of viewing these images? Do these motifs constitute a non-representational account of social complexity and is society in turn created by the imagery? These initial questions generate the stimuli for this research, in which I explore the dynamics of participation of some persons and entities with visual imagery in Neolithic Ireland. Building upon my Masters research, I aim to take the motifs beyond their traditional role as passive epiphenomenon and further understand them as performing active roles that intensify, simulate, perpetuate and contest modes of thought and action.

I will achieve these objectives by reviewing existing literatures on the study of Irish passage tomb motifs, in order to extrapolate and build upon the most salient aspects. Rather than view the images through a textual representational analogy, I will instead utilise visual cultural and neurological studies, set within a worldview perspective to paint a picture of the possible ambiguities of life and belief at some locations in Neolithic Ireland. Such an account will be thick with paradoxes, contradictions, replications, similarities, differences, ruptures, tensions, embedded and embodied expressions, emotions, life, death, pleasures and pain. By doing so I attempt to explore the richness of evidence, to recover previous thought fragments, creating new ways to deal with a past that develops multiple narratives. Visions, context and belief layered together often generate ruptures in daily life that can facilitate new imaginings within the rhythms and sequences of images. Within such a perspective the Irish passage tomb motifs move beyond modernist interpretations that are situated in reality: social construction dichotomies, and present fresh conditions for possibility and diverse understanding. In order to fully examine these proposals, I will first briefly introduce Irish passage tombs with existing descriptions and interpretations of their motifs and settings.
Complex patterns: the context of research

Passage tombs are arguably the most famous Irish monument type, with the four large complexes of the Boyne Valley, Loughcrew, Carrowkeel and Carrowmore attracting the most attention. Irish passage tombs originated in the fourth millennium cal. BC (e.g. the Mound of the Hostages, Tara; see Chapter Six) and continued to be constructed until the early third millennium (Grogan 1991). It is estimated that there are over 230 known examples (Bergh 1995, 12). Passage tombs consist of a large subcircular or ovoid cairn revetted by a continuous kerb of large stones; this kerb is a distinctive Irish feature. Cairn sizes vary normally between 10-80m in diameter. The cairn covers a stone structure, which consists of a chamber, with an aperture leading to the exterior via a passage. Some passage tombs distinguish themselves from other classes of Irish stone tomb by incorporating the eponymous passage and engraved imagery (Eogan 1986), while others do not have passages (e.g. Knockmany, Co. Tyrone; see Chapter Six). The more innovative examples of passage tomb motifs in Europe occur on kerbstones and the interior structural stones of the tombs in the Boyne Valley (M. O’Sullivan 1993). In its simplest form the chamber plan can be rectangular or polygonal as at Sliabh Gullion, Co. Armagh (F. Lynch 1973, 155; Eogan 1986, 100), but the most common form is the cruciform plan, created by three side chambers around a central open space at the end of the passage, as demonstrated by Newgrange Site 1, Co. Meath (M. O’Kelly 1982; see Chapter Four). Other Irish monument types do exhibit variation in construction, yet none are more markedly noticeable than the passage tomb monuments. For example, we have evidence for simple dolmens with rudimentary passages, without cairns but within boulder circles, others have complicated chambers and passages in huge cairns, while some have a passage tomb with a façade, such as at the western tomb, Knockroe, Co. Kilkenny (M. O’Sullivan 1996c, 13; see Chapter Six). At Loughcrew and Carrowkeel, the passage tombs often occur in clusters, previously known as ‘cemeteries’ now termed ‘complexes’, and are predominantly located in commanding positions (Cooney 1990). Even ‘isolated’ passage tombs are often found in conspicuous locations, such as the Mound of the Hostages, Co. Meath (Newman 1997; M. O’ Sullivan 2005) and Knockmany, Co. Tyrone (see Chapter Six). Although depositional evidence within
these tombs is similar to other Irish types, passage tombs differ by incorporating designs on their structures. Often upon the stones of these tombs occur incised and pocked motifs. The passage tombs of the Boyne Valley and Loughcrew form the richest areas of megalithic motifs in western Europe (Shee Twohig 1981; see discussion of Knockroe, Co. Kilkenny in Chapter Six). The predominant burial rite is cremation, although inhumation does occur. The finds often include pendants, pins, beads, stone balls, miniature axeheads and fragments of coarse and decorated Carrowkeel pottery.

Since the nineteenth century, the carvings or visual schemes at passage tombs have attracted a large amount of attention (e.g. Wilde 1849; Conwell 1872; Frazer 1893; Coffey 1897). The study of passage tomb motifs continued in the twentieth century, with interpretations reflecting the theoretical climates of their time. For instance, Breuil (1921; 1934) was concerned with questions of style and chronology and his interpretations were dominated by the hypothesis that passage tomb engravings originated in the portrayal of the human form (see also Breuil and Macalister 1921). Anthropomorphism was prominent in Breuil’s approach, yet although he constantly sought to interpret carvings as ‘figures’ and ‘human faces’, he proposed that the famous ‘triple spiral’ on stone L19, Newgrange Site 1 was a swastika, ‘...with only three arms...’ (Breuil 1934, 321; see Fig.0.1); this suggestion was also supported by Mahr (1937, 356). Later, the Newgrange Site 1 stone L19, triple spiral, became known as the ‘Eye Goddess’ after Crawford (1957) sought to seek out Breuil’s ‘faces’ and only found ‘eyes’. As with the swastika, this interpretation soon fell out of favour when Fleming (1969) critiqued a modern ‘myth’.
Later investigations of the motifs at passage tombs have been more concerned with style classification and chronological typologies. Shee Twohig (1981) proposed the terms ‘Fourknocks’ and ‘Loughcrew’ styles, based on motif content and engraving techniques (cf. M. O’Sullivan 1981). Fourknocks-style engravings are characterised by a compositional approach in which, ‘...motifs are integrated to form a coherent design and are arranged to give a pleasing effect...’ (Shee Twohig 1981, 106), whereas the motifs of Loughcrew-style engravings were, ‘...not particularly artistic and were generally placed on the stone without any attempt being made to achieve a pleasing result...’ (Shee Twohig 1981, 139). The rationale behind the styles is that they may relate to function (either decorative, symbolic or a combination of both) but ‘...are not separable chronologically, geographically or in regard to the monuments in which they are found...’ (Shee Twohig 1981, 135). Recent endeavours at stylistic analysis have been more circumspect. Eogan (1986) developed a corpus of fifteen styles of imagery at Knowth based on intra-site syntactical relationships between types of motifs. This classification was later simplified to four (Eogan and Aboud 1990). O’Sullivan (1986; 1993) isolated distinct ‘depictive’ and ‘plastic’ styles, which he developed initially from examination of Knowth Site 1, the western tomb, and later in the Boyne valley generally. These styles are defined as approaches to composition in relation to the morphology of the stone surface. In the depictive style, motifs are composed in relation to each other, whereas in the plastic style the shape and surface
contours of the stone are important factors in determining composition. Recently, Shee Twohig (1996, 68) has agreed that O’Sullivan’s (1986) ‘depictive’ and ‘plastic’ divisions come closer to accurately describing motif developments over time. In attempting to track the evolution from the standard Irish style through to the extreme ‘pick-dressing’ style, O’Sullivan (1996a, 396) has proposed four stages of development and these can be broadly summarised as:

a) Stage one: This is the standard ‘depictive’ Irish style. The images were founded on the presentation of standard Irish geometric motifs (e.g. spirals, circles, triangles and radial motifs), usually applied by picking or incision with a stone tool. There is minimal ‘aesthetic’ ambition, with designs appearing in nondescript or carefully constructed arrangements. They are created in two dimensions without reference to the modulations of the surface. The right-hand recess in Newgrange Site 1 (see C. O’Kelly 1982, 181) is an excellent example of this style.

b) Stage two: In this phase applications still include the standard Irish style, yet are more ‘ambitious’ with simple large-scale arrangements, bold carving and a marked deference to the profile and variants of the stone, thus reflecting and enhancing it. Old styles merged with new to create an alternative mode. This new decorative approach is demonstrated at Newgrange Site 1 on Kerbstones 1, 52 and 67. It has proved impossible to classify the kerbstone motifs at Knowth Site 1 with such clarity (cf. Eogan 1996; 1999).

c) Stage three: Apart from a few residual echoes the standard Irish geometric elements are absent from all the designs in this phase. Instead we mostly see distinctive linear forms. The shapes of these motifs appear to reflect the outlines and contours of the stones, demonstrating a three-dimensional appreciation. Stage three is found at Knowth Site 1, for example on Orthostat 49, western tomb (Eogan 1986) and is considered to succeed stages one and two. Stage three is not found at Newgrange Site 1 and Dowth.

d) Stage four: This final stage is characterised by the abandonment of the linear carving technique. Instead we see motifs that consisted of dense picking that
extended over large areas of the surface and displayed a marked interest in the contours of the stone. The imagery in this stage mutilates many of the pre-existing motifs of stage one, although in the case of Kerbstone 52 at Newgrange Site 1 it enhances the original motifs rather than supersedes it. On Orthostat 41 of the western tomb, Knowth Site 1, the image is not carved in, but rather raised out of the stone via inverted process, or a technology of inversion (M. O’Sullivan 1996, 82-7).

O’Sullivan (1996a) concludes that stage three and four had a close relationship at Knowth Site 1, and that stage two and four occurred in close chronological proximity to each other at Knowth Site 1, Newgrange Site 1 and Dowth (see Chapter Four). Stage two, three and four are all found exclusively on surfaces that were still accessible after the completion of the monuments. Stage one styles are, however, found on areas that were only accessible ‘before’ the structures were completed (1996, 87). O’Sullivan’s (1996a) sequenced staging of motifs is insightful and will be incorporated into later discussions of the imagery at Loughcrew, Fourknocks I, the Mound of the Hostages, Co. Meath, Sess Kilgreen and Knockmany, Co. Tyrone and Knockroe, Co. Kilkenny.

**Interpreting the interpretations**

As mentioned above, early claims to see schematised representations of identifiable objects, such as faces, swastikas and eyes, were soon dismissed and supplanted by more ‘grounded’ or ‘factual’ approaches (e.g. C. O’Kelly 1973; Shee Twohig 1981; O’Kelly and O’Kelly 1983). These more ‘objective’ accounts sought to remove ‘subjective’ interjections (M. O’Sullivan 1986, 70; 1997, 24). Changes occurred, however, within academia, which resulted in a post-processual or interpretative theoretical movement. This new approach allowed different understandings of the past to be utilised in making sense of the archaeological evidence. It was argued that ‘...the interpreting archaeologist fills the gaps in the past... [and] like a metaphor the past requires interpretation...’ (Shanks and Tilley 1987, 21).
In following this new perspective in archaeology, Brennan (1983) suggested that the passages in some tombs are aligned to significant events in the solar and lunar calendars, such as midwinter sunrise at Newgrange Site 1 and the spring and autumn equinox at Knowth Site 1 (see Chapter Four). Brennan argued that astronomy was not merely one of the functions of some passage tombs, but was in fact their 'only' function, with the motifs being related to it (Brennan 1983, 29). The imagery was interpreted in astronomical terms and depicted as plans of solar and lunar cycles, calendars and sundials. Brennan (1983) proposed that numerical values of astronomical significance reside in passage tomb motifs, with values determined by counting the number of motifs on individual stones, or the number of components in particular motifs (i.e. the number of turns within spirals, or the number of arcs in concentric arc motifs). Brennan's (1983) assertion is subjective and it is supported by his own 'interpretative' drawings of the motifs, rather than archaeological evidence. Yet it is not inconceivable that some of the motifs could have been related to astronomy, as alignments have been argued as being important in the construction of passage tombs (e.g. Patrick 1974; M. O'Kelly 1982; Eogan 1986; 1999; A. Powell 1994; see Chapters Four, Five and Six). Coffey (1912) was one of the first scholars to suggest that some of the motifs had a possible astronomical significance. For instance, in describing the concentric half-circles on the stones in Cairn L, Loughcrew, Co. Meath, he states that they probably represent '...a symbol of the sinking or rising sun...' (Coffey 1912, 88), suggesting an abundant 'solar cult' (Coffey 1912, 89). After reviewing the motifs at Newgrange Site 1, North proposed the notion of a 'lozenge of alignment', with the angles of the lozenge-shape motif representing directions to the sun and moon (1996, 504). North did, however, concede that this was an unproven proposition (1996, 505). Archaeoastronomical theories have also been prevalent in some studies of Neolithic Ireland and Orkney, with MacKie (1977; 1997) notoriously proposing that a theocratic elite constructed monuments to use as elaborate and accurate solar calendars (see also Herity 1974, 185-66 for similar discussions on 'benevolent despots' and professional priests). This model has, however, been disputed due to mathematical, social theoretical and alignment inaccuracies (e.g. Ruggles and Whittle 1981; M. O'Kelly 1982; Barnatt and Moir 1984). Furthermore, it is suggested that all structures, be they tombs, dwellings or decorated stones will have 'some' alignment (see Ruggles and Barclay 2000, 67).
Regarding Irish passage tombs, Professor Ray from the Dublin Institute of Advanced Studies recently stated, ‘...any passage with a clear view of the horizon has roughly a fifty per cent chance of being “aligned” with the sunset or sunrise on some day of the year, since the position of sunrise and sunset changes so much. So from a statistical perspective such “alignments” as the one at Knowth are of no astronomical significance...’ (2000, 27). Recent surveys of the diametrically opposed passages at Knowth Site 1 have discovered that the original plans made the error of recording magnetic north rather than true north. This means that the passages are not precisely orientated on sunrise and sunset at the equinoxes (Prendergast and Ray 2002, 35).

Archaeologists have noted that calendrical alignments are unlikely, but argue that there is a strong body of evidence for ‘general’ alignments of tombs, such as Maes Howe, Orkney with conspicuous ‘natural’ foresights (cf. Bradley 1998, 230; Ruggles and Barclay 2000, 71), and more recently Knockroe, Co. Kilkenny (see Chapter Six). Furthermore we should consider that looking towards the passage tombs may have been equally as important as looking out from them (see Tilley 2004, 136; Endnote iv, and discussions on ‘focal’ passage tombs in Chapter Five).

Thomas (1990; 1993) adopted an interpretative approach by developing a ‘hermeneutics of megalithic space’, using some Irish passage tombs as models and exploring divisions of space as part of the structure. This idea is further linked with the spatial distribution of engraved motifs (J. Thomas 1992). Thomas (1992) suggested that the most ‘complex’ compositions, the stones with the most motifs, at Cairn L and Cairn T, Loughcrew, Co. Meath, were located in the deepest areas of the tomb interiors (see extended discussion and critique in Chapter Five). Thomas (1992) proposes that the imagery functioned as a ‘script’ or ‘prompt’ to the person(s) conducting ‘rituals’ in the tombs, who positioned themselves in relation to the stones and the audience so as to facilitate restricted viewing (see also A. Powell 1994, 92). Thomas creates a parallel ‘...between constructed space and written text... [so that] one can attempt to impose an “approved reading”... by restricting the ways in which the tomb and its contents can be approached and accessed...’ (J. Thomas 1992, 141). Although I challenge the appropriateness of using textual analogies (see Chapter Two here), and ‘simple:complex’ image dichotomies (see Chapter Five), I find Thomas’s (1992) interpretative model appealing as it addresses the experiential aspects of
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engaging with passage tombs and their motifs (see also discussions in Chapter Two on entoptic phenomena). This is an approach that is currently favoured by some in archaeology (e.g. Shee Twohig 1997; Fraser 1998; Tilley 1999; Whittle and Pollard 1999; Cooney 2000a; Bradley 2000; J. Thomas 2001), and one that this thesis will incorporate in the next chapters.

The structure of this volume: a methodological approach

Chapter One begins by reviewing anthropological examples of how some people think about themselves and their world(s). In doing so, I question the concerns that some of the Irish Neolithic people may have experienced. Previous accounts of past social interactions have incorporated concepts of culture, as a means of describing events (e.g. Herity 1974; Eogan 1999). Here, I discuss the advantages of alternatively considered cosmologies, mentalités and worldviews as a means to recreate a sense of a dynamic past in which engagements (both routine and non-routine) with the world are stressed. Then, Chapter Two introduces the politics of spectatorship and the ways in which we think people see the world and construct the world from what they see. Here I am attempting to further understand how passage tomb motifs were perceived in Neolithic minds. Arguments are supported from a variety of positions, ranging from neurological models, anthropological examples and modern and Classical Western visual movements.

Next, to create a backdrop for which I can situate interpretations against, I briefly present a synopsis of the Irish Neolithic and its associated material culture from the earlier stages through to the later (Chapter Three). The Irish Neolithic is not considered as a homogeneous entity, but rather a construct that reverberates through particular elements. The chapters that follow incorporate all the themes of the previous sections to explore in detail the passage tomb sites and complexes in the Boyne Valley (Chapter Four), Loughcrew (Chapter Five), Fourknocks and the Mound of the Hostages, Co. Meath (Chapter Six), Sess Kilgreen and Knockmany, Co. Tyrone (Chapter Six), and Knockroe, Co. Kilkenny (Chapter Six; see also Fig. 0.2). In working through the data I consider the characteristics of the sites (for instance as
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places where water, land and sky meet), and introduce ideas concerning *axis mundi* cosmologies, material animacy and the activation of stone and motif via liquids. The carnivalesque as a mode of action is used as a medium to construct new understandings of how people might interact with their environments and material culture. Combined with examples of the repetition, difference and sequential overlay of particular motifs, and discussions of movements within and around passage tombs, we begin to see a Neolithic that is pregnant with conflicts, tensions and paradoxes. Thick description is deemed necessary in places to explore the richness, the scale, the temporal, the scrambled and the palimpsestic natures of passage tomb motifs. It is not my intention to reproduce all data, as this has already been extensively catalogued in other places (e.g. C. O’Kelly 1973; Shee Twohig 1981). Instead, I will highlight particular features and examples in the construction of new narratives and approaches, whilst interpreting the evidence from the theoretical positions presented in Chapters One and Two.

**Fig. 0.2.** Map of Ireland demonstrating the location of the main sites discussed in the thesis (adapted from M. O’Sullivan 1993, 6).
The last section of this thesis (Chapter Seven) brings together the themes that emerged during the earlier chapters. Discussion here also incorporates the varied material culture that is associated with the images and structures. In bringing together content and context, I explore some of the intimate and evocative ways in which the sites may have been experienced. In order to address the impact of superimposed motifs within a worldview, I adopt a visual cultural perspective to investigate how simulations and simulacra influence the generation of beliefs and other worlds within networks of visual events. I suggest that passage tombs and associated motifs are not just representations of Neolithic worldviews, but rather indications of Neolithic performances and practices. Here, the social is visually constructed rather than the visual merely being socially constructed.

By interrogating and engaging with the evidence from some Irish passage tomb sites I will detail new and dynamic ways of thinking about how motifs acted within embodied and materially embedded conditions for social experience during the Irish Neolithic. This thesis is less about what the monuments and their motifs ‘are’ and more about what they ‘do’ within particular rhythms and temporalities. These perceptual assertions form the basis for the following discussions.

1 This trend is also represented in Madagascar, where tombs are normally placed ‘...on east-facing hillsides or along roadsides where they form prominent monuments...’ (Parker Pearson 1999, 12). In Madagascar, monuments are not only located so that they can be seen, but so that they must be seen.

ii O’Kelly describes this style as ‘pick-dressing’ and regarded it as a phenomenon separate from megalithic ‘art’, due to its extreme nature (1982, 151).
Chapter One

Introduction

The ways in which people in the past and present think about themselves and their world has intrigued archaeologists and anthropologists for a long time (e.g. Childe 1956; Binford 1965; Geertz 1973; Bloch 1992). This cognitive process by which people perceive or experience, consciously or unconsciously, relationships between self, others, the day-to-day living of life and the cosmos is often termed a ‘worldview’ (cf. Hallowell 1975; Redfield 1968; Lee Whorf 1975 Bloch 1998; Kuper 2000). Derived from the German word Weltanschauung, worldviews attend primarily to the ways in which people take up views in or make views of the world and are founded on a cognitive orientation or engagement of the self in relation to alien objects (Hallowell 1975; Ingold 2000; Whittle 2003). Much has recently been written about the ‘archaeology of the mind’ (cf. Renfrew 1993; Mithen 1996; Lewis-Williams 2002; Lewis-Williams and Pearce 2005), in an attempt to understand the cognitive ‘mind sets’ and ‘worldviews’ of past thought patterns. One of the aims for these archaeologists is to determine the complexities of what it was to be a human being in past societies, via the material record. Problems with complexity can also arise for anthropologists who study cultural worldviews or cosmologies, as they are often implicit rather than explicit (Geertz 1973; Bloch 1977; Dundes 1980). It is stated that ethnographic informants are unlikely to be any more consciously aware of their worldviews than they are of the grammatical principles which formulate their spoken language (Hallowell 1955; Bloch 1998; Ingold 2000). Moreover, our own beliefs can affect perception; we look for what we expect and what we think is relevant (G. Lewis 2002, 573). Such difficulties are magnified for archaeologists, for they cannot even ‘speak’ with the inhabitants of a past society.

Bradley (1998a) proposes that there are two ways to resolve this dilemma. The first is to work at the largest possible scale, drawing together elements from the archaeology of a considerable area, and the second method is to focus on the details of human behaviour at particular places and times (Bradley 1998a, 123). This approach relies on a holistic concept of society and the notion of an all-pervasive worldview that transcends any part of material culture. We can, however, speculate that human beings
in any culture utilise a cognitive orientation within the cosmos. There are basic premises and principles implied, even if the people in the past were not consciously aware of them and as such, elements of the material culture will be imprinted with them. By engaging with their material culture we are confronted with some of the implications of their thought, that is the nature of the world of being as they may have conceived it. Ultimately it is a penetration into prehistoric metaphysics, with the challenge being to ascertain the reliability of our inferences. This problem is a difficult and complex one, but it should not preclude our exploration. In this chapter I assemble anthropological examples from around the world, to help formulate theoretical models, which assist in adding experiential ‘flesh’ to the Irish Neolithic archaeological data. In doing so, I appraise the proposal that elements of the metaphysics of being are found in many societies, both past and present, and that they constitute complex and fluid worldviews. In essence this chapter adopts two positions: firstly that understandings of the past can be enhanced via considerations of both Western and non-Western social actions, and secondly that we cannot begin to determine the processes of the Neolithic mind without entering discussion concerning the character of modern mind (Mithen 1994, 29; Chase 1999, 47). As Miller and Tilley (1984, 1) insist, we must acknowledge that people and prehistoric societies possessed the same abilities as we credit ourselves. In also examining two distinct systems of thought, ‘shamanic’ and ‘totemic’, this chapter draws out a sense of layered repetitions and cycles from the contextualised archaeological and the documented anthropological data. Through a more ‘fine-grained’ analysis of praxis and creative metaphor (Tilley 1999a), I unfold a variety of avenues by which we can approach the series of concerns that the Irish Neolithic people may have experienced about themselves and their world.

Experiencing and performing culture

The term ‘culture’ can be thought of as one of the most debated terms in academic discourse, resulting in successive generations of scholars producing understandings that reflected the concerns of the day, to such an extent that it still resists final definition (cf. Tylor 1920; Boas 1966; Leach 1967; Lévi-Strauss 1969; Geertz 1973;
Knight 1991; Schneider 1995; Kuper 2000). As Sahlins poignantly observes, ‘...culture...is on everyone’s lips...’ (1993, 3). The term originates from the German *Kultur* intellectual tradition and has undergone many modifications since its conception (Hatch 1996). During the eighteenth century the term ‘culture’ acquired metaphorical meanings within the English language, referring to cultivation, becoming cultivated or demonstrating civilised traits (R. Williams 1981). Later, the term ‘culture’ developed into a plural sense of modes of life or distinct and divided senses of humanity (Kroeber and Kluckhohn 1952). During the nineteenth and twentieth centuries, the expression ‘culture’ acquired more complicated and more diverse meanings. It could be used to describe either an evaluative humanistic and singular quality, such as one procures culture or becomes cultured through the arts media, for example attending grand opera. Or it could have plural and relativistic value, in which agents belong to a particular culture and are in turn products of their culture (Barnard and Spencer 1996, 136). Some relativist scholars argue that culture is based on ‘memes’, which are described as the basic building blocks of our minds, ideas and culture, in the same way that genes are the basic building blocks of biological life. By extending Darwinian evolution theories through memes to culture, it is suggested that ideas will spread not because they are ‘good ideas’, but because they contain ‘good memes’ such as danger, food and sex, which forces evolution to pay attention to them (cf. Dawkins 1976; Brodie 1995; Aunger 2002; Shennan 2002).

Other academics convincingly propose that culture is *not* an evolutionary relativistic credo involving race and biology. Instead it is appropriated and learnt rather than being replicated in our genes or memes as ‘retention systems’ that are designed to allow generation after generation to interact with their environments (Benedict 1943, Montagu 1997; Speel 1997). Human beings are after all not born with knowledge of culture and worldviews, in as much as they are not born with an understanding of walking. They have to ‘learn’ to walk and they have to ‘learn’ the worldviews of their society through a process of enculturation and interaction with other persons (Ingold 2000, 375). Recent research has suggested that people adhere and learn a society’s worldview through a fundamental motive to imitate (Meltzoff and Moore 1994). Meltzoff and Moore state that ‘...imitation is to understanding people as physical manipulation is to understanding things...’ (1994, 96). This imitation of beliefs by
Chapter One

people has been termed *mimesis* and can be described as a ‘...natural force of cohesion, which alone grants access to the social, to language, to culture, and indeed to humanness itself...’ (Oughourlian 1991, 2). Further consideration of mimetic theory will occur in Chapter Two.

Geertz (1973) challenged interpretations of culture that prioritised technological, economic or environmental factors and proposed instead more dynamic and humanistic models. Culture for Geertz (1973, 5) is a deep web whose interrelated components are lattice-like relational composites. These single web threads are not seen as deterministic of the whole, but rather construct multiple meanings, which are in turn linked to the material world. In this synthesis, traditional ways of doing things are conserved, whilst innovation is embraced. To further understand these webs of change and innovation and in following Geertz’s ‘sources of information’ and ‘genetically programmed processes’ models (1973, 92), Boyd and Richerson constructed a complex mathematical proposal to define culture as ‘...the information... acquired by individuals by imitation or teaching...’ (1985, 283). Boyd and Richerson suggested that, ‘...there is no necessary connection between Darwin’s idea of evolution by natural selection and the particular features of genetic inheritance...’ (1985, 173). Cultural variation is therefore argued to be the result of failures of memory and unintentional mistakes in imitation through a symbolic ‘cultural transmission’ process (Boyd and Richerson 1985). Continuity within this model is regarded as the norm, rather than radical change, with culture essentially being seen as an inheritance system.

Shennan (1996; 2002) is one of the few scholars who advocate the relevance of Boyd and Richerson’s (1985) models for archaeology. Shennan argues that material culture and other products of human action, operate as an ‘endogenously generated transmissible’ environment that channels future decisions in particular directions, whilst acting as a source of cultural transmission (1996, 293; 2002, 59). This Neo-Darwinian evolutionary approach is stated to postulate mechanisms and processes that are central to the generation of human change and the maintenance of stability (Shennan 1996, 295). Despite its resonance, the value of such a position is limited as ‘...at best it remains only a non-human analogy for the way people act and think, consciously or unconsciously, and at worst it removes any sense of human agency at
all...' (Whittle 2003a, 67). Biologists, psychologists, geneticists, philosophers and anthropologists have also been challenging the genetic determinist notion that much or even most of human behaviour has been programmed into the human genome by natural selection. Instead, aspects of the human behavioural phenome are forwarded to be programmed into the brain by the environment (Ehrlich and Feldman 2003). One of the most convincing arguments against behavioural genetic and evolutionary psychology interpretations has been raised by Johnston (2003) who has noticed that many of these scholars have a poor understanding of molecular biology. Johnston clarifies that genes are ‘... molecules, and not very active molecules at that. Genes cannot, in principle, specify a behaviour - all they do is provide a template for the synthesis of a protein or other biologically active molecule through the intermediate steps of transcription (of a messenger RNA molecule) and translation (of a protein)...’ (2003, 99). It would seem that most human development and behaviour, be it named ‘cultural’, ‘ideological’ or ‘cosmological’, is the result of interactions with material artefacts, environment, individual or collective preferences, historical and economic contingency and in some cases, limited influences from genes and memes (cf. Aunger 2002; Schoenemann 2003; Tattersall 2003).

Kuper describes culture as a ‘hyper-referential word’ (2000, x) and challenges the American culture anthropologists who define culture as ‘...essentially a matter of ideas and values, a collective cast of mind... [regarding]... ideas and values, the cosmology, morality and aesthetics...’ (2000, 227; see also R. Williams 1981, 13). Instead, Kuper advocates that we debate in more depth aspects of ‘...knowledge, or belief, or art, or technology, or tradition, or even ideology...’ (2000, x) in order to penetrate the current pretensions in cultural theory (2000, xi). Kuper (2000) is, however, careful to note that these concepts have to be argued individually in particular cases as there are no universal valid standards, as cultures are mutable and fluid (cf. Sahlins 1999). For Kuper, culture is an unhelpful and unhealthy way of considering disparate processes and collective identities (2000, 247). Indeed, as a concept, the term ‘culture’ entails a very high level of abstraction (Radcliffe-Brown 1952), with much diversity (Bloch 1998) and is not something that one will ever encounter ‘on the ground’ (Ingold 2002, 330). As such, Ingold suggests that it may be
more realistic to say that people ‘live culturally’ rather than that they ‘live in cultures’ (2002, 330).

Childe (1956) was one of the earliest archaeologists to associate a sense of culture with recurring sets of artefacts that represent a people or society. In the absence of textual records, prehistoric cultures were named after artefacts, types, sites, or regions. Thus we have, the Trichterbecher (TRB) culture group named after a class of ceramic vessel, and the Wessex culture named after a region of southern England (see Chapter Three for discussion of Irish examples). Culture-historical interpretations are, however, no longer academically fashionable (Michaels 1996; Shennan 1996) and are considered to have been ‘badly under-theorised’ (Whittle 2003a, 64) with little attention paid to ‘...archaeological culture as a whole: its boundaries, internal variability and especially the phases in which it changes and reforms...’ (Whittle 2003a, 66). Indeed, many arguments are politically rejected, such as Kossinna’s Kultkreis theory, which identified geographic regions with specific ethnic groups on the basis of material culture, being later adopted by a National Socialist worldview of the Germanic peoples place in the world during the early twentieth century (Veit 1989, 38; Arnold 1996, 550). Yet, themes do persist, resulting in many scholars still orientating their work around the concept of culture. Some prehistoric studies are permeated with equations between people, their culture and the land they inhabit (e.g. Bradley 2002; Skeates 2002).

Material culture is viewed as the product of a site and the result of social action. Artefacts are used as metonyms to infer the beliefs, activities and ideology of a culture, with culture becoming identity (Yentsch and Beaudry 2001). Such approaches adhere to Fabian’s notion of ‘visualism’, ‘...the ability to visualize [sic] a culture or society almost becomes synonymous with understanding it...’ (1983, 106). This visualism of culture through tangible material culture and landscape is strikingly similar to the post-modern desire to visualise knowledge through visual culture, such as the Internet or reality television war footage, and in turn might demonstrate more of ‘our’ culture than those of the past. These modern examples also highlight the ways in which material culture can alter our perceptions or interpretations of a reality and negate preconceived notions of what should happen. For example, when computer
programmes perform in unexpected ways, we can react with joy, sadness or pure disbelief (Yentsch and Beaudry 2001, 216; see Chapter Two for detailed discussion). Interestingly, Childe (1949) was also one of the first scholars to relate how engagements with material culture can influence human experience. Childe (1949) argued that archaeologists should treat artefacts as concrete expressions of human thought and ideas, whilst acknowledging that ‘religion’, ‘beliefs’ ‘magic’ and ‘ritual’ all leave their marks on the archaeological record.

Past attempts to interpret the Irish Neolithic that only emphasised the material culture, are now considered to be de-contextualised and simplistic (Cooney 2000a, 2). These studies focused primarily on particular aspects of the Irish archaeological data, such as specific tombs, pottery or tools and this resulted in a picture of the period as just being inhabited by classified distinct objects and fragmented deposits (see also Ó Cróinin 1995; and Chapter Three here). Instead of categorisation, Cooney argues that archaeologists should emphasise that material evidence is the crystallised expression of the behaviour, thoughts and ideas of the people who created it (2000a, 3). In acknowledging that material culture is activated through myth, narrative, systems of thought, metaphor and metonymy, archaeologists are now able to further comprehend how people created their sense of the world (Hodder 1995; Tilley 1996; Whittle 1996a). The notion of investigating past ‘worldview construction’ is after all a double metaphor in itself. The result will not be a view (as of a landscape) and it will not construct (as an architect does). This thesis will not be able to fully recreate the narratives and experiences of the past, and it acknowledges Freud’s concern that worldviews can sometimes be ‘...an intellectual construction which solves all the problems of our existence uniformly on the basis of one overriding hypothesis...’ (Nicholi 1998, 1). Instead of constructing a universal interpretation for the worldviews of the Irish Neolithic, I aim to delineate the commonalities and differences in the archaeological details. By further considering the contested ways in which people live today, I will also forward an understanding of events, illusions and daily praxis that the Irish Neolithic people involved, may never have noticed. For instance, in studying the Baktaman in the central highlands of New Guinea, Barth has noticed a trend in which cosmological knowledge is constantly communicated, yet only vaguely understood by most people (Barth 1987, 222 cited in McCauley and Lawson 2002,
As recently as the late twentieth century, people in western Europe have been documented as having a poor knowledge of their own conscious lives (Schwitzgebel 2002, 649). Life is often what happens to you, whilst you are busy making other plans.

**Cosmologies and engagements with realities**

Cosmologies are not the attempts of persons to explain in fantasy, where empirical knowledge of reality is absent, but are rather statements in allegorical form about the interrelations between people, objects and the learned aspects of a reality (Ridington and Ridington 1975). Cosmologies serve to orient a people to its world and inform them in the broadest terms of who they are and their relations to the rest of creation (Bowie 2000, 119). People culturally inhabit a world in which cosmologies (a totality that is), are explicitly constructed, interactions symbolically formulated and taboos dictated often under non-human surveillance. Astrophysicists and other physical scientists use the term 'cosmology' with reference to the systemic properties of the universe. This application does not, however, account for the way people conduct daily lives with an intimate understanding and experience in the world as cosmos. Most Western people generally do not live their lives under the influence of conceptions concerning black holes, quarks and the Big Bang (Laughlin and Throop 2001, 731). Cosmological activities are social constructs of an objectified ideology and recently some scholars have postulated that a belief in supernatural or non-human beings is part of an evolved psychology which is the result of cognitive fluidity (e.g. Mithen 1996; 1999). It should, however, be stressed that the appellation ‘supernatural’ is misleading in that it presupposes a concept of the natural, or a supernatural-natural dichotomy (Hallowell 1975, 143, 151). I prefer the term ‘non-human’ beings or entities, whilst still appreciating the limitations of these expressions.

Others scholars suggest that humans have belief systems because they are just ‘gullible’; thus enabling self-replicating cosmological delusions to affect us like computer viruses (Dawkins 2003, 130). It is argued that these traits manifest when applied to group or social situations and form the foundations of linguistic,
mythological, religious and other symbolic representational activity (e.g. Hallowell 1975; A. Barnard 1999; Chase 1999; Knight 1999; Nettle 1999; Watts 1999; Ingold 2000). Such traits or systems are interconnected within the context of the worldview. They are multiple expressions of a reality as understood by the people. The cosmology is part of an interactive system of meaning and experience conducted in the context of a person's mind, body and soul that is both personally and culturally informed (Hollan 2000). The cosmology and its associated images are therefore lived, and through this experience the cosmology is animated and validated within the neurocognitive mechanisms that are responsible for the realities experienced by each agent. These agent-based cosmologies are imagined and expressed through the society's visual media, which permits persons to intimately engage in their own momentary version of an interpretation of a reality. It has been suggested that people rarely create new cosmological beliefs and practices, but rather accept and participate in the worldviews that they inherit from their society (Ortiz 1952, 135). Such a proposition does not, however, account for or explain 'cultural' innovation or variation, be it intentional or just through repeated acts never being identical (Rappaport 1999). James is essentially in agreement with this when he states that, '...owing to the fact that all experience is a process, no point of view can ever be the last one. Every one is insufficient and off its balance, and responsible to later points of view itself...' (1995, 70 original emphasis).

In considering models of 'Social brain' and 'Machiavellian intelligence' (Humphrey 1976; Byrne and Whiten 1988), a theory emerges with anatomically modern humans depicted as having a sophisticated capacity for deceiving one another. For instance with eye-movements, facial expressions and tones of voice; furthermore, it is suggested that the representational activity named 'symbolic culture' is an extension of these expressions. To deliver deceptive signals is to participate in imaginative scenarios. Yet the majority of people who live within symbolic societies interact with fictional scenarios or simulations, without experiencing them as deceitful or exploitative. Modern Western examples include engaging in soap operas, movies and cyberspace (Heim 1993). People have the ability to construct things and scenarios that do not exist outside of a symbolic context, termed 'collective fantasies' or 'deceptions' (Knight et al. 1995). Chase (1999, 36) cites some examples of these
constructs, such as the game of chess (the rules and moving castles), non-human beings (deities or space aliens), social roles (kings and queens), objects (no smoking signs), concepts (fidelity), acts (marriage) and values (heroic). Chase (1999) argues that these symbolic phenomena do not exist in isolation, but rather they are integrated into overarching systems of symbols and cosmologies. He proposes that these symbols or social imperatives are not regarded by the members of the society as arbitrary rules, but rather they are embedded into a worldview through engagements that justify their existence.

Cosmological ideas are often emotionally reinforced and sanctioned through myth and ‘ritualised’ activities (although these formats do have other roles), with members who ignore the demands of the worldviews often suffering negative emotions or actions from human and non-human agents (Overing and Passes 2000). The prime values of Ojibwa ontology are an excellent anthropological example of this (Hallowell 1955). Within this North American Indian culture, great stress is placed upon sharing what one has with others. Hoarding or any manifestation of greed is considered to violate a basic mythological and moral code and is subject to a punitive sanction. Non-human entities or persons sharing power with human beings illustrate the nexus of this moral value in their worldview. Hallowell (1975, 173) recalled how his friend and informant Chief Berens once fell ill and could not explain it. The Chief did, however, later recall overlooking one man when he had passed around an alcoholic beverage. He believed the man was offended and had cursed him. Hallowell (1975) describes this situation as demonstrating the extreme sensitivity of persons to the principles of sharing in Ojibwa worldviews. The Murngin of Australia also illustrate this point (Warner 1958). The symbolic context of their worldview justifies an enforcing cultural behaviour, with obligations and prohibitions being expressed in mythology and supported by seasonal ritual cleansing acts. Warner explains, ‘...the providing world of nature will not function if the rules of society are flouted and man’s [sic] uncleanliness contaminates nature. Hence everyone must obey. If he does not by his own volition, then he must be forced to...’ (1958, 396). As such, a Murngin need not violate another person in any physical manner in order to be punished. By failing to adhere to the worldview rules of conduct, the well-being of the society is threatened and therefore the offending agent must be sanctioned.
Some archaeologists have utilised anthropological examples of the worldviews of
Australian and African hunter-gatherers to elucidate social and cosmological order in
the Neolithic past (e.g. Lewis-Williams and Dowson 1993; Tilley 1994). It is,
however, becoming apparent that such ethnographic analogies are problematic, as not
all hunter-gatherers are in agreement, either as ‘individuals’ or as exponents of their
social understandings of relations to the environment and cosmos (cf. Bloch 1998;
Ingold 2000). Furthermore, recent studies argue that some non-western societies do
not represent pristine examples of social formations unadulterated by colonial settlers,
but are rather hybrid or creole responses to outside influences (Peers 1999). It should
be noted however that the term ‘hybrid’ is in itself a problematic term, as it suggests
that the combining entities are ‘pure’ in their own right (Ingold pers. comm). The
fundamental differences between African and Australian hunter-gatherers is that
African ontology is based on fluid and flexible accommodation between society,
nature and the universe, whereas Australian aboriginals assume an exact fit between
social and cosmological spheres (A. Barnard 1999, 54). African Bushmen can for
example, create individualistic understandings of the world. The same person can
develop diverse and contradictory notions regarding mythical entities and beings, in
order to express different views of the world according to circumstance (A. Barnard
1988; Lewis-Williams 2002).

Australian aboriginal cosmologies are more structurally ordered, yet even here the
symbolic associations between seemingly disparate objects, such as animals and
heavenly bodies, demonstrate degrees of flexibility (Turner 1993). The Australian
aboriginal worldview is founded upon the belief in the Rainbow Serpent and more
particularly the Dreaming. This worldview provides the aborigines with a coherent
explanation of the relations between time and space, land and society, humans and
animals and the order of the Universe (A. Barnard 1999, 63). In contrast, the African
bushman worldview is generally based upon the belief in one main deity. This deity is
essentially male and is often compartmentalised into male and female halves.
Although Bushmen do occupy delimited territories, they do not have the same
cosmological relationships to the land and animals that the Aboriginal peoples do. For
example, only a few number of groups are totemic, such as the Hiechware, and most
lack clan structures (A. Barnard 1999, 65). Barnard concludes that it is the existence of universal kinship structures, without the constraints imposed by totemism, that forms the basic properties of Bushmen cosmology (1999, 66). The diversity in the understandings that people create can therefore be thought of as resulting from the various relations that people have between themselves, the world and material objects.

In a sense, worldviews can be compared to material artefacts, in that they can be transformed. For example a stone tool can be flaked again and again, thus altering its artefact category, and an idea can be constantly reshaped (Mithen 2001). This analogy is compounded by Boyer’s (1994a) belief that cosmological ideas need to be ‘anchored’ in the ‘real’ world and the human mind through artefacts and human character traits, lest they corrupt and dissipate via cultural transmission, such as oral narratives. Multiple and flexible understandings of the world have recently been attributed to the evolution of a cognitively fluid mind in anatomically modern humans (Boyer 1994a; 1996). Such fluidity is derived from the combination of knowledge and ways of thinking from different cognitive domains. Boyer (1994a; 1996) argues that this cognitive fluidity enables humans to create events and situations that defy the laws of physics, such as talking trees and moving stones (see also Hallowell 1955). It is suggested that this violation of the physical world produces cosmologies that are transient and difficult to comprehend and transmit. Boyer (1996) propounds that technical and social knowledge is inherent as cognitive domains within anatomically modern humans, but that religious or cosmological ideologies are not (see also Mithen 1996). In order for these ideas to survive cultural transmission, they need to be intuitively understood through references to a salient human world (e.g. deities acting in a human manner), or material world (e.g. engaging with the landscape) (see also Guthrie 1993). When these themes are transmitted into material symbols, such as Irish passage tomb designs, they become easier to communicate and comprehend as their material form provides another anchor, distinct from the oral narrative of cosmologies, for the human mind. These physical reflections provide a device by which the features of a worldview or belief system that violate ‘intuitive knowledge’, such as concepts of inertia, momentum and the effects of what we term gravity (Spelke et al. 1992), may themselves be anchored for the mind. If this is correct, then we should expect that these indices of ontologies would stress the ‘intuitive
knowledge’ violations, rather than conformities of the beliefs (Boyer 1994b). Such an explanation may in a preliminary way, account for the abstract geometric forms on Irish passage tombs in the Boyne Valley. These images may be acting as anchors or ‘ghosts in the machine’ (Ryle 1963, 23) that allow ideas to be acquired, recalled, understood and transmitted through association to ‘intuitive knowledge’ generated by the material and social cognitive domains. As Geertz propounds, ‘...meanings can only be “stored” in symbols...’ (1973, 127).

Following this model, one might suggest that some people in Neolithic Ireland ‘intuitively’ understood there to be non-human entities in the environment, but needed the designs on the passage tombs to fix, store or simulate these beliefs into an accepted cosmology. The Walpiri of the central Australian dessert are reported to utilise imagery in this manner. For them ‘...the natural world is visualized [sic] in terms of totemic features and mythological histories. The art makes those unseen realities tangible and reminds the people of their tribal origins and religious obligations...The Walpiri excel in employing symbols to communicate and comprehend an intricate belief system...’ (Faulstich 1992, 22 cited in Mithen 1999). Fernandez noticed similar activities whilst studying the Fang of Gabon in West Africa, and recorded a movement call Bwiti, which aimed to reduce the fragmentation and loss of cosmology produced by colonial agents and referred to this technique as ‘revitalisation’ (1986, 562). Fernandez argued that ‘...the performance of a sequence of images revitalizes [sic], in effect, and by simple iteration, a universe of domains, an acceptable cosmology of participation, a compelling whole...’ (1986, 203), thus a particular cosmological integrity is created through a remembered coherence or praxis of repetition. Sutton (2001) demonstrates how tangible everyday experiences of material culture and smell, can evoke memories, identities and individual cosmologies in the Greek Island of Kalymnos, quoting Dragoumis who states that, ‘...a flower-pot of basil can symbolize [sic] the soul of a people better than a drama of Aeschylus...’ (1976 in Sutton 2001, 73). The ability of material objects to communicate non-verbal cosmological metaphors has also been noted among the Kenyah Kayans of Sarawak, who believe that there is a strong connection between the possession of a human head and the establishment of equilibrium within the life of a person and their people (see Fig. 1.1). These human head objects are thought to give to the Kenyahs courage,
safety with the spirits in the head offering permanent cleansing affects (Phelan 1994, 10). Such anthropological examples might be thought of as supporting the notion that objects can act as tangible analogies and anchors.

These ‘cognitive anchor’ models are based on evolutionary psychology that utilises metaphors of Swiss army knives, cathedrals and computers to describe the workings of the mind as ‘mental modules’, ‘multiple intelligences’, ‘cognitive domains’ ‘mental connectionism’ and ‘Darwinian algorithms’ (Fodor 1983; Gardner 1983; Barkow et al. 1992; Hirschfeld and Gelman 1994; Bloch 1998). By compartmentalising the mind into sections, the theory is that a person can lose ability in one aspect of life, such as speech, yet still be able to relate to their material environment. These cognitive researchers believe that the mental modules responsible for domain specific behaviours, such as the creation of worldviews, are situated in specific neural circuits in the brain and that accessibility between them is created via neural pathways. One of the challenges for the cognitive scholar is ‘...to discover how other people create order out of what appears to him to be utter chaos...’ (Tyler 1969, 6). Bloch (1998) utilises an example of a Zafimaniry peasant from Madagascar to explain the relevance of connectionism theory in determining the possible human nodes of thought available in anthropology. The anecdote demonstrates how a peasant recalls from his long-term memory the complex yet highly flexible mental models in conceptualising a piece of forest and ascertaining which bits he can produce good
swidden from and how to process this wood (Bloch 1998, 12). Bloch challenges how we think we think, by replacing series of linear thought processes with parallel units that feed information simultaneously in our minds from either our memory or a perception of the external world (1998, 12).

Such cognitive domain theories are, however, not without their critics. Current objections range from the evolutionary psychology analogies bearing resemblances to Western capitalist free market economies, to reservations regarding models that engage more in 'mind metaphors' than the reality of the anatomically modern human brain (Sahlins 1977; Rose and Rose 2000, especially chapter 15). These observations are perceptive, and they might be further supported by three-dimensional imaging of living brains to test for connections between brain locations or domains (Damasio 1999). Such imaging techniques currently include PET (positron emission tomography) and the newer fMRI (functional magnetic resonance imaging), which make it possible to observe human brains at work (Paulesu et al. 1997, 57). The fMRI technique relies on examining the blood oxygen level that is generated by an imbalance between the increase in regional cerebral blood flow (rCBF) and oxygen metabolism in the brain during activation, and it is considered to be more sensitive than PET. At this stage however, fMRI still cannot reliably detect significant signal changes during complex cognitive performances, which cause much smaller signal changes than simple sensory stimulation or motor performance (Paulesu et al. 1997, 57).

Even though Renfrew has lamented that attempts at an archaeology of the mind are '...destined to tread an uneasy path between the pretentiously jargon-laden and the blindingly obvious...' (1982, 14), it is still fruitful, to utilise 'mind metaphors' in order to better understand and appreciate how people in the Neolithic created and socially perpetuated their worldviews (cf. Tilley 1999; J. Thomas 1998). Interestingly, Renfrew stated in a later publication that metaphors regarding prehistoric images are one of the principal ways of understanding the minds of the past (Renfrew and Bahn 1991, 363). If domain metaphors are to be used, they need to remove themselves from the Cartesian ontology that pervades cognitive connectionist modelling. Clark (1997, 83-84) argues that cognitive ontologies separate the human mind from the body in the
world. The body is reduced to an information delivery system for received data to be later processed by the mind, rather than engaging with the cognition itself. Cognitive scientists and some 'connectionists' are noted to demonstrate ‘...a distressing tendency to study disembodied problem solving and to opt for abstract, symbolically defined input-output mappings...’ (A. Clark 1997, 80). The processing loops involved in cosmological construction are postulated not to reside in a domain space in the mind, within the skull, but instead fluidly penetrate both the human body and its environment (A. Clark 1997, 69). In emphasising this point, Clark (1997, 75) considers a scenario in which a person has to remember to buy alcohol for a party. To jog their memory, the protagonist places an empty beer can on the front doormat. Later when attempting to leave the house, they trip over it and recall their mission, thereby exploiting some aspect of the world as a partial substitute for 'on-board' memory (A. Clark 1997, 75). Clark terms this trick of using the environment to prompt actions 'indirect emergence' (A. Clark 1997, 75). Smith in writing about the Chipewyan of the northwest Canadian subartic has alternatively termed this environmental engagement 'bush sensibility' (1998, 413 cited in Ingold 2000, 105), and describes how the hunter and trapper constantly experiences dynamic understanding via interaction with the surrounding forest.

In following Gibson’s (1979) ecological psychology approach, Ingold argues that cognitive maps, Platonic forms and ‘internal programmes’ produce explanations that describe a static perceiver who can only engage with ‘...transient patterns of sensory excitation that are... insufficient to specify the objects and events that gave rise to them...’ (2000, 166). This creates a problematic model of perception, in which cognitive scholars struggle to explain how fragmented sense data are reconstructed, with pre-existing representations, into a worldview or picture. For Gibson (1979) and Ingold (2000), engagements do not produce the data for perception, but rather consistencies in moving from place to place, from moment to moment, perpetuate continuous modulations of senses and stimulus for information. Perception is described as the result of interaction with variants and relies on active movement for information assimilation. Instead of utilising domains already created, it involves continual fluidity and adjustment of human receptor organs. Gibson argues that ‘...looking, listening, touching and sniffing...’ (Reed and Jones 1982, 397-398), need
to be activated and continually reoriented for the perceptual systems to create cosmologies and experiences of realities. The possibility of static systems in the world be they optical, acoustic or haptic is debated by many ecological realists (Mace 2000). Gibson proposed that, ‘...frozen structure is a myth, or a least a limiting case. Invariants of structure do not exist except in relation to variants...' (1979, 97). More recently, Rogers has argued that information is not restricted to optical arrays that change over time and that even ‘frozen’ images can provide instantaneous information and ongoing optical flow (2000, 341). Such a proposal is certainly interesting in considering ‘how’ people used and engaged with the ‘static’ visual motifs on passage tombs (see further discussions in Chapter Two). Ecological psychology models may account in part, for the multiple and fluid worldviews that are expressed by people, because the range of sense engagements that any one agent can experience in the world are inexhaustible. Perceptions of a reality are ‘fine-tuned’ by the society in everyday activities situated in the world, and not by the transmission of data. Indeed, Gibson insists, ‘...we perceive in order to move, but we must move in order to perceive...' (1979, 223). People are thought to construct worldviews daily through ongoing engagement with the environment, an ‘education of attention’ (Gibson 1979, 254), in essence, to ‘...perceive the world is to co-perceive oneself...' (Gibson 1979, 141). Awareness of the world is described therefore as complementary to relations in the world, and not through alienating Cartesian domains that separate the mind from nature and sensation from intelligence.

Understandings of a physical world that is ‘out there’ (Ingold 2000, 41), can therefore be described as the creative use of metaphorical thought in the process of ‘dwelling’ in an environment (Tilley 1999a, 50-51). For Tilley, ‘...metaphors provide the ontological basis for that dwelling and for reflecting on the process of dwelling...' (1999a, 271). This ‘dwelling perspective’ or ‘ontology of dwelling’ describes how people are immersed daily in ‘...an active, practical and perceptual engagement with constituents of the dwelt-in world...' (Ingold 2000, 42). In Ingold’s (2000, 42) model, people do not construct a worldview per se, but rather they engage a worldview. People do not build a worldview; they dwell in one, not ‘...making a view of the world but of taking up a view in it...' (Ingold 2000, 42 original emphasis). Material objects (such as stone axeheads), the built environment (such as passage tombs),
animals, plants, human bodies and the paths and places in the landscape are all therefore ‘...potent sources of metaphors for the social construction and perception of reality...’ (Tilley 1999a, 271). The environments that people move within, have been suggested to not exist separately, nor in prior form, from the ‘taskscapes’, the routine, habitual and knowledgeable lived-in experience that people derive from the world (Ingold 1993; 1995). Whittle (2000, 3; 2003, 15) has challenged scholars to attempt to apply Ingold’s (1993) taskscape approach to archaeological data. Whittle does, however, offer a note of caution, in detailing how the taskscape approach gives ‘...insufficient attention to the weight of collective tradition or culture...’ (2003, 15). The taskscape interpretation is deemed to be decontextualised and does not account for the basic and routine aspects of life and how people can adapt, change and learn (Whittle 2003a). In this thesis I will look at sequenced motifs on archaeologically contextualised passage tombs in Ireland, and consider how engagements with these images altered the ‘viewers’ and ‘makers’ experience (see Chapters Four, Five, Six and Seven). By doing so, I will raise questions about how we can further understand the social relations and actions that may have been carried out in Neolithic Ireland.

Talking faces: narratives and myths

The conceptualisation of worldviews through fluid narrative and conversation has been documented by anthropologists (e.g. Widlok 1997; Bloch 1998) and has more recently been considered by archaeologists (e.g. Bradley 2002; Whittle 2002). Narratives and myths are often regarded as an essential element in providing meaning for cosmologies, landscapes, origins, activities and making sense of the past (Children and Nash 1997). Narratives and myths are inherently public (Brothers 1997, 80) and are constructed and elaborated by persons to talk in multiple ways in different contexts, be they oral or non-oral, about what is ‘thought’ to be known, rather than being a ‘factual’ knowledge (Bloch 1998, 110). They have no immediate ‘practical’ function and are generally not engaged with any form of reality different from itself (Lévi-Strauss 1964). Although how one can distinguish ‘practical’ functions from other ‘non-practical’ functions, without imposing a post-enlightenment perspective is deemed problematic (Brück 1999). Within such interpretations of a reality, narratives and myths do not have any meaning in themselves, but rather in relation to each other,
Chapter One

forming a matrix of intelligibility (Lévi-Strauss 1964). Meanings derive from the imposition of a relative perspective or 'organised orientations', that is a decision to perceive chosen aspects of chosen environments in chosen ways (Shibutani 1961 cited in Rapport 1983, 349). Myths and narratives attempt to provide models capable of resolving at some level the contradictions and problems of human life (Kuper 1988, 182). Myths and narratives therefore do not just explain phenomena, but rather they serve to regulate human actions (Awang Mois 1990, 9; cf. Malinowski 1936, 3). They are essentially variant expressions of an interpretation of a reality as understood by the people, and in studying them the scholar is at some level provided with a magnifying glass to see some of the ways people think (Lévi-Strauss 1964). As Cove notes in studying the Tsimshian of the Northwest Coast of America, '...the relationship between mythological and lived-in realms is never completely isomorphic. Each is more or less than the other. If the first has particular significance, it is in giving a foundation for meaning in the second...' (1987, 28 cited in Laughlin and Throop 2001, 711).

Myths and narratives can therefore be thought of as being part of a living system of meaning that is performed in the context of (in)dividual agents that are both personally and socially informed (see Fig. 1.2). For instance, among the Tukano of South America, all adult males are able to participate in yaje (a psychotropic substance) ingestion activities. The Tukano 'shaman' supervises this performance and guides the participants through their visions, providing explanations of what is seen in terms of their cosmological narratives and myth structures (Reichel-Dolmatoff 1975). Some mythological stories and narratives have been described to be universally able to temporarily disengage us from an accepted everyday reality and provide us with alternative perspectives of our world (J. Weiner 1994, 387). Durkheim (1915, 12) took this idea a stage further and emphasised that the reality expressed in myth is not merely the figment of imagination, but rather it is reality itself imagined, or simulated. Consider a fictional example in which a person recites a narrative and the listener responds with another tale that captures an important generalisation between the two stories. Both parties 'feel' that something important is understood and possibly ascribe qualities of high intelligence and perception to each other. As Schank has noted, '...storytelling and understanding are functionally the same thing...' (1990, 24
cited in Brothers 1997, 155). Furthermore, people who have lost the ability to construct narrative have been described to have lost their selves (Young and Saver 2001, 82).

So why are narratives and myths so important in creating a human sense of belonging and attachment in the world? One possible answer might be that group narratives organise the thoughts of its members, specifying the categories of their experiences and perceptions of other beings. Bidney names this phenomenon 'critical insight' and states, '...the concept of “myth” is relative to one’s accepted beliefs and convictions, so that what is gospel truth for the believer is sheer “myth” and “fiction” for the non-believer or skeptic... myths and magical tales and practices are accepted precisely because... folk do not consider them as merely “myths” or “magic”... (1953, 166).

For example, the Ojibwa Indians from North America do not entertain Western conceptions of ‘natural law’ and as such their narratives do not support the notion that the sun will rise day after day (Hallowell 1975). Often the Ojibwa recount the tale of Tcakâbec, a mythical personage, who once ensnared the tail of the sun and captured it. Darkness reigned until a small mouse was sent by human beings to free the sun from its trap and provide the world with daylight again (Hallowell 1975, 152). The Ojibwa
do notice the ‘regular’ movements of the sun, yet understand through their narratives that deviations in behaviour caused by other persons, human or otherwise, can occur as they have no conception of ‘natural’ events or objects (Hallowell 1975, 152). For the Ojibwa, mythology also plays a very active role in their lives. It is through dreams that the Ojibwa can directly interact with the *âtîso ‘kanak*, the non-human powerful persons that consume their narratives. The voices of these entities are also reported to be experienced whilst awake during conjuring performances. Both types of personal interaction with the ‘mythic’ visitors are thought to augment and assist in the daily round of life (Hallowell 1975, 165). Although these visits can happen at any time, there are strict taboos against myth narration and experience being recounted out of the proper seasonal context (Hallowell 1975, 164).

Campbell (1959) suggests that such modes of thought and activity are imperative for stimulating and preparing neurocognitive structures in the brain, which in turn develop cosmological beliefs. As Ricoeur propounds, ‘...myth invites thought...’ (1995, 60). Through ‘performance utterances’ (Austin 1975), myths and narratives allow agents to see in the world what they expect to see. People are equipped with situational interpretations that fulfil the expectations which their worldviews provide them with. Cosmological expectations therefore become what Garfinkel terms ‘self-fulfilling prophecies’ (1967, 40). In such a scenario, people define their own stimuli, whilst continually constructing their own responses. In studying the dry land and wet water origin myths of the Iatmul from New Guinea, Bateson describes people as ‘energy sources’ and ‘relays’ of energy, because they are not mere passive receptors to their beliefs and environment (1973, 27-28). Such individuality in experience can therefore lead to contested worldviews as people intent upon their own creative use of language and performative utterances can easily misconstrue the motives, intentions, implications and worldviews of others with whom they are conversing (Rapport 1983, 351).

Becker (1973) has proposed that societies construct cosmological narratives to keep the terror of death at bay. Becker utilises the term ‘hero project’, in describing societies as ‘codified hero systems’, meaning ‘...society everywhere is a living myth of the significance of human life, a defiant creation of meaning...’ (1973, 7). Becker
(1973) suggested that every society is a 'religion' whether it thinks so or not as there is no unambiguous way to confirm the veracity of a worldview, and therefore it is supported just by faith. Berger and Luckmann (1966) argued that this 'faith' has to be constantly confirmed and discussed as most of what people believe in any given society, their worldviews, is derived not from empirical knowledge, that is knowledge based on methodical procedures of observation, interpretation and verification, but rather experienced knowledge (cf. Bloch 1998, 110). Berger and Luckmann (1966) concluded that worldviews are social 'objectifications' that are culturally 'internalised'. Therefore, '...the world is built up in the consciousness of the individual by conversation with significant others (such as parents, teachers "peers")'. The world is maintained as subjective reality by the same sort of conversation... if such a conversation is disrupted... the world begins to totter, to lose its subjective plausibility...' (Berger 1967, 16-17). The Kayapó and Mundurucú of the Amazon basin are reported to maintain continuous order over their women by re-telling a Tukuna myth about a young girl who spied on the sacred flutes and subsequently was killed, quartered and eaten (Bamberger 1974). Bamberger states that whether the Kayapó and Mundurucú women actually believe these stories is irrelevant as the penalties for ceremonial injunctions do actually include ritual humiliations and gang rape (1974, 278). Cosmological narratives can act as a particular logic that expresses the social tensions between people, whilst sanctioning order by presenting repellent images of the consequences of misconduct (G. Lewis 2002, 574).

The action that myth and narrative have on present or future events has been noted in the Maori of Polynesia, who ‘...think of the future as behind them...’ (Sahlins 1987, 58). Conversely, some of the folklore and narratives of modern America seem to have a distinctive futuristic orientation. Kluckhohn in generalising that the English have a predilection for the past, tradition and ancestry notes that, ‘...Americans, more than most people of the world, place emphasis upon the future – a future which we anticipate to be “bigger and better”...’ (1953, 349). The narrative genre of science fiction (e.g. Star Trek) is one of the most convincing examples of this future mind set. The fictional creatures and plots that influence social action or predict events may bear resemblances to classical myths, but the differences are a matter of time setting – future as opposed to past (Dundes 1980, 85). Myths therefore might be thought as
behaving as guidelines for action, serving as schemata for the operation of particular actions (Kuper 2000, 176). For the Foi of Papua New Guinea, myth and narrative are seen as a creative and mutable way in which multiple views of the world can be presented, contested and reworked (J. F. Weiner 1991, cited in Whittle 2002, 199). The Foi believe that myth becomes public because its insights are elusive; cosmological meanings are not ‘created’ as such, but rather ‘discovered’ (J. F. Weiner 2002, 608). The characters of these myths, such as Tononawi, live through articulated rhetoric and magic spells and do not uphold the conventional orders of society, but rather impinge and contest them (J. F. Weiner 2002, 609). In studying the Uitoto people in the lowlands of Colombia and the north-eastern part of Peruvian Amazonia, anthropologists have asserted that narratives about the ‘supernatural’ and cosmos cannot be separated from the social and material aspects of daily life (Griffths 2001, 248). Uitoto cosmologies and myths are permeated with the stipulation that perpetual work will maintain good relations with both people and spirit beings during daily life (Griffths 2001, 249). Uitoto myths are filled with narratives that stress that behaviour both creates and signifies the identity of living beings – to work is to become human and not to work is to become animal (Griffths 2001, 252). People who work excessively hard are thought to be able to communicate directly with the ancestral spirits that are described in the narratives and myths. In sum, Uitoto cosmology is geared towards is the production of ‘people’ who can communicate with the mythic persons and thereby add protection to the wider community, rather than the production of materials (Griffths 2001, 258). Such a cosmology is not ideal for archaeologists who endeavour to construct past ideologies from the material evidence. It is, however, possible that some people in the past regarded materials as living persons. This is a theme that will be discussed further in later chapters.

Narratives and myths that project worldviews do not always project one meaningful and generalised interpretation of a reality (see J. F. Weiner 2002), but sometimes many separate ‘systems of ideas’ that are constantly developing and changing (Winch 1974, 15). At times people can interact without any meanings being communicated, and people can sometimes talk past each other unknowingly. At other times people can impose meanings of the world onto each other, in an act that Geertz describes as ‘...the major end, and primary condition of human existence...' (1973, 135). By
returning to the Foi of Papua New Guinea, we can notice that their thinking involves a world that is continuous, undifferentiated and all-encompassing (J. F. Weiner 2002, 592). For the Foi, the human task is to create difference and compartmentalise perpetual being into demarcated domains (J. F. Weiner 2002, 591). By using metaphors to say that one thing is like another, such as the plant Sago is like the skull of a mythical boy, the Foi are not emphasising assumed commonalities, but rather their distinction set against a backdrop of acknowledged continuity (J. F. Weiner 2002, 593). By considering Weiner's (2002) proposal, this thesis will review contested and differentiated modes of thought that may have constituted the metaphorical phenomena of myth, narrative and belief as a means to further understand the workings out of the possible relations that some people in the Irish Neolithic created with their environments (see Chapter Two). I also appraise the idea that myth can also be non-linguistic, and exist in the form of thematic motifs and materials that can activate 'neurognostic' cosmologies in the thoughts of agents (see Laughlin and Throop 2001, 721). Such an approach assists in contextualising past thoughts via the visual and material culture of some Irish passage tombs.

Shamanic systems: reflections and thoughts

Since the conception of post-processual and cognitive archaeologies, there has been a marked concern for ancient symbolism and meaning-content of material culture. As a response to this trend, the publications of recent years have often dealt with models based on shamanic beliefs and practices. The word 'shaman' derives from the word šaman of the Tungus people in central Siberia and means 'skywalker' or 'one who is excited or raised' (cf. Eliade 1964; Guenther 1999). As the indigenous Siberians had no written language, the terms šaman or sama:n were normalised via the Russian language into western European languages to produce the more conventional appellation 'shaman' (Price 2001, 4). The term has been used by anthropologists and ethnographers as a label for a particular kind of medicinal or religious specialist (see Fig 1.3), working within a worldview system or 'grammar of the mind' (Pentikäinen 1998, 59 cited in Jordan 2001, 87).
Shamanism is often used cross-culturally and it is applied to customs that are inferred to have arisen independently in different parts of the world (I. Lewis 1971), customs in Eurasian circumpolar cultural areas (Siikala 1978), or scattered survivals from an allegedly original human condition (Hultkrantz 1989). Most studies (cf. Eliade 1964; Reichel-Dolmatoff 1975; Noll 1985; Stahl 1986) have recurrent themes when defining shamanism. These characteristics are:

a) Shamans use some means of altering perception or consciousness. This use is controlled and the ability to manipulate consciousness sets the shaman apart from others who may experience altered-states.

b) Within a state of altered consciousness the shaman accesses other worlds and uses spirits as guardians and helpers to effect some specific end. This might be to cure an illness or provide therapy, but it can also be to bring harm to others.

c) Shamans have a distinct and emically recognised role in the social system in which they operate.
d) Shamans have specialised knowledge of myth, cosmological symbolism and psychoactive compounds (see Hultkrantz 1985, 453). As a historian, mythmaker and storyteller the shaman not only reflects the beliefs of the people, but also influences the development of their ideology (see again Fig. 1.2).

These criteria are a generalisation and not diagnostic schemata. The precise nature of each theme has to be argued according to a specific ethnographic study, as there are many kinds of shamanisms (Keightley 2002, 409). Attempts have been made to unify the study of shamanism by defining the concept more tightly (e.g. Eliade 1964; Winkelman 1990). Lewis (1971) reported that there was uniformity across cultures in the mystical experience and symbolism of shamanism. It is stated that shamanic trance in these societies can be induced by a variety of stimuli including alcohol, drugs, rapid over-breathing, hypnotic suggestion, the inhalation of smoke and vapours, music and dancing (see Fig. 1.4), and more slowly by self-inflicted or externally imposed mortifications and privations as fasting and ascetic contemplation (I. Lewis 1971, 39). For Lewis, a shaman is ‘...a person of either sex who has mastered spirits and who can at will introduce them into his own body... by his power over the spirits which he incarnates the shaman is able to treat and control afflictions caused by pathogenic spirits in others...’ (1971, 51). This definition of shamanism is adopted by Hultkrantz, who argues that ‘...the shaman [is] a social functionary who attains ecstasy with the help of guardian or helping spirits, and who through his ecstasy creates a rapport with the supernatural world - all this on behalf of the members of his group...’ (1989, 46).
Definitions of a universal shamanic practice have been challenged since its academic conception in the eighteenth century. Van Gennep argued, ‘...we have inherited a certain number of very vague terms, which can be applied to anything, or even to nothing; some were created by travellers and then thoughtlessly adopted by the dilettantes of ethnopsychology, and used any which way. The most dangerous is shamanism...’ (2001, 51 cited in Klein et al. 2002, 387). In reviewing Eliade (1964) Bradley states that the model is ‘...extraordinarily generalised, for it is based less on a systemic analysis than on cross-cultural generalisation of an extravagant kind...’ (2000, 30). Kohoe has also commented that the data Eliade (1964) uses to construct the ‘archaic substratum’ derives largely from ethnological reports of modern peoples and that the similarities noted between northeast Asia and the Americas might reflect seventeenth and eighteenth century contacts between Siberia and northwestern America (1996, 381-383). Gill (1998, 3-19) has recently argued that Eliade’s (1964) models demonstrates a disregard for history and is constructed with multiple chronologically disparate and often contradictory sources. Vitebsky has noted that although similarities between shamanic ideas and practices occur in different parts of the world (1995: 11), the idea of ‘pure’ shamanism is hard to sustain (1995, 116; see also Siikala 1985; Layton 1991; Flaherty 1995; Guenther 1999). More recently,
however, Pearson has stated that shamanism is ‘...a near-universal phenomenon...’ (2002, 66).

Such variations with definition have prompted some academics to plea for a ‘...more refined, more nuanced terminology...’ (Klein et al. 2002, 408), and possibly to reject the terms ‘shaman’ and ‘shamanism’ entirely. Usage of these terms has frequently aroused Pavlovian responses from a small minority of researchers (e.g. Bednarik 1990; Bahn 2001; Kehoe 2002; Knight 2002). Bahn is so averse to shamanistic models that he exclaims, ‘...sometimes I wake up screaming...’ (1998, 38). Such abject terror is certainly extreme and rather limiting as it does not inform future debate or critically advance disciplinary discourse beyond divisive labelling. Chippindale (2002) has suggested that the difficulties with the term ‘shamanism’ and ‘shaman’ stem from the terms being ambiguous and malleable, with no single and universally valid definition. He concludes, however, that all words and every word ‘...may be torpedoed in the same way...’ (2002, 402), and that any interpretation of the past is always constrained by the language of the present. Furthermore, even if we did import ‘another’ foreign word to replace ‘Shaman’, such as ‘h’iloletik’ from Mesoamerica, or invent a new word, such as the appellation ‘Neolithic’, they would soon corrupt with usage (Chippendale 2002, 403). Our usage of language is not static and performances or beliefs are equally not static. Rapport (1999) commented that even when societies seek to preserve certain actions, they will always gradually alter, as they are never performed the same way twice. Actions are dynamic, adaptive and flexible affairs that offer change through repeated performance (Rapport 1999; Price 2001). The term shamanism is entirely an academic creation, and although as a notion it is unlikely to be understood by the societies that we deem as shamanic, it is certainly useful for scholars in ‘delineating’ and ‘differentiating’ complex cosmologies from one another (Guenther 1999, 426). The concept of shamanism is useful for this study as it offers interesting insights into ways in which some people see and think their worlds.

The classic depiction of the shaman in western literature is often of a male dominating figure, who controls social relations and masters their communities equipped with a certain degree of charisma and benevolence (see Castenada 1998; Wallis 2003).
Wallis, however, argues that shamanism is not intrinsically ‘safe’ and controlled but rather it is always contested, open-ended and unpredictable (2001, 225). Stewart and Strathern illustrate this point, in studying the indigenous groups in Hagan and Duna regions of the Highlands of Papua New Guinea (1999). They have termed the disruptive, violent and often cannibalistic practices ‘assault sorcery’ and ‘aggressive shamanism’ (1999, 664). Furthermore, some of the indigenous peoples of the Pakaraima Mountains in Guyana, Amazonia, practice a form of ‘death-shamanism’ called Kanaimá (Whitehead 2001). Kanaimá, which means ‘Lords of Death’, is essentially a ‘dark’ shamanic practice designed for ‘anti-structure’ and the dissolving of both kin and political units through actual killing and through the fear it generates (Whitehead 2001, 236). Such observations are not always welcomed by some Western ‘neo-shamans’ and ‘neo-pagans’. These modern individuals who adhere to notions of feminism, vegetarianism and in living in ‘partnership’ harmony with the ‘mother’ earth (e.g. Eisler 1987), are increasingly looking at the indigenous shamans, and finding them wanting (Price 2001, 12).

Although shamanism cannot be purely regarded as a universal phenomenon, there are fundamental details of the shamanic worldview that are structurally the same. For example the shamanic cosmos is generally vertically tiered. It can be simplified to an original form comprising of three levels: the realm above (sky), the realm below (underworld) and the realm in between (earth) (Eliade 1964, 259). The upper realm or plane is usually occupied by powerful beings who are sometimes anthropomorphic, such as the sun, moon and theriomorphic creatures. The underworld consists of other world beings, such as spirits, ghosts and malevolent entities. Whereas the middle world is thought to be inhabited by people and the spirits that reside in mountains, rocks, caves, trees, rivers and other natural places or ‘hierophanies’ (Bradley 2000, 29; see further discussions in Chapter Five). This middle world is usually imagined to be circular and floating in a space surrounded by a void or water (Pearson 2002, 69). This description of the cosmological middle world fits well with the location of some circular shaped passage tombs (e.g. those in the Bend of the Boyne River), and will be discussed at some length in the following chapters.
This shamanic universe is also organised directionally, with the world having a centre and an edge. The most recurring scheme for dividing the worlds is based on quarters, often relating to the symmetry of the human body (Pearson 2002, 69; also see Fig. 1.5). The center of the world is often referred to as the axis mundi or world axis (Eliade 1964, 259), and it represents a threshold between different realms. This axis can manifest itself in various guises, for example it might be described as a ‘world tree’, ‘sacred pole’, ‘cosmic pillar’, ‘rainbow’ or a ‘sacred mountain’ (Eliade 1964, 261). These representations are the points of communication between the upper and lower worlds and intersect the individual planes of existence, which allow a shaman to traverse either ‘celestially’ or ‘infernally’ between them (Eliade 1964, 259). Communication between these cosmic zones is quite complex and not without contradictions, due to contaminations and modifications of cosmological engagements and imagery by people through time (Eliade 1964, 265). Accounts of this communication tend to have a narrative structure connected with mythic events, focusing on interactions with non-human entities and material objects in the middle world. For instance, in the Sámi of Eurasia, the shaman while engaging in particular performances in the kota (tent), is located at the center of the world. The holy corner or boasso and the smoke hole of this tent, are thought of as manifestations of the mythic world tree, having its center of the Pole Star, around which the heavens revolve. It is at this center that the shaman can maintain communication with the realms of the dead (Pentikainen 1984, 125 cited in Dronfield 1994, 126). For the Desana Indians of the northwest Amazon, the twisted cone of a basketry pot stand is compared with the concept of spiralling whirlpool, the dia oreri a life devouring and giving cosmic whirlpool. Yet when this stand is viewed in profile, as an hourglass shape, the object is interpreted as a three tiered cosmological model that link one dimension (turi) to another (Reichel-Dolmatoff 1985, 33 cited in Dronfield 1994, 126). Interestingly, Christmas trees have been described as the Westerner’s mythic ‘cosmic tree’ and axis mundi, with Father Christmas the Tungus ‘grandmaster of shamans’, assisted in his nocturnal activities by eight caribou familiars (I. Lewis 1981, cited in Guenther 1999, 431).

The notion that one can interpret the worldviews of the past by investigating possible engagements with sacred or natural places has most recently been considered by
Bradley (2000). In paying particular attention to places that are possibly situated on the *axis mundi*, such as islands in Scandinavian rivers and caves in Greek mountains, Bradley (2000) attempted to understand unaltered features of a landscape from a cosmological perspective. Dronfield (1996b) is one of the few scholars that have forwarded such an approach in the interpretation of Irish Passage tombs. Dronfield (1996b) argued that a relationship existed between people's perceived ability to travel between the cosmic planes, and engagements with the physical representation of this shamanic journey in the motifs and architecture of the passage tombs (see also Lewis-Williams and Pearce 2005 for a similar interpretation).

![Diagram of the shamanic worldview](Fig. 1.5. The shamanic worldview (after Bradley 2000, 31).)

The studies by Lewis-Williams and Dowson (1993), Dronfield (1994; 1996b) and Lewis-Williams and Pearce (2005) can be thought as some of the most engaging interpretations of Irish passage tomb motifs from a shamanistic perspective. Following an approach proposed by Lewis-Williams (1983), these scholars aimed to look past the 'obvious' surface of the stone and seek out '...the cultural content of the art... the shared, transcending beliefs and values on which the individual artists drew and which made their handiwork intelligible to the entire community...' (Lewis-Williams 1983, 6). Dronfield (1994; 1996b) in critiquing (Lewis-Williams and...
Chapter One

Dowson 1993), proposed that shamanic practices were the source for the Irish passage tomb visual content and that these acts were socially structured around ‘semi-predictable’ genetic clustering of neuropathological syndromes which cross-cut simple descent. The shamanic experience and the engraving of entoptic images in to stone were seen as a unified concept, that was meaningfully constituted throughout the Irish Neolithic and perhaps even before (Dronfield 1996b, 69). Dronfield (1996b) regards these experiences as a localised, but not isolated social phenomenon. Unfortunately, Dronfield (1994; 1996b) uncritically uses the term ‘shaman’ and defines it as an all-encompassing, monolithic explanation to contextualise the activities of the creators of the motifs on some passage tombs in Ireland (see Bahn 1996). With respect to a shamanic interpretation, Murris O’Sullivan asserts that it is ‘inconceivable’ that meaning remained the same throughout stylistic changes (1996, 59). Furthermore, it has been noted that societies which are not shamanistic are also found to have entoptic art (Bednarik 1990). These concerns will be critically examined and will inform analysis of the individual passage tombs of Ireland in Chapters Four, Five and Six here.

**Worlds we create: totemism**

The word ‘totem’ is taken from the Ojibwa word *ototeman* and can be translated as ‘he is a relative of mine’ (Bowie 2000, 138). The Ojibwa use an Algonquin language and are located in the region to the north of the Great Lakes of northern America (Lévi-Strauss 1962, 18). Although the word is from the Americas, most theorists have based their ideas of totemism on the ethnography provided by Spencer and Gillen (1899; 1904 cited in A. Barnard 1999, 52) on Arunta (Aranda) and other tribes of central and northern Australia. As with shamanism, totemism is a cross-cultural category that is used by anthropologists (e.g. Lévi-Strauss 1962; Stanner 1965; Lang 1970) and has been the cause of much heated debate. For example, Durkheim (1915) believed that ‘primitive’ men were in awe of blood and refused to cohabit with females of their respective clans, as the totemic gods were thought to inhabit clan blood. Whereas Lang (1970) emphasized the engagements between people and the totem, Tylor (1920) described totemism as simply a special case of ancestor worship, and Ridington and Ridington (1975) define it as an intellectual abstraction of one
element of shamanism. Most models do, however, agree that totemism refers to the use of animals or plants as emblems or guardians of social groups celebrated in 'ritual'.

In recent years there has been much debate regarding the definition of the term 'ritual' among anthropologists (see Nadel 1954; van Gennep 1960; Bell 1992) and archaeologists (see Richards and Thomas 1984; Renfrew 1985; Biehl 1996). Such academic discourse has lead Bahn to humorously conclude that ritual is, '...[an] all-purpose explanation used where nothing else comes to mind...' (1989, 62). In the past, scholars attempted to distinguish from the archaeological record activities which demonstrate practical functional actions, from other non-functional and 'irrational' pursuits. These latter actions are often described as ritual. Some academics now question the belief that ritual is a separate non-practical preoccupation, distinct from other aspects of daily life (see Bourdieu 1977; Lane 1986; G. Lewis 1980; Bell 1992; Brück 1999). In certain societies there is no sacred and profane dualism and ritual actions are integrated in the mundane. Indeed, many of the supposedly diagnostic properties of ritual practice, such as symbolic, non-technical, formal, prescribed, structured and repetitive in nature (cf. Nadel 1954; Firth 1951; Leach 1964) are shared by secular action (Barrett 1988; Hill 1995). Making a cup of tea, for example follows a structured sequence of rules, while a University staff-postgraduate panel meeting involves a high degree of formalisation.

Leach (1968) suggested that ritual is not a distinctive category of behaviour, but rather an expressive, symbolic or communicative aspect of all human action. This interpretation does not, however, account for how we can distinguish ritual from other non-ritual activities. Moreover, if ritual is purely a communication device, then a policeman on duty is performing a very explicit ritual (Fortes 1966). These conflicting issues have led Brück to conclude that it is, '...impossible to propose watertight lists of criteria for the identification of ritual in the archaeological record...' (1999, 316). Indeed, the imposition of the dichotomy ritual-secular onto the archaeological record is not always successful. For example, anthropomorphic figurines from south-eastern Europe are often associated by some with cult, ritual or religion (Kalicz 1970; Gimbutas 1991; Biehl 1996). These visual material objects are described as such,
because they are discovered in settings that suggest display, concealment and repetition (Marangou 1996). Figurines, however, are also found inside domestic contexts and their association with ovens and querns can indicate incorporation into mundane contexts (Bailey 2000). These examples certainly raise interesting questions for the significance and meanings of motifs in public and private locations on the Irish passage tombs (for detailed discussion see Chapter Two).

In an attempt to remove the structural dichotomy which polarises ritual from secular activity, Anderson has forwarded the term ‘secular ritual’ (191, 35). Anderson describes a modern newspaper reader who ‘...is well aware that the ceremony he [sic] performs is being replicated simultaneously by thousands (or millions) of others of whose existence he is confident, yet of whose identity he has not the slightest notion...’ (1991, 35). This begs the question of whether a person gazing on the ‘ritual’ motifs on the passage tombs of Knowth Site 1, Boyne valley, was consciously aware of people viewing images in Loughcrew, County Meath. Knight (1999) argues that ‘ritual’ activities create a virtual world, which occupies an alternative domain from the ordinary or current perceptible or ‘real’ one. For ‘ritual’, or as Bradley suggests ‘ritualised’ (2002) activities, practices (Bell 1992), or actions (Humphrey and Laidlaw 1994) to be successful, they must interfere with the process of everyday perception and cognition (Bloch 1985). If they do not eclipse ‘this world’, they have failed. One of the fundamental aspects of ritual activities, be they totemic or shamanic in orientation, is to make people see ‘beyond’ perceptible reality into the other worldly domains (Knight 1999, 230). Recently Bradley has commented how the process of ‘ritualization’ [sic] (2003, 221), cuts through divisions between ritual and daily life. As such it was through domestic routines that ritual activities were conceived and via this daily familiarity the conventions became established (Bradley 2003, 221). As Whittle suggested, there is ‘...an interesting contrast between the extremes of ritual action, between specific set-piece public rituals or rites of passage... and the spectrum of ritualised action which may structure daily life...’ (1988, 203). One of the challenges of this thesis is to suggest how the passage tombs in specific locations changed and influenced the thoughts of some people.
Totemism is applied animism, or animism in practice, which involves the attribution of conscious life to souls and spirits and to nature and natural phenomena (Bolin 2000). The rationale of totemism is that each social group is identified with a different species or entity; the significance of each species or entity derives from its place in the cognitive structure. Group A is a snake because it is not a bird or dog (see Lévi-Strauss 1964, especially Chapter 5). Totemism has been defined as the ‘original’ human religion (Durkheim 1915; Spence 1921); more recently Lévi-Strauss (1964) has argued that totemism is a product of human cognition. In his analysis of the Australian Aborigines, Durkheim wrote, ‘...without symbols, social sentiments could have only a precarious existence... social life, in all its aspects and at every period of its history, is made possible only by a vast symbolism (1915, 231). Durkheim was primarily interested in defining Australian religion and he eventually characterised it with the term ‘totemism’ (1915). For Durkheim (1915), celebration of the ‘totemic ancestor’ in ritual became a reaffirmation of the group’s identity within the wider society. Lévi-Strauss (1964) regarded each group’s responsibility to perform ritual to increase the numbers of its totem species as an expression of the several groups’ interdependence on one another in social life.

Morphy (1989) has, however, criticised the notion that each social group has an exclusive relationship with a single totemic species. It is argued that the totemic beings that combined the attributes of people and animal often travelled vast distances through the Australian bush, traversing the territory of a number of social groups. While each group has the responsibility to carry out ceremonies at sites visited by those ‘beings’ or ‘ancestors’ within its own country, there will be several groups sharing a single ancestral track (see Morphy 1989; Tilley 1994b). In many Aboriginal cultures a number of different ancestral tracks pass through each territory and each group has a unique combination of ‘totems’, even though each separately is shared with other groups (Morphy 1989). The fluidity and variability of totemic beliefs are also recurrent in shamanism. This lack of standardisation of belief is due in part to the orality of the beliefs, which may be stories of a person’s experience that is itself surreal, such as a dream or an entoptic vision induced by psychoactive substances. Moreover, in some societies with rich story-telling traditions there is emphasis on narrative individualism and the expectation and appreciation of originality in a story-
teller's performance (Benjamin 1977b). This can result in variation, repetition, innovation and diffusion of stories, beliefs and practices among neighbouring peoples (Bloch 1998; Guenther 1999). Unfortunately, a mythic cosmology based on oral syntax and grammar, is also susceptible to being lost. For instance, the modern Australian aboriginal Pidgin language lacks the linguistic subtleties of the indigenous languages. This has resulted in many of the earlier myths being forgotten, as fewer aborigines are fluent enough to understand them (Cowan 2002, 69).

So far nobody has challenged Durkheim's (1915) theory of the perceived importance of visual images in totemic systems (Stanner 1965; Firth 1973; Morton 1987; Layton 2000). Durkheim (1915) argues that the cohesiveness of the social group was given visible expression in the depictions of the totemic species on sacred objects, which the group possessed. Durkheim states that the objects selected as totems ‘...are frequently insignificant... so it is not the intrinsic nature of the thing whose name the clan bears that marks it out to become the object of a cult...’ (1915, 205), but rather it is its ability to function as a 'symbol' of the group. Durkheim proposes that ‘...it is the figurative representations of this plant or animal [on selected objects]... which have the greatest sanctity...’ (1915, 206). These objects provide a physical expression of the group's place in society, ‘...personified and represented to the imagination under the visible form of the [stylistic representation of the] animal or vegetable which serves as a totem...’ (1915, 206). Through this process the images acquire a sense of power (Durkheim 1915).

The relevance of Durkheim's (1915) model to the passage tomb motifs in Neolithic Ireland is demonstrated in his study of the abstract style of Central Australian Aboriginal art, which is based on geometric forms. Durkheim (1915) argues that this style is not intended to faithfully convey naturalistic depictions of the animal, plant or entity, but to provide visible markers of the concept of a totemic relationship; ‘...if the Australian is so strongly inclined to represent his totem, it is not to have a portrait of it before his eyes... it is merely because he feels the need of representing the idea which he forms of it by material and external signs, no matter what these signs may be...(Durkheim 1915, 127). In reviewing the Yolngu of North-east Arnhem Land, Australia, Morphy (1991) has suggested that the artistic images gain their power not
from the ideas they express, but rather from their ability to express them and their
capacity to communicate. For the Worora and Ngarinyin in the Kimberley region of
Northwest Australia, each clan is associated with a Wandjina or ancestral being. The
Wandjina are reported to have bestowed upon each clan a particular territory during
the creation period, and they demarcated the area with his or her own image upon the
wall of a rock shelter. In the Kimberly region, these totemic images communicate a
cosmological sense of belonging in the world (Layton 2000, 176).

By employing a structuralist approach to anthropology, Lévi-Strauss (1962) proposed
that totemism is a heterogeneous collection of facts rather than a fundamental
category. Totemism is regarded by Lévi-Strauss as an illusion (1962, 15) and that its
reality, which is considered an intellectual construction, is reducible to that of ‘...a
particular illustration of certain modes of thought...’ (1962, 104). These modes are
correlation and opposition, and totemism is described as being reduced to ‘...a
particular fashion of formulating a general problem, viz. how to make opposition,
instead of being an obstacle to integration, serve rather to produce it...’ (1962, 89).
Recently scholars have questioned whether opposition, posited as an obstacle to
integration, constitutes a ‘general problem’ (Lévi-Strauss 1962, 1) for anyone. It is
argued that Lévi-Strauss’s (1962) premise depends upon how the concept of
‘opposition’ itself is defined and since he offers no definition the model lacks precise
analytical value (Needham 1973).

Stanner has challenged Lévi-Strauss’s (1962) model by asserting that ‘...European
notions of society, external nature, and natural species had no counterpart among their
[Australian aborigines] ideas...’ (Stanner 1965, 223). Stanner believes that what is
meant by totemism in aboriginal Australia is always ‘...a mystical connection
“between living persons and other existents”, and that the problems of understanding
totemism there are the problems of understanding religion anywhere...’ (1965, 224).
Lévi-Strauss (1962) is criticised for looking for more systems in the facts than there
may actually be (Stanner 1965). The rationale of any tribal selection of things as
having totemic significance is deemed unclear and ‘...probably it is irreducibly
arbitrary...’ (Stanner 1965, 227). Stanner proposes a theme that it interesting for this
thesis, by suggesting that a totem is not a species or variety or class as such, but rather
it is a ‘symbolic image’ that creates a ‘sense’ of being (1965, 229). The notion that objects were resonates of non-human entities that were ‘good to think’ with for providing different engagements to the viewer and designer (see Lévi-Strauss 1962; Bock 1994), is one that this thesis appraises when investigating how people thought about the motifs of Irish passage tombs.

In reviewing the work of Clottes and Lewis-Williams (1996), Layton (2000) conducted a comparative study of totemic and shamanistic societies, in order to contrast their use of imagery as a way into their various nodes of thought. Layton’s (2000) hypothesis was that totemic, shamanic and secular rock art offer different ways of using motifs drawn from the vocabulary of a cosmological tradition. It is proposed that each category will have different but characteristic distributions within and between sites and may utilise different styles; ‘...each is symptomatic of a political strategy in which motifs are deployed in appropriate contexts...’ (Layton 2000, 180). More than one theme, however, can co-exist in any cosmological tradition (Layton 2000). Layton (2000) stated that totemic imagery would be preferentially depicted at significant sites within the territory of the group for whom it is the totemic emblem. Conversely, shamanic images are generally vehicles for spiritual encounters and these occur in a random fashion, distributed throughout the community’s area because they are available to people in many ‘local’ groups. This distribution is argued to be similar for secular imagery, as again it will consist of images that are available to all members of the community. It should be noted at this point that Layton (2000) at no point defines his perceived distinction between secular activities and ritual ‘totemic’ or ‘shamanic’ ones. It will be assumed that Layton (2000) is regarding secular as a generalisation for ‘domestic’ (another problematic term) activities. Layton (2000) reasons that in totemic imagery, a large number of species or forms are represented, but each occurs with approximately the same frequency because each functions as the emblem of one group among many. The imagery of secular activity is proposed to depict a large number of styles or species with approximately equal frequency (Layton 2000). In shamanic societies, however, certain beings are often particularly charged with power. Shamanic imagery is thus argued to be characterised by the predominance of the limited number of entities commonly functioning as guardians or
vehicles for spiritual encounters, setting it apart from both secular and totemic imagery (Layton 2000).

During my Masters research, I was interested to see how the motif styles represented on the structural stones at Knowth Site 1, Newgrange Site 1 and Dowth, Boyne Valley, compared to Layton’s (2000) diagnostic hypothesis (Cochrane 2001). By doing so I hoped to develop the systems of thoughts that may have influenced the production of motifs. Dronfield (1995a, 545) argued that endogenous forms account for 20 to 30 percent cent of the design forms in each of his sample sites (see further discussion in Chapter Two here). I wanted to determine if any of the entoptic images dominated (see Cochrane 2001, especially Chapter Two). If they did this might suggest a shamanic site, if they did not then maybe a totemic one. After careful analysis, it became apparent that three entoptic forms dominated at each site. These were the meander, filigree and multiple spiral motifs (see Cochrane 2001, 113-115).

Following Layton’s (2000) model, I initially suggested that Knowth Site 1, Newgrange Site 1 and Dowth could be characterised as shamanic sites, due to the predominance of the limited number of entoptic patterns favoured that occur in a high proportion. Yet I also considered that these images are only occurring at three specific sites in the whole Boyne region. As the evidence did not present ‘...a limited number of [forms] favoured, but all at a high proportion of sites...’ (Layton 2000, 182), I proposed that Knowth Site 1, Newgrange Site 1 and Dowth possibly represent prehistoric totemic sites (Cochrane 2001, 106). In this thesis rather than determining whether a particular site is shamanic or totemic, I move beyond these generalising labels, by instead distilling some of the essences of shamanic and totemic worldview systems, to create narratives that incorporate the archaeological data. In doing so, I will be able to further highlight possible commonalities and variations in the cosmological attitudes of some people in Neolithic Ireland. I do not anticipate that I will discover exclusive bodies of thought and practice, but rather ever-expanding interactive networks of (non)representational equivalence over time and space.
Summary

This chapter has been concerned with the general problem of understanding how people lived and acted in the past. One of the principal ways in which I have approached this issue, is to consider how people think and act today. By incorporating the arguments of the evolutionary and environmental psychology and the cognitive domain and connectionist scholars, I have attempted to produce a detailed exposition of the various and often contested ways in which some people think we think.

Notions of momentary, complimentary and contested systems of thought are supported by anthropological examples. In reviewing various societies, we have seen how cosmologies, mentalités and worldviews act as the systems of practice that people use in ruminating about thoughts that they experience in daily life. In moving in and around their environments, people are continually engaging with the narratives and myths of others, whilst forwarding their own views of the world. Cosmologies, mentalités and worldviews are always fluid and flexible because the people who utilise them and the worlds in which they operate are always moving and momentary.

Whether the ‘shamanic’ and ‘totemic’ modes of thought really do exist ‘on the ground’ is purely an academic debate. We can, however, surmise that the mere existence of these terms continually reorientates people’s views of the present and the past. These nodes of thought are useful, in that they assert the view that people can often act in ‘non-functional’ and ‘irrational’ ways. Chapter Two will continue this appraisal and further consider how engagements with visual culture can influence our daily lives and experiences.

1 For further discussions on how multiple understandings and ways of seeing the world are attributed to the evolution of a cognitively fluid mind in anatomically modern humans see Boyer (1994), Mithen (1996) and Hoffman (2000).

ii Descartes described the mind as an immaterial substance that communicated with the body via the interface of the pineal gland. Descartes vision was of a mind distinct from body and world (Ariew 2000, see Meditations II and IV).
Chapter Two

Introduction

The previous chapter set out to establish how some people in the Irish Neolithic thought; in this chapter we build upon this evidence and consider how they created what they saw. Firstly, I question whether Irish passage tomb motifs, in their bare, decontextualised presence, tell us any more than that some Neolithic people liked to carve stone. Any attempt to understand the meanings of ‘megalithic art’ and their form in relation to the past societies that produced or used them, will eventually experience difficulties with how the terms are defined. Scholars currently consider the terms ‘megalithic’ and ‘art’ to be problematic, regarding them as Western concepts that carry different connotations when applied to the material culture of the past (see Layton 1991; 2000; Gell 1998; Tilley 1998; 1999a; Bradley et al. 2000; Conkey 2001). Indeed in many archaeological publications, the term ‘art’ is often thought of as being ill-defined and consequently confined to inverted commas (Skeates 2002, 166). This chapter will suggest the usage of alternative appellations, such as ‘visual imagery’, ‘visual culture’, ‘visual events’, ‘visual fictions’ and ‘decorative schemes’ as a means of stimulating further debate on the nature of prehistoric images.

In this chapter I consider how archaeology, as an enterprise in understanding past human endeavour, operates via the modern production of texts in propositional form (see Gell 1999a, 11). This creates a paradox in which we as prehistorians utilise text to understand a world in which text did not exist. It is therefore suggested that a better comprehension of the cognition of thought processes, or how Irish Neolithic people perceived their world, will derive from focusing first on what they had seen and second from what they made of what they had seen (Bloch 1998). Taking my lead from Bloch (1995) and Gell (1998), this thesis will abandon interpretations, linguistic fallacies (Dundes 1980; Gottdiener 1995) or ‘thought-traps’ (Gell 1999b, 213), founded on unambiguous visual meanings, definable symbolism and decipherable textual codification. In rejecting these decompositions of imagery, I remove myself from succumbing to the ‘treachery of language’ (Holly 1998). Instead, I will seek out alternative metaphors and ‘modes of attention’ (Baxandall 1997, 135), which further elucidate the motifs from Irish Neolithic passage tombs.
These alternative models regarding how people engage with vision, will introduce current theories on ecological psychology, neuroscience, neuropsychology and cognitive science (e.g. Ouzman 2000, 31; Bahn and Helvenston 2002, 11; Munz 2002, 437). By incorporating contemporary models from these fields, this chapter will amplify our understandings of how people in the Irish Neolithic ‘viewed’ their world. The motifs on Irish passage tombs offer a unique opportunity to pursue visual approaches as one can be certain that some people would have seen them. I aim to delineate how a spectator interacts with Irish passage tomb motifs, thereby placing the phenomenology of viewing three-dimensional objects for the first time at the centre of debate about Neolithic daily life.

Contesting ‘art’

The term ‘art’ derives from the Old French ‘ars’, meaning ‘skill’ (Morphy 2002, 649). Some contemporary scholars suggest that ‘art’ is the product of talented people who are often inspired by genius, madness or taste (Price 1989). Art from such a perspective is often described in terms of its semantic or aesthetic properties, which are used for ‘presentational or representational purposes’ (Morphy 2002, 655). Previous megalithic and rock art studies have, for instance, revolved around formal description. Reducing ‘art’ to descriptive, aesthetic and formal properties, however, limits the roles of the producers and consumers. Art has more recently been defined as ‘...any painting or sculpture or material object that is produced to be the focus of our visual contemplation or enjoyment...’ (Renfrew 2003, 66; see also notes that volume for discussion, 202). Such a definition does unfortunately focus more on ‘art’ as being solely ‘good to look at’ rather than ‘good to think with’.1

The term ‘art’ from an archaeological and anthological perspective is difficult to define, due in part to the imprecise boundary between ‘art’ and ‘non-art’, whose location shifts with fashion and ideology (Layton 1991, 4). Ventures within the twentieth century at expounding the term ‘art’ have been fashioned to encompass not just recognisable paintings and abstract paintings, but also anything that an artist defines as ‘art’ (Dickie 1997, 80-81). The doctrine being that ‘art’ is very much the free creation of the individual artist. Art is therefore characterised to be an ‘ultra-
Chapter Two

abstract' concept of an 'institutional' kind (Gell 1998, 188; Tillinghast 2003, 133). Studies in anthropology have, however, elucidated that this is a most unique perspective (Layton 1991; Gell 1998). It is proposed that one should instead consider issues of social expression, knowledge and understanding. Moreover, it is noted that the term 'art' does not exist in non-Western societies. As an illustration, the languages of Aboriginal northern Australia, such as the Kunwinjku language of a region with 'rock art', have no word for the notion of 'art' (Taçon and Garde 1995). It might therefore be as Sparshott suggests that art is '...so specifically framed within “our” civilisation that it is perhaps something native only to “us”...' (1997, 239). Clearly the contemporary characterisation of what is 'art' and what is not, is limited on empirical and conceptual grounds, and assists little in debates regarding prehistoric visual imagery.

Although I remove the appellation 'art' from this thesis, I will still acknowledge ideas derived from the modern art-world. Discussion within the western artworld, have for instance considered that 'making', 'production' and 'textual meaning' are no longer the basis for what is 'art'. This perspective on 'art' has largely originated from the artist Marcel Duchamp’s 'readymades' which contributed towards the movement of 'conceptual art' (Renfrew 2003, 97). Duchamp's 'readymade', the Three Standard Stoppages, and its subsequent works, are useful vantage points in illustrating the alternative ways in which one can consider Irish Neolithic images. The pieces of string used in the construction of the Three Standard Stoppages are related to sight lines, and to vanishing points. In addition to their references to perspective and projective geometry, the Stoppages allude to what Duchamp terms ‘...canned chance...’ (Duchamp 1973, 33). Duchamp used the Stoppages to design the pattern of lines in his painting the Network of Stoppages and then, after rendering this plan view in perspective, transferred it to The Bride Stripped Bare by Her Bachelors, Even (Duchamp 1973) (see Fig. 2.1). Duchamp was apparently interested in exploring a contested relationship between the bride and the bachelors, involving fragmentation and the delay of communication. Understandings are therefore separated from the bride and her bachelors through the acts of seeing, without words and text. In his notes, Duchamp explains that the bride sends her commands to the bachelors through
the ‘draft pistons’ and ‘triple ciphers’ that use a formal process constructed using the *Three Standard Stoppages* (Adcock 1984).

![Fig. 2.1. (a) Three Standard Stoppages, 1913; (b) Network of Stoppages, 1914; (c) Bride Stripped Bare by Her Bachelors, Even, 1915-23. By Marcel Duchamp.](image)

This thesis is not the place to discuss in depth the *oeuvre* of Duchamp⁶. What we can, however, extrapolate from his works is his quest for the ‘continuum’ and ‘unrepresentable’ realities and dimensions that exist beyond the ordinary (see Adcock 1984). It is interesting to note that the networks that Duchamp called ‘elementary parallelism’ (Hopkins 1998, 45), are similar to modern theories of ‘connectionism’, the idea that most knowledge and perception involved in daily life, does not involve linear, logic-sentential form but rather complex and integrated networks and nodal connections (Bloch 1998, 24; Zeki 1999, 67). Duchamp’s understanding of how one can experience images raises questions of whether Irish Neolithic motifs were merely engraved to communicate encoded meanings. Duchamp’s expectations of dimensional realities that can be experienced as an everyday practice were possibly influenced by the philosophies and mathematics of his time (Adcock 1984). Since the people of the
Irish Neolithic had no access to this ‘modern’ thinking, we need to consider how these perspectives assist this thesis. Anthropological literature is an excellent medium by which we can begin to appreciate that some people can experience images located within a flux and continuum, some without meanings, while others are fragmented, and that this perspective is by no means the preserve of an intellectual west. With this in mind, it is towards this data that I now turn.

What can anthropology contribute to an understanding of Irish passage tomb motifs? This question was one of the motivations for my discovery of the writings of the late Alfred Gell. Gell, who died in 1997, was one of the most influential social anthropologists of his generation. Initially inspired by extensive fieldwork with the Umeda people of Papua New Guinea, Gell produced a series of works that dealt with the concept of ‘art’. Gell (1998) attempted to create an anthropological theory of ‘art’ that dispenses with beauty, meaning, symbolism and other Western essentials for the definition of ‘art’. Gell announced that he wanted to apply an established methodological approach to the study of ‘art’, that of social anthropology, and ‘...be unoriginal in a new way...’ (1998, 4). Gell (1998) proposed that we consider agency, intention, causation, result and transformation. By amalgamating these alternative viewpoints, and by introducing the importance of awe, enchantment, magic and partial cognitive indecipherability in ‘art’, Gell (1998) was able to identify common properties in a variety of examples including the Mona Lisa, New Zealand Maori meeting houses, Kongo ‘nail fetishes’ and medieval cathedrals (see discussions in Chapter Five). Gell (1998) believed that he was able to provide the theoretical key to understanding ‘art’. Material objects are stated to be the equivalent of persons, or social agents. These agents operate within systems of action that ‘change’ the world rather than encode symbolic propositions about it (Gell 1998, 6). For Gell (1998), this is why agency is primary. Agents are defined as persons or things, which have the ability and intention to ‘cause’ something ‘in the vicinity’ or ‘in the milieu’ (Gell 1998, 7). Gell (1998) distinguishes between primary and secondary agents, with the former being intentional beings (e.g. patrons, ‘artists’ or originators), and the later being artefacts through which primary agents render their agency effective. These latter artefacts are described with the term ‘index’, to remove the appellation ‘art’ and to imply that they are indexes of agency. These indexes indicate by their existence
intentions, actions and efficacy. From this perspective, visual images are ‘about’, and located in, the milieu of social relations, which are in turn dynamic relations of agency (Gell 1998). Utilising Gell’s (1998) proposals, an Irish passage tomb design is equivalent to a person and indexes intention, agency and efficacy. The engraving need not be ‘beautiful’, although they generally are, nor does it only ‘symbolise’ or necessarily ‘represent’, although it can (see also Bloch 1995). Rather the passage tomb design is; it instantiates that to which it relates to as an index.

In Gell’s (1998) anthropological ‘art’ nexus, four terms are employed: artist/originator, index, recipient and prototype. These four categories are described as having numerous identities. For instance, the originator can be the maker or the patron; the recipient can be the audience or the buyer; the index can be any artefact from which agency can be abducted; and the prototype can be a god (for an idol) or a sitter (for a portrait). Furthermore, any of these four categories of person/object can be paired in an agent/patient relationship – that is one part acting on another. Such a dynamic directional relationship is deemed by Gell (1998) as essential, although he does concede that the direction can be unexpected. For example, just as an Irish Neolithic ‘originator’ may index their agency and intention in the production of a passage tomb engraving, so might the stone, through hardness and texture, dictate what would be done with it by the engraver.

Although Gell (1998) does eliminate any Western conceptions of the word ‘art’ from his discussions, he unfortunately seems unable to remove the term ‘art’ itself. Within his treatise, the term or compounds containing it are used throughout, thus prejudicing the arguments with pre-conceived notions of the language used. Gell is aware of this problem yet avoids it by stating ‘...excessive terminological consistency is the enemy of intelligibility...’ (1998, 12). In order that the reader of this thesis is not prejudiced by the language in which the inquiry is conducted, I reiterate my decision to dispense with the Western appellation ‘art’, and instead I will seek out alternative ways of understanding the ‘why’ and ‘how’ of visual images. I will take my lead from Gell who argued that indexes display ‘...a certain cognitive indecipherability...', that they enchant and confuse the viewer who is unable to recognise at once ‘...wholes and parts, continuity and discontinuity, synchrony and succession...’ (1998, x). Later
sections of this chapter will help elucidate why and how these cognitive observations are possible.

**Rhetoric cast in stone**

The philosopher Arthur Schopenhauer (1788-1860) once advised that we should deal with a work of ‘art’ as we would deal with a Prince – that is to wait until we are spoken to. This interesting advice is, however, mostly ignored in modern ‘rock art’ and passage tomb motif studies. Currently, scholars attempt to understand prehistoric images by attaching concept metaphors of language, narrative and rhetoric. This approach is understandable, when we consider that within the late twentieth century, most learning and training was predominantly through text. There was a structural relationship between intellectual education and the digestion of printed ink. This thesis will appraise the appropriateness of text analogy in *reading, deciphering, decoding* and *interpreting* material culture from Irish passage tombs, as a means of further understanding the possible worldviews of a textually illiterate Irish Neolithic people. It is proposed that in order to enhance engagement with the Neolithic, we should endeavour to see their ‘world-as-a-picture’, rather than their ‘world-as-text’ (Mitchell 1994, 16).

Within some archaeological literature there is a trend to consider the world from a contextual perspective. These interpretative models have been heavily influenced by postmodern literary criticism (especially deconstructionism) and post structuralism; most predominantly through the writings of Michel Foucault, Roland Barthes, Umberto Eco, Jacques Derrida and Paul Ricoeur. Hodder (1986) was one of the first archaeologists to suggest the artefact as text metaphor, insisting that ‘context’ also meant ‘with-text’. Hodder (1986) argued that the archaeological record could be ‘read’ as a ‘text’, and in doing so introduced an analogy between the possible contextual meanings of material objects and the meanings of written word, thus ‘...privileging the cryptographic skill and eloquence of the archaeologist as interpreter...’ (Patterson 1989, 556). Hodder’s (1986) contextual interpretation was not, however, accepted by all. Critics argued that his approach was essentialist, with an assumption that there is indeed a unified narrative text ‘out there’ that could be
read, based upon the competence of the archaeologist without prejudice from their own historical context (Johnsen and Olsen 1992). Furthermore, it was argued that Hodder (1986) did not fully appreciate the fluid, contested and multiple interpretations that are available in both the past and the present (Barrett 1987).

In response to these criticisms, Hodder (1993) has recently conceded that material culture narratives should indeed be contested. Following Paul Ricoeur, Hodder (1993, 270) argues that through a process of ‘mimesis’, people compartmentalise their lives into daily lived experiences and narratives about these experiences. It is argued that these narratives are encoded in to a material rhetoric that represents notions of metaphor, irony, plot, argument and ideology; ‘...In...material culture...it is possible to pun and quote, and sequences of material culture styles can result in cliché or kitsch...’ (1993, 271). Although I find Hodder’s (1993) model of Sitagroi, northeastern Greece imagery refreshing in its ability to demonstrate the nuances in the construction of social and economic sequences, I am still not convinced by the appropriateness of employing modern romance and (post)modern ironic narratives, to ascertain the ‘meanings’ of prehistoric motifs. By doing so, Hodder (1993) imposes Western rationalities onto the peoples of the past (see discussions on intellectual imperialism in Bloch 1998, 101). Furthermore, by considering Ricoeur, Hodder (1993) is unfortunately limiting his explanations of motifs to ‘story-lines’ constructed with beginnings, middles and ends. In the context of sequenced Irish passage tomb motifs, it is unlikely that the first engravers envisaged the final forms and overlays that we see today.

Rather than follow literary masters, I suggest we very briefly consider a sculptural one. Michelangelo Buonarroti (1475-1504) was an artist and creator of works that attempted to express the full breadth of the human condition, from a neo-platonic perspective. Being a Catholic, Michelangelo was particularly interested in the life and love of Jesus, especially around the time of his crucifixion. Such passion resulted in the production of several sculptures on this topic, which he left unfinished. Among these unfinished works, we can include his San Matteo, the Bearded slave and Day. Although there may have been extenuating reasons for these pieces remaining
incomplete, such as being called back to Rome, it is believed that Michelangelo's *non finito* reflects the sublimity of his ideas (Schulz 1975). By these sculptures remaining unfinished, the spectator is invited to be imaginatively engaged, with the spectator's (*non finito*) view activating previous thoughts, concepts and beliefs. Such processes are not as prevalent with finished works, with the piece demanding, and the viewer requiring less active cognition (Zeki 1999, 32). Interestingly, Michelangelo believed that the images that he carved existed in the mind and were extracted from the stone.

The notion of images being from a neurological origin, and then released from the stone is one that will be reviewed later in this chapter. By using sculptural process as opposed to textual, we can begin to appreciate how Irish passage motifs were experienced, in an imaginative and unexpected manner, rather than in a post-structuralist narrative with definable boundaries.

Despite my concerns with textual analogies, usage of them permeates previous accounts and still persists, most commonly in interpretations of 'rock-art', 'megalithic art' and prehistoric visual imagery. In one of the earliest interpretations of the carvings at Newgrange, Colonel Vallancey constructed an alphabet from them and read the name *Angus* (Coffey 1912, 18). Although Hoare (1807, 256) later rejected these claims, Wilde argued that the carvings were *tymboglyphics* or *tomb-writings* (1849, 200; see also Deane 1886, 162); this opinion was challenged by Coffey who suggested that it was more likely that the carvings simply represented the style of decoration of the time, and marked the beginning of decorative 'art' and architecture in Ireland (1912, 19). Later scholars still, however, attempted to 'decipher the crabbed characters' (Macalister 1921, 217), and understand the 'vocabulary of this language' (Herity 1974, 103) by dissecting its syntax and meaning (see also Breuil 1934; MacWhite 1946, 66; Piggott 1954, 211-13).

More recently, Tilley's (1991) examination of rock carvings at Nämforssen in northern Sweden is one of the most influential studies of 'images' as text. Here, he constructs a 'grammar' for the material culture that can be 'read' and 'decoded'. Tilley (1999a) later refined his models in an examination of the rock carving site at Högsbyn in western Sweden. Tilley (1999a) poetically evokes an image that sees the engravings
as pages of a torn book washed up by the water onto the rocks. Tilley (1999a) placed this visual imagery into a landscape setting, yet still concluded that this amplifies an 'encoded narrative' that can be 'read' through and linked it to the passage time and social relations (see also Layton 1995). Since Tilley's (1991; 1999a) models, there has been little deviance from text analogy, within European 'rock-art' studies. Indeed, within a recent book about European landscapes and 'rock-art' (Nash and Chippindale 2002), nearly every paper utilises text analogy in its interpretation. For instance, one paper by Baker (2002) compares the graffiti by Russian soldiers onto the German Reichstag in 1945, to abstract 'rock-art', even though it is essentially written Cyrillic text. Interestingly, even Tilley (2003, 138) questions the appropriateness of this approach. The 'universal' textual analogy that pervades this book is ultimately re-enforced by Nash in which he propounds that 'rock-art' does possess 'rhetoric' and does represent a 'narrative' and 'language' (2002, 176). This position is severely weakened by images failing to fulfil some of the basic attributes of linear text (Ouzman 2000, 32) and language. For example, on their own visual images cannot make inductive or deductive arguments, particularly those in which there are both a premise and conclusion (Birdsell and Groake 1996; D. Flemming 1996). Moreover, visual images cannot point out the weaknesses in another argument or engage in debate, unless supported by text (Lake and Pickering 1998). Some of the difficulties with understanding prehistoric visual images can therefore be attributed to the problems of rendering into a text something which is not a text (see also Bloch 1998, 24).

I agree with Thomas (1998, 108) when he suggests that any metaphor that enhances human relationships with the material world deserves consideration, and that text-metaphors have certainly been useful in creating better understandings of the past. Yet for the textual analogy to be truly useful in understanding non-textual images, we need to reconsider what is meant by the term 'text'. For some it represents a semiotic system (Saussure) or structuralist system (Lévi-Strauss), a hermeneutic interpretive system based on structuralism (Gadamer and Ricoeur) and for others, all or none of these (Buchli 1995; Yentsch and Beaudry 2001). These textual manifestations represent the pursuit of meanings in the past, which can be inappropriate (Ouzman 2000, 31). Bloch (1995) has demonstrated how the analogy to text, especially when
understood in semiotic or structuralist terms as artefacts to be read or decoded can be erroneous. This point is explicated through an examination of the geometric abstract carvings on Malagasy wooden house posts. The visual images on these house posts are stated by the Zafimaniry engravers to be meaningless and pictures of nothing (Bloch 1995, 213). They may possess the names of other objects or entities, such as the moon and the rain, but they do not in any sense ‘mean’ those objects (Bloch 1995, 214). The images do not act as signifiers revealing something signified, in the manner that a literary text would signify meaning by arbitrary signifiers. Rather than ‘meaning’ the images ‘magnify’ and continue the growth and impermanence of life and the ‘permanent’ house that the posts support (Bloch 1995, 215; see also V. Turner 1982, 14 for discussion on ‘meaning’ versus ‘experience’). For the Zafimaniry, it is the process of maturation that is important; the hardening of people and teza (translated as ‘white of egg’) wood, from a young bendy state to that of a solid and hard inner core (Bloch 1998, 33). The motifs are a celebration of this process of maturation. Interestingly, this notion mirrors Gell’s (1998) position that decoration is a process. It is the process of decorating an object that is important, rather than the finished product itself; ‘... patterns... generate relationships over time between persons and things... [always creating] “unfinished business”...’ (Gell 1998, 80 original emphasis). In another example, similar inspirations and fluid processes were also noticeable in the Synthetic Cubist movements of the twentieth century. Malevich (1959) writes that for Pablo Picasso, objective nature is only the starting point by which motivation creates new forms and ceases to be mere representation. By focusing more on process rather than meaning, I aim to avoid what Bradley terms the ‘illustrative fallacy’ (2001, 261), in describing how Irish Neolithic motifs may have affected the ways in which people think, act and experience their world.

Gell was primarily concerned with removing linguistic models such as ‘a grammar of style’ ‘visual grammar’ and ‘visual-ese’ in order to further understand relationships and social process in any analysis of images (1998, 164). Gell rejected that anything except language itself has ‘meaning’ in the intended sense. Only language has ‘meanings’ and visual images are not part of a language and nor do they constitute an alternative language (Gell 1998, 6). Gell (1998) propounded that one can discuss visual objects using signs, yet visual objects are not, except in special circumstances,
signs themselves with 'meanings'. If they do indeed have 'meanings', then they are part of a language, such as graphic signs, and therefore not an individual 'visual' language (Gell 1998, 165). Following Gell’s (1998) approach, visual images are a system of action, intended to alter the world rather than 'encode' symbolic propositions about it, as if they were texts. To demonstrate this point I refer to Nick Thomas who has recently commented on how the Maori people of North Island, utilised their competitive nature to develop large elaborately carved and painted meeting houses (1995). The houses were designed to serve as an indication of wealth, skill, power, sophistication and ancestral endowment. Although highly decorative, these houses ‘... were not “symbols”... but vehicles of a collectivity’s power... Distinctions between function and meaning, use and expression, instrumentality and symbolisim obscure what was integrated and processual in these collective presentations of tribal efficacy...’ (N. Thomas 1995, 103 original emphasis). Interestingly, Hoare made a similar point about the ‘meanings’ of the Newgrange passage carvings in the nineteenth century when he stated that ‘...[s]ome antiquarians have carried their zeal so far as to discover (in idea) letters on the stones... those marks which I have observed on many of the stones bore very little resemblance to letters... (1807, 256).

Fortunately, the situation of how we engage with prehistoric imagery is not as negative as my exposition on textual analogies may suggest. In an attempt to refresh what ‘...would otherwise remain dead...’ (Panofsky 1993, 24), I will consider the discourse of a relatively new discipline, that of visual culture studies. By considering these alternative theoretical positions, I will augment discussions in this chapter, which taken alone might suggest that this thesis is adopting an essentialist and existential position supported with biological universals. Visual culture is concerned with any form of apparatus designed either to be looked at or to enhance natural vision, from an oil painting, the Internet or indeed Neolithic passage tomb motifs. Some modern scholars currently advocate that we are increasingly a visual society, as we are no longer informed solely by text, and they suggest a 'visual' or 'pictorial turn' (Mitchell 1994, 16). Daily we are informed and saturated with images ranging from the advertisement, television and the Internet (Elkins 2002). This is not to suggest that human experience is now more visual and visualised than ever before (as proposed by...
Mirzoeff 1999), but rather that we utilise different visual regimes from those in the past (cf. Poster 2002; Rockwell 2002). Human visual experience and visual intelligence, both past and present, is founded on practices of spectatorship: the look, the gaze, the glance, observation and surveillance (Mirzoeff 1999). It is argued that these motions cannot be fully explicable in models of textuality.

The visual is not simply the medium of information; it also offers a sensual immediacy that cannot be rivalled by print media, the very element that makes visual imagery of all kinds distinct from texts. There is an undeniable first impact on sight that a written text cannot replicate, for example first seeing the Sistine chapel or watching the first man walk on the moon. It is that exhilarating edge that separates the remarkable from the humdrum and this surplus of experience moves the differing components of the visual image in to a relation with one another (Mirzoeff 1998b). At the heart of all visual events is an intense moment which can involve sublime feelings of ‘admiration, awe, terror and desire’ (Freedberg 1989, 433). It is this sensational dimension to visual imagery that led Mitchell (1994) to argue that any interpretation of modern Western culture needs to consider the ‘world-as-a-picture’ rather than the ‘world-as-a-text’. Since there is no current evidence for inhabitants of early Neolithic Ireland being textually literate, I consider there being less resistance in proposing the Neolithic ‘world-as-a-picture’ than Mitchell (1994) may have in proposing ours is.

So if we are to imagine a Neolithic world in Ireland that was viewed rather than read, we have to address notions of visual engagement and the politics of spectatorship:

1) How do people view objects?
2) How do objects engage with the viewer?

Currently models regarding ‘observation’ are heavily influenced by Foucault (1979) and his theories on the ‘panoptic gaze’, which is essentially a surveillance gaze based on restraint and the object being something to look at. Observation in this model is ‘fixed’ and one-way, it is the viewer who has the power and controls a fixed or static visual engagement and scrutiny, creating what Carrier terms a ‘tourist gaze’ (2003, 5; see also Urry 1990). The eye is regarded as the centre of the visual world, being the
sole mediator and controller over appearances and space. Sight is deemed to 'isolate' the viewer, situating the observer 'outside' what they view, at a distance in a one-way direction (Ong 1982, 72). As Cosgrove comments, '...visual space is rendered the property of the individual, detached observer, from whose divine location it is dependent, appropriated object...' (1985, 49). Foucault's (1979) influence is most evident within anthropological accounts written by Western scholars. For instance, Stoller in documenting the Songhay of Niger, comments that vision sets up a distance between the spectator and the object seen, thereby creating a spatialised gaze (1989, 120). In studying the Umeda of Papua New Guinea, Gell has similarly stated that vision is a 'static' form which isolates and abstracts or removes the viewer from the environment, through processes of observation (1999c, 236). Carpenter's examinations on Inuit sensory experience led him to conclude that vision has 'fixed boundaries' creating a 'pictorial space' that is 'boxed-in' and static (1973, 35). More recently these modern assumptions have unwittingly created controversy with Australian aboriginal people of the western Kimberley region. The heated debate was the result of the Gibb River repainting project (Mowaljarlai et al. 1988), which directly contributed to a symposium on retouch at the first AURA (Australian Rock Art Research Association) Congress held in Darwin, Australia. This discussion emphasised the broader question of whether contemporary aboriginal painters should be 'allowed' to retouch their 'ancestral' rock images, through a practice that they believe is 'culturally' required (Conkey 2001, 274). As David Mowaljarlai, of the Mowanjam community near Derby in Western Australia comments '...we have never thought of our rock-paintings as “Art”. To us they are IMAGES... IMAGES with ENERGIES that keep us ALIVE...' (Mowaljarlai et al. 1988, 691, original emphasis). It is argued that the modern researchers have privileged a notion of a 'static' or 'original' stasis to the images over the ideal of ongoing connectedness that the aboriginal people harbour.

Following Foucault's (1979) model, the engraved motifs on the passage tombs, are set in an asymmetric relationship of visibility. The 'seer' has a sense of omnipotent voyeurism, with the 'seen' imposed a sense of being surveyed with no autonomy in the situation. Although Foucault's (1979) models of surveillance are useful, and have clearly influenced scholarly thought, one must bear in mind that they were initially
based upon Jeremy Bentham’s panopticon Building. This construction was designed in 1791 for visual omnipotence over the seen in institutionalised environments, such as prisons, asylums and hospitals. Foucault depicted the panopticon as a ‘...pure architectural and optical system...’ that operated subjectively through a ‘...fictitious relation...’ (1979, 205). The panopticon building was configured as a twelve-sided polygon, with a central windowed tower, that provided a panoramic view of the separate peripheral illuminated cells (see Fig. 2.2). Positioned in the central tower, a guard could see ‘every’ inmate without them being able to see the guard, thus placing the viewed subject in a state of ‘...conscious and permanent visibility...’ (Foucault 1979, 201).

The panoptic gaze demonstrates a ‘...peculiarly modern project of objectification...’ (Ingold 2000, 253) that reduces vision to a one-way ‘linear perspective’ or reflection (see Rodaway 1994, 131). Moreover, it was designed solely for modern social situations; as such I wondered if observation and surveillance models are best to impose upon passage tomb motifs. With these images the position of sight is limited;
one can only stand in one place at one time. Therefore the sense of visual omnipotence in the viewer is only imaginary, demonstrating what Baudry terms an ‘...over-cathexsis...’ with perception (1986, 316). The panoptic model emphasises the subjective effects of imagined scrutiny and permanent visibility onto the observed (extramission); yet it does not explore the subjective effects of the observed - onto the Neolithic observer (intromission). To engage with this, we need to seek out alternative models for visibility. Following Friedberg’s (1998) approach to modes of visual practice in modern cinema, I propose we briefly consider ‘gazes’ such as panoramic and dioramic, which were originally based on models that were designed to transport rather than confine the spectator and subject. These entertainment devices were designed to distort reality, to make it artificial. The models produced for the viewer a ‘virtual’ spatial and temporal visual mobility, creating a simulated or imaginary illusion of mobility (Friedberg 1998). In considering these visual engagements, we can free the Neolithic spectator from Foucault’s (1979) ‘prison-world’ visual surveillance.

The panorama was first patented by Robert Barker in 1785 and was originally a 360 degree cylindrical painting, generally of a landscape setting, viewed by an observer in the centre in a darkened room. Essentially an illusionary device, the panorama did not physically mobilise the body, but provided virtual spatial and temporal mobility. It brought the country to the town dweller and transported the past to the present; creating a simulated reality. The panoramic spectator lost ‘...all judgement of distance and space...' and ‘...in the absence of any means of comparison with real objects, a perfect illusion was given...' (Gernsheim and Gernsheim 1968, 6 cited in Friedberg 1998, 258). This effect can easily be achieved within passage tombs, such as within Newgrange Site 1, Co. Meath, where the spectator is in a darkened environment. Here there are no markers of time and place to compare the seen objects and the passage tomb motifs with, thus dislocating references to the outside world, and possibly creating a mirage of simulated realities. Through analysis of ‘near-death’ events, Dronfield (1996b) considered the effects that the passages in the Boyne valley tombs play in creating ‘tunnel’ experiences (see also Lewis-Williams and Pearce 2005). These engagements are reported to express the journey, be it real or imagined,
between the spatial and conceptual separate domains of the worlds of the living and dead.

The Diorama was created by Louis Jacques Mandé Daguerre in 1822 and was a viewing device that expanded upon the panorama’s ability to transport the viewer. The dioramic simulation was created in part by the manipulation of light through a transparent, often watercolour painting. The viewer saw a scene composed of objects arranged in front of a backdrop and after a few minutes, the scene was rotated 73 degrees to expose another viewing. The diorama was designed to (re)construct and simulate reality, altering the relationship of the viewer, to the spatial and temporal present. The viewer is still immobile but the views become mobilised. Later in this chapter I will utilise neurology to elucidate how the viewer is never truly immobile, with the eyes constantly moving and surveying. As Ingold poignantly comments ‘...[w]here there no movement of the body and its sensory organs relative to the environment, nothing would be perceived...’ (2000, 254). At this juncture the notion of immobility refers to the spectator ‘standing’, ‘lying’ or ‘squatting’ still, possibly being constrained by the internal architecture of a passage tomb (see discussions in Chapter Four).

So if we consider the passage tomb imagery not from a panoptic-surveillance gaze but rather a panoramic or dioramic gaze, we can imagine an Irish Neolithic person looking at an image, maybe standing immobile, not controlling the visual encounter, not empowering the visual engagement, but rather playing an interactive creative role. The Neolithic spectator is ready to participate with the visual reality, a virtual or simulated reality placed in front of their body. Through these visual interactions, these two-way fluid engagements, the image is able to influence the person’s experience. One of the best modern examples of this effect is the image of Kitchener saying, ‘Your country needs you’. The image literally enters the viewers ‘real-life’ space, with Kitchener’s direct gaze creating an interpersonal interaction (Messaris 1997, 21). Images therefore can momentarily destroy one perception of reality and instantaneously replace it with another. As such, the viewer of any image, be it a nineteenth century watercolour or passage tomb motif, is temporarily ‘immersed’ and ‘engaged’ in a world not present, a simulation of a ‘world-as-a-picture’. Moreover, in
considering panoramic and dioramic gazes, we can envisage an Irish Neolithic spectator absorbed in the pleasures or horrors of artificial worlds, the sublime experience of immersion worlds not present (Cochrane 2005, 15). Visual images, through their nature and our neurobiological construct, are not stable but rather change their relationship to exterior reality at particular moments in time and place. As one interpretation of reality that is presented by an image loses ground, another takes its place, creating a matrix consisting of realities within realities (Lyotard 1993, 9), or simulations within simulations (see Chapter Seven). Images that assist in fabricating or warping an interpretation of reality are therefore much more than a static 'world-picture'; instead they are fluid 'visual-events', 'visual actions' or 'eye-cons', neurologically devised by humans as 'tactics' to place us within the world of everyday life (Messaris 1997, 7; de Certeau 2002, xix). In short, ‘...the process of vision consists in a never-ending, two-way process of engagement between the perceiver and his or her environment...’ (Ingold 2000, 257-58).

**Memory and meaning as internal rumours**

At this juncture it is appropriate to enquire about how we engage with past events and past interactions. The question I pose is: what is the meaning of memory in a world of experiences? Availability of space dictates that I can only attempt to answer this question in part, but such an attempt will allow me to understand how some visual images may in certain contexts have representational ‘meanings’ via memory systems. I also do this to add balance to my previous discussions drawn from Gell and Bloch, regarding ‘meaningless’ objects and non-remembered semantic or autobiographical pasts, that can be looked at from a non-semiotic, non-representational and non-linguistic perspective. This section follows Bergson who proposed that ‘...there is no perception which is not full of memories...’ (1911; quoted in Whittle 2003a, 109). Memory is a complicated and fluid thing, best thought of as a ‘relative’ to truth although not its twin, and based upon an open-ended series of remembering and interactions (Kingsolver 1990; Whittle 2003a). Memory is constructed through sensuous engagements in the world, it is always contextual and it is through the acts of remembering and movement that memories are forged (Ingold 2000, 148).
From this perspective, the purpose of the Irish Neolithic passage tombs motifs might be to render explicit, through practices of remembering, social myths and narratives. Connerton describes this creation of memory through human behaviour as 'incorporated practices' (1989). Commenting on these acts, Bradley (2002, 12) has recently stated that the building and 'inscribing' of monuments demonstrates dynamic processes that perpetuate a particular view and social memory of the world. Each process would have demanded interpretation with only the people who had access to the social dialogues or past interactions being able to understand the 'meanings' of the designs. Therefore, the Irish passage tomb motifs may represent what Clarke referred to as 'coded survival information' (1968). These coded practices refer to a specific 'technology of remembrance' (A. Jones 2001a, 339). Such a technology engenders the view that the image as an artefact stands as a particular conceptualisation of the cognitive processing of memory, with image production in the minds eye being enhanced by memory. In this scenario, images stand as templates for further memories of images. Andy Jones (2001) has noted, however, that this engagement produces a 'memory system' in which there is a passive relationship between the subject of the image, the producer and the image produced.

Although I remove 'meanings' from my study of the Irish passage tombs (as discussed earlier), I must concede that anthropology does elucidate that some people do prescribe 'meaning' and narrative to their visual images. I will briefly discuss some examples to remove this thesis from possible criticism of selective readings. The anthropologist Morphy (2002, 664) is one of the main proponents of the 'representational systems', or how imagery 'encodes meaning' approach (see also Layton 1991; 1992). Morphy (2002) draws upon Munn's (1973) study of the imagery of the Walbiri, an aboriginal people from central Australia, to argue that the Walbiri 'signs' are a system that creates 'meaning' by ordering relationships between different dimensions of reality. For example, a depicted circle image might 'mean' a nest, hole, tree, fire, egg, dog or any number of permutations (Morphy 2002, 661). In another context, Nelson's (1983, 243) investigation of the Koyukon of Alaska, describes how he was taken by an elderly women to the forest, where the late Chief Henry and his wife Bessie had their fishing camp. The elderly lady explained how the marks on the
Birch trees demonstrated where Chief Henry used to select wood with the best grains to make snowshoes or sleds, or where Bessie weaved baskets. For the elderly lady, the markings or 'signs' represented meanings of a past and evoked memories of that past. The marks were not just objects of memory, but also a practice of remembering (see also Ingold 2000, 148). The Walbiri example utilises a semiological perspective and the Koyukon is more phenomenological in nature. Both are useful, yet are limited in an archaeological context, for we cannot speak to the people in the past.

My next two examples briefly offer a cautionary note on how we employ anthropological examples of 'meanings', narratives and remembered pasts. The first is retold by Layton (1992) who records how Bill Nayidji, from the Bunidj clan in the south west Kimberleys, Australia, discovered a hitherto unknown Ngalyod (Rainbow Serpent) painting. Although this painting had not been seen before or discussed by his father and grandfather, Bill Nayidji instantly created the 'real' meaning and narrative of the image from his 'memory' (Layton 1992, 118). The second example is Klassen’s (2000) study of the narratives that surround the images at ‘Writing-on-stone’ located in the Milk River valley of southern Alberta, Canada. Klassen (2000, 65) explains that although narratives of the images did exist in some form in pre-European contact periods, the degree of narrativity in the post-contact far exceeds the previous epochs. The increased narrativity surrounding the motifs is argued to be a direct consequence of internal social resistance to the affects of direct and indirect European ‘culture’ (Klassen 2000, 66). Confronted with these examples, it might be suggested that some accounts of ethnographic ‘meanings’, social memories and narratives that we may acknowledge, are likely to be distorted or amplified by an European presence.

Referring back to the modern artworld, the work of the twentieth century artist Max Ernst demonstrates how visual images in certain contexts can function as memory systems and processes that transmit memories over time and space. In his painting Vox Angelica (see Fig.2.3), Ernst uses collage fragments, of his own œuvre, as mnemonic and structural emblems. Here, geometry is used as 'memory charts' to express Ernst's hermeneutic belief in architectural settings, resonating with his thoughts on some social practices, such as the anti-Catholic movement, the masculinist traditions of the Cubists, and the Nazi occupation of France (Hopkins
1998, 175-179). Ernst draws upon elements of these social acts as an influence for *Vox Angelica*, which creates a situation whereby the visual image references ‘meanings’ from the world, whilst emulating them. Images are therefore, through processes of citation, transformation and repetition, externalising social memories (A. Jones 2001b). In another context, Barrett (2001, 154) has addressed how social practice draws upon memory, past experience, expectations, desires and a communicative engagement with other co-inhabitants. Experience therefore creates material practices, which in turn create new experiences (Barrett 2001). Through the practice of creating *Vox Angelica*, Ernst is not only influenced by ‘meanings’ and narratives in the world, but is also depicting new comments about the world in general. Yet it should be noted that although one can ‘see’ how the painting *Vox Angelica* conveys these ‘meanings’, it is unlikely that an ‘uninitiated’ spectator would arrive at the same conclusions.

![Fig.2.3. Vox Angelica 1943. (Hopkins 1998, colour plate 8).](image-url)
Clearly there are a wide range of possible ‘meanings’ and memories, or none at all, for the archaeologist to choose from. Frazer in studying the passage tomb complex at Loughcrew, Co. Meath (see Chapter Five), has for example stated that the search for the past ‘meaning’ content of passage tombs is a ‘fruitless exercise’ (1998, 205). Thomas also argues that the precise ways in which events are experienced or understood are likely to be multiple and fleeting, thereby rendering it ‘impossible’ to approximate what ‘they’ thought in the past (2001, 180). This debate is complicated by psychologists who have proposed that visual working memory is not functionally analogous to other working memories (such as verbal), and that there are different cognitive processes underling visual memory and visual imagery (Andrade et al. 2002). As a result, I argue that it is more prudent for the Neolithic investigator to focus more on the creative flux’s that help people engage with a real or imagined world, rather than the ‘lost’ memories and ‘meanings’ that they may or may not have envisaged. With this in mind, I now consider the various ways of seeing.

**How we think we see: neuro-visions**

Why does the archaeologist need to appreciate the main elements of visual neurology (i.e. the visual pathway) in an investigation of Irish Neolithic passage tombs? In short, it is because one of the essential aims of my thesis is to produce an understanding of how the motifs operated within the broader context of the Irish Neolithic. By examining the neurological processes that make visual engagements possible, this section will demonstrate ‘how’ people can consciously perceive an internal visual image, after being stimulated by an external one. Most interpretations of Neolithic activities employ general psychological universals the moment they attempt to convey how the people saw their world and what motivated their actions (cf. Tilley 1994b; Brück 1998; Fleming 1999; Cummings 2000b). These universals should not, however, escape critical examination, as the psychological disciplines themselves have developed significantly in recent years. Neurophysiology is an extremely complex field and this chapter will only offer a brief synthesis for the benefit of readers without prior knowledge. The debate within contemporary Western thought on ‘how’ people ‘see’ deserves an entire thesis in its own right. Here, I will
extrapolate themes that assist in delineating that the Neolithic spectator’s eyes were not passive recorders of a pre-existing world, but rather played active roles in constructing every aspect of their visual experience. We may never know what they thought when they saw an image, but we can move closer to understanding how they engaged with an image. For instance, visual imagery in any given society or group of people may, in a sense, have differing encultured, iconographic, functional, aesthetic or decorative ‘meanings’; or none at all (Washburn 1983). Yet on a basic level, they all share fundamental similarities which are structurally neurobiological in nature.

As mentioned in Chapter One in this thesis, visual engagement involves not only the eye and the brain, but also how the environment is structured external to the body (Gibson 1979). Visual experiences incorporate the arrangements of objects and surfaces, distances and depths with colours and textures (Gibson 1979). People can locate and orientate themselves through vision and they are able to distinguish places, people and objects as a result of their visual characteristics. Rodaway (1994, 115) argues that vision is essential to the formulation of spatial relationships; we ‘create’ space through vision via an awareness of the extent and content of space and our position in relation to things around us. Such experiences help formulate a ‘temporality of vision’, concerned with movement, duration and continuity. Movement is seen through a relationship of people and objects to apparently ‘static’ components of the environment, with continuity and duration being established by observations on these ‘changing’ or ‘static’ proponents (Hoffinan 2000, 141). Visual encounters therefore enable people to be aware of the presence or absence of change, its manifestations and consequences.

Vision is dependent on the pattern of light and the arrangement of surfaces in the environment, with respect to that light (Gibson 1979). In the dark, our visual abilities are diminished. Sight, through our eyes, enables visual images to be constructed. These presentations are appearances of phenomena in light, but not the phenomena themselves in their fullness and depth (Rodaway 1994, 117). Sight is both abstract and synthetic, in that it creates an image by translating the patterns of illuminated surfaces, such as objects and people. Sight is the action of recording light sensations with the eyes and then composing them within the brain (Rodaway 1994, 118). Sight is
enabled by the visual pathway, which consists of three principal areas: the eyeball, the post-retinal pathway carrying signals to the brain, and the visual areas of the cerebral cortex (the outer surface of the brain, or areas V1, V2, V3, V3A, V4 and V5) (Hubel 1995, 59). Between the detection of light by cells in the retinas and the conscious sensation of perceiving a visual image, a complex process of encoding and dissecting the sensory data takes place along this pathway (see fig. 2.4).xii

Visual perception or conscious vision is conventionally thought to occur in the brain, with the brain making contact with the external environment through the sense organs (Coren et al. 1999, 2). Contrary to previous thought, we do not ‘see’ with our eyes but rather with our brain, in the primary visual cortex (Zeki 1999, 15). It is useful to envisage the eyes as being merely the windows or lenses to the world. As such, if our ‘windows’ or lenses are coloured, the view of the world is tinted (Coren et al. 1999, 50). In simple terms, our visual experiences are thought to represent how the brain physiologically processes and modifies information through the medium of light that enters the eye. How these processes ultimately result in the conscious perception of an integrated visual image is still unknown to psychologists and neurologists. Current thought is that the phenomenon or experience that we term ‘consciousness’ is diffuse, being spread over the whole of the cerebral cortex and indivisible from...
neurophysiological structure (i.e. the central nervous system) (Hubel 1995, 24; Zeki 1999, 67).

There are several contesting theories of how we see the world. The first 'extramission' theory revolves around the notion that vision involves an outward projection of rays through the eyes. This 'sending out' view of vision depicts sight as an active process, in which the viewer looks at things and can decide where to direct their attention. It was argued that the eyes emitted light or fire, and that nocturnal animals supported this notion as they could see at night (Hoffman 2000, 66). The second main theory is that of 'intromission', the idea of the 'sending in' of images of light through the eyes. It has been questioned, however, how one is able to pass objects the size of a mountain, on a cinema screen, through the tiny pupil of the eye (Hoffman 2000, 65). The orthodox scientific theory of vision was postulated by Johannes Kelper in 1604; a theory of refraction by spherical lenses. Kelper demonstrated that the eye has one clear function: to focus an image onto its retina, operating just like the image in a camera obscura (Hoffman 2000, 66). In this model the retina is not a 'passive' recipient of images, instead it actively transforms them, utilising millions of neurons (cells) working in parallel. These data are received via fibres from the retina to the cerebral cortex, V1 (Zeki 1999, 18). Previous neurological models described seeing as a passive process with understanding what was seen an active process (Zeki 1999, 20). Current neurological developments into what I will term 'neuro-vision' have elucidated the roles that other areas of the brain perform (such as V2, V3, V3A, V4 and V5) (see Fig 2.5). This proliferation of newly discovered visual areas, which processes different aspects of the visual scene such as form (area V3), colour (area V4) and motion (area V5) have demonstrated how all vision involves active spectators (Hoffman 2000). Such discoveries have helped create the view that '...vision is an essentially active search for essentials...' (Zeki 1999, 21). What the visual brain is doing is seizing from continually changing information the fundamentals and distilling from these views the 'essential' character of objects and situations (Zeki 1999, 21). The 'essentials' provided in our context are the passage tomb motifs and it may be that the motifs function in assisting the visual brain to, adopting a phrase by Tennessee Williams, 'snatch from the eternal the desperately fleeting'. From such a perspective, one of the performances of the passage
tomb motifs might be a collaboration with the functions of the brain - to distil knowledge of an ever-changing world.

Fig. 2.5. The visual brain consisting of multiple specialised areas (Zeki 1998, 16).

Sheldrake (2003) has recently proposed an alternative theory that incorporates all three positions, and states that there is both an outward movement of attention and an inward movement of light. The images of the objects we see around us are described as being where they seem to be, outside our heads, rather than inside the brain. This outward projection is attributed to occur within mental fields, named ‘perceptual fields’ (Sheldrake 2003, 206). Such a model is similar to Velman’s ‘reflexive model’ of the mind, which advocates that ‘...the initiating stimulus (the observed) is an entity located in space beyond the body surface that interacts with the visual system of the observer to produce an experienced entity out in space beyond the body surface...’ (2000, 114). Although Velman does not understand how this happens, he does note that this does not alter the fact that it does happen (2000, 115). Sheldrake (2003) has attempted to prove that the ‘extended mind’ theory (see also Clark 1997, 64; Gell 1998, 222) is in operation through a series of daily life examples. The most stimulating one is about staring at another person from behind; the projection of the viewer's attention extends their field of vision on to the person being stared at. This image of the person is therefore projected onto the person through a ‘perceptual field’, which alerts the person being stared at, causing them to turn around without knowing
why. Such new and exciting models regarding vision are currently hard to empirically prove and do mirror the ‘fringe’ ideas of cosmic vibrations, energy flows and chi. Yet what they do share with orthodox theories is the notion of the viewer not being involved in a ‘passive’ engagement. The spectator is creatively and actively constructing what they see, whether it is in the V1 cortex or whether it is a projection into the world. As Zeki propounds, ‘seeing is perceiving is understanding...’ (1999, 80). Visual imagery, whatever its medium is actively created with the brain, rather than just the eye, with mind rather than just the retina (Zeki 1999, 215; Hoffman 2000, 24). The spectator is literally creating a world and a view of that world, or worldview, from what they experience in the environment. How we think about the implications of this visual engagement, how this action is encultured and how neurobiology can further inform us about Irish passage tombs will be considered in the following sections.

The visual impact of patterns

Some previous interpretations of Irish passage tomb motifs have unfortunately lacked consideration of the visual impact of the images themselves. Traditional explanations have incorporated value judgements on the motifs’ ‘quality’ of execution, design and aesthetic ‘appeal’ (e.g. Herity 1974; Shee Twohig 1981). As mentioned previously, attempts at ascertaining complex Irish Neolithic aesthetic values from a contemporary Western perspective are of limited value. Neurobiology can, however, allow some universal cross-cultural generalisations to be made. For instance, studies demonstrate that certain types of pattern can cause visual discomfort, optical illusions, headache and dizziness. During the late twentieth century, there was a movement of what became termed ‘op art’, due to its optical effects. Works were produced consisting of coloured or monochrome patterns of curved or straight lines, grids and dots, which resulted in the viewer experiencing discomfort, optical distortions and systematic errors that misrepresent the outside environment to our brains (Coren et al. 1999). The trend was rather short-lived, yet it expedited research on the functioning of vision when exposed to extremely intense stimuli (Wade 1990; 1998; Wade and Swanston 2001).
When a spectator is subjected to dense optical patterns (see Fig. 2.6), the neuro-visual system malfunctions. The extreme intensity of the pattern of lines overloads the contrast/orientation neurons of the primary visual cortex (V1), causing them to ‘leak’ and cross-stimulate neighbouring neurons (Wilkins et al. 1984). This is termed the ‘contextual effect’ and delineates the action in which the orientation specificity of primary cortical neurons can be distorted when identical stimuli are detected by neighbouring neural columns. If viewed for sufficiently long periods, this effect will cause optical illusions, headache and dizziness. Furthermore, it can result in migraine and epileptic seizures in photosensitive sufferers (Wilkins et al. 1984).

Fig.2.6. Visual illusions (source: Wade 1990).
Since some Irish passage tombs motifs resemble simple dense patterns (see Fig. 2.7), I will briefly discuss a number of observations and implications. The present preservation of the Irish motifs in their eroded form unfortunately precludes their use as a means of inducing ‘op-art’ optical effects, although it is possible that when freshly cut, there would have been sufficient contrast between line and space to create such effects. These effects may have been magnified if the engraving were used in conjunction with high contrast pigments. Based on evidence from Cairn T at Loughcrew, Co. Meath (see Chapter Five) it has been argued that the visual motifs at the passage tombs in Ireland were originally painted and that environmental conditions in Ireland have not permitted survival (Breuil and Macalister 1921, 4). Shee Twohig (1973) has, however, contested this interpretation due to the lack of reference to it in earlier studies. Interestingly, the passage tombs at Carrowkeel, County Sligo, do not contain engraved motifs, and Eogan (1986, 148) has suggested that this is a result of the limestone being too hard to engrave and that they may have been painted instead. It is worth noting, that in the Iberian Peninsula where it is relatively arid, painting does survive alongside engraved stone; as demonstrated by the black and red motifs painted on Orthostat C1, Forno dos Mouros, La Coruña, Spain and Antelas C5, Viseu, Portugal (Bueno Ramirez and Balbin Behramann 1996). Recently, it has been suggested that paint was possibly used to create a spiral motif on stone 11 of the Castlerigg stone circle in Cumbria, England, and that its complete disappearance since 1995 is due to natural weather conditions (di'az-Andreu et al. 2006, 1585). Although there is no current evidence to suggest that the motifs in Ireland were painted, traces of pigment have recently been found by taking infra-red photographs of a number of decorated surfaces in the main chamber at Maeshowe, Orkney, which were previously thought to be un-painted (Bradley et al. 2000). If this new technique is applied to the Irish evidence, pigments may be found. As such, this thesis proposes that Irish passage tomb motifs did induce visual experiences, but without sufficient pigment evidence, it is unlikely that they created ‘contextual effect’ optical distortions on their own. For this to happen we need to consider alternative universal neuro-biological encounters.
Alternative visual stimuli: patterns of intention

Visual imagery is largely, though not exclusively, the product of the activity of the visual brain. Is it then appropriate to define its purpose in purely neurobiological terms? In part the answer is yes; yet such a simple response does not, unfortunately, place visual experiences within any social framework or setting. For example, although Zeki has demonstrated that as a general rule ‘...all abstract works activate more restricted parts of the visual brain than narrative and representational art...’ (1999, 207), we are still not informed as to why people would then engrave abstract images in certain places and not others. Once an object is observed and understood by the visual brain, it is then in turn understood through social processes or ‘social-brains’. Through an appreciation of the various social, neurological and environmental processes that influence people to experience images, can we begin to
discuss *why* certain Irish Neolithic images are. It is towards discussions that incorporate social practices that I now focus.

Recent developments in the field of passage tomb motifs have suggested that many of the designs were produced during states of altered consciousness, as has been recognised in ethnography. Bradley (1989a) and Patton (1990) have suggested that aspects of megalithic visual imagery in Brittany and Ireland can be interpreted in this manner, while Lewis-Williams and Dowson (1993), Dronfield (1993; 1994; 1995a; 1995b; 1996a; 1996b), and recently Lewis-Williams and Pearce (2005) have investigated this proposal in more detail. Following a suggestion by Lewis-Williams and Dowson (1988) for their ‘best fit’ hypothesis to be assessed against other ‘rock arts’, Bradley (1989) produced a paper mostly concerned with a description of Breton megalithic tombs and motifs and more briefly with Irish passage tomb imagery. Bradley summarises Shee Twohig’s (1981) divisions of the designs in Brittany and suggests that motifs of the developed phase of passage tomb imagery can ‘almost all’ be matched in Lewis-Williams and Dowson’s (1988) account of ‘entoptic’ phenomena.

The term ‘entoptic’ is from the Greek ‘within vision’ (Tyler 1978) and refers to visual sensations derived from the structure of the optic system anywhere from the eyeball to the cortex (see Klüver 1926; Knoll *et al.* 1963; Siegal 1977; Tyler 1978; Lewis-Williams and Dowson 1988). These images are generally multicoloured geometric or abstract shapes and are perceived when the eyes are closed, although they can occur as external hallucinations (Hodgson 2000). Dronfield (1993: 180), however, disputes this term and proposes ‘subjective visual phenomena’ as an alternative. Although this is not an orthodox neuropsychological or neurophysiological term, Dronfield (1993: 180) believes that it can include all entoptic, entophalmic, phosphene and hallucinatory visual experience. Dronfield (1994) divides sensory visual phenomena into hallucinatory and endogenous. Bahn and Helvenston have recently requested that archaeologists dispense with the term ‘entoptic’ and feel it would be more parsimonious to use ‘geometric figures’ (2002, 10) or ‘complex hallucinations’ (2002, 11). This approach would certainly diminish future contentions regarding entoptic interpretations, as few would dispute that geometric figures possibly represent
geometric figures. Within this study I will, however, continue to use the terms ‘entoptic phenomena’ or ‘entoptic’ since they have been adopted into the general archaeological literature (e.g. Hyder and Lee 1994; M. O’Sullivan 1997; Clottes and Lewis-Williams 1998; Whitley 1998; Scarre 1998; Hodgson 2000; Shee Twohig 2000; Ross 2001), and because they reduce possible misunderstandings. Another approach would be to follow Clegg’s (1987, 237) cautionary ‘fish’ example, and use the term ‘entoptic’ as opposed to ‘entoptic’. Yet this still might confuse rather than clarify.

Architecture influences visual engagements, with the motifs in the later developed tomb phases (see Chapter Three) being largely hidden from daylight by the use of larger chambers and some side compartments. With reference to the possibility of entoptics in passage tomb motifs, Bradley comments, ‘...for the most part it is made up of abstract designs almost all of which again reflect the entoptic imagery discussed by Lewis-Williams and Dowson...’ (1989, 73). Bradley concludes that entoptic images were translated into other media, notably to Grooved Ware (see also Bradley et al. 2000). Figure 2.8 demonstrates a selection of images from Breton and Irish contexts that Bradley (1989) compares with Lewis-Williams and Dowson’s (1988) diagram of entoptic phenomena.

<table>
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Fig. 2.8. Six sample entoptic shapes that were compared with San and Coso motifs and ‘megalithic art’ (adapted from Lewis-Williams and Dowson 1988; Bradley 1989).
Patton (1990) produced his study from work conducted at La Table des Marchand passage grave in Brittany. Excavations revealed evidence for an early ‘ritual’ complex sealed adjacent to the cairn of the Table des Marchand passage grave. This complex included a series of carved menhirs, of which Le Grand Menhir Brisé is one. Patton argues that access to the grave and earlier menhirs would only be granted to those initiated with ritual knowledge of the supernatural and altered states of consciousness (1990, 555). According to Patton (1990, 557), it is in Gavrinis, Brittany, near La Table des Marchand that the greatest concentrations of entoptic motifs of any grave in the Armorican area are found. Patton (1990) believes that the end of the fifth millennium cal. BC in southern Brittany, marked an emergence of social differentiation and consolidation, with the appearance of entoptic phenomena in Breton being regarded as a part of this development both geographically and chronologically. Whittle has recently appraised the menhir of La Table des Marchand and Gavrinis, and although he disagrees with Patton’s model for social differentiation, he concurs with the suggestion that motifs resemble entoptic phenomena (2000a, 253).

Lewis-Williams and Dowson’s (1993) paper incorporated suggestions from both Bradley (1989) and Patton (1990) and introduced some refinements to their earlier discussion (see Lewis-Williams and Dowson 1988). They address Wylie’s ‘relations of relevance’ theory (1985) and use ethnographic material from the Turkano tribe of the Amazon instead of that from California. They also include some further criteria for assessing geometric imagery based on neuropsychological studies and on the Turkano and San visual schemes. These criteria review the three ways in which the motifs may be transformed by repetition, integration of entoptic images or integration of iconic hallucinations with geometric elements. This last criterion is demonstrated in the impressions at La Table des Marchand and Gavrinis, which have been interpreted as representations of a whale, axehead, axe-plough or plough, and are enclosed variously by geometric images (see Le Roux 1992; Whittle 2000a). Discussions on what these motifs may represent are interesting, yet this is unfortunately not the place to repeat them. The later part of Lewis-Williams and Dowson’s paper is concerned with the function of the motifs in passage tombs. They draw upon the work of
Thomas (1990; 1992) by placing the subject in relation to the architecture. It is proposed that greater social complexity and differentiation coincided with separation of particular roles and space divisions. Boundaries developed in importance, with social transitions marked or denied by rites of passage. These divisions of space: kerbstones, portals and doorways were marked by entoptic motifs, which Lewis-Williams and Dowson suggest represents altered states of consciousness acting as political and ‘ritual’ demarcation devices (1993, 63). Lewis-Williams and Dowson also incorporate architecture by comparing the experience of looking down a long passage towards a lighted chamber with laboratory subject reports on a ‘tunnel-like perspective’ and ‘...seeing a bright light in the centre of their field of vision that becomes the focus of this tunnel...’ (1993, 60). Lewis-Williams and Dowson conclude with the challenge that, ‘...there is a need to examine in detail the placing of motifs within the architecture of the tombs... the development of “styles” within specific sites and the reuse of decorated stones... in the light of their possible association with specific components of altered states of consciousness...’ (1993, 61).

Dronfield (1993; 1994; 1995a; 1996a) has presented the most comprehensive critique of Lewis-Williams and Dowson’s ‘neuro-visual’ proposals from an archaeological perspective. Although Dronfield (1994) agrees with Lewis-Williams and Dowson (1988; 1993) main thesis in terms of the logical structure of argumentation, he feels that the theory is flawed, as there is no room for replicative testing. The method of testing visual motifs for entoptic visual derivation used by Lewis-Williams and Dowson’s (1988; 1993) consisted of a comparison of a small selection of common endogenous visual forms with the design elements of the relevant design. Whilst this produces suggestive parallels, Dronfield (1996a, 379) believes that they are unreliable. Steinbring and Lanteigne concur and argue that the problem with Lewis-Williams and Dowson’s analysis is an absence of an ‘...orderly procedure aimed solely at testing and evaluating their theoretical statements [which] may be repeated, over and over, wherever the appropriate data are available...’ (1990, 58). Dronfield (1994; 1996a) removed the non-replicative element of Lewis-Williams and Dowson’s (1988) procedure, by including into his studies imagery which is known ‘not’ to derive from endogenous visual experience. By adopting a phenomenological approach to characteristic forms, Dronfield (1993; 1994) examined entoptic and non-entoptic
images, and attempted to discover whether there were any motifs, elements or characteristics exclusive to one or other visual cultures. After evaluative analysis and sampling, Dronfield (1995a; 1996a) isolated nine shapes of a potentially diagnostic character, seven endogenous and two non-endogenous (see Figure 2.9).

Fig. 2.9. a) Dronfield's seven diagnostic endogenous shapes; b) diagnostic non-endogenous shapes (source: Dronfield 1995a; 1996).

The corpus of papers that Dronfield published (i.e. 1995a; 1995b; 1996a; 1996b) represents the various sections of his 1994 Ph. D dissertation and since publication many scholars have agreed with the accuracy of his replicative diagnostic analytical models (see Chippindale 1996; Dowson 1996; Lewis-Williams 1996; D. Whitley 1996; Shee Twohig 1997; Hodgson 2000; Lewis-Williams and Pearce 2005). My Masters dissertation (Cochrane 2001) contextualised Dronfield's entoptic forms with the material evidence from the passage tombs in the Boyne Valley, Co. Meath. I was concerned primarily that Dronfield (1995a; 1995b; 1996a; 1996b) did not consider chronological sequences, locations and associations or landscape settings. These failings resulted in a mathematically valid concept that floated around archaeological evidence rather than engaging with it. One of the challenges for my dissertation was
to contextualise Dronfield's approach with archaeological evidence. In doing so, I produced a sequenced 'design grammar' (see Tilley 1991; 1994a) for the carvings at the sites of Knowth Site 1, Newgrange Site 1 and Dowth, Boyne Valley, Co. Meath. This model proposed that psychoactive substance consumption with direct and remote manipulation techniques influenced entoptic images at some Irish passage tombs. Although still interested with alternative stimuli modes as a way of inducing images, I am more concerned that past models have focused more on the structural forms of motifs than the processes that helped produce them. Conkey (1982) stated that archaeologists tend to focus on the 'secretions' of a process (i.e. the structured motifs), because they do not know how to deal with the process itself. The motifs at Irish passage tombs offer a unique opportunity to focus on these processes of 'secretion' as they were produced in chronological sequences. Chapters Four, Five, and Six here will contextualise in detail the sequences and overlays of some Irish passage tombs and propose more fluid and open models in the consideration of Irish Neolithic visual engagements.

Summary

This chapter has introduced a series of concerns that will help define the overall argument of the thesis. In the following chapters, I will draw upon the various themes raised here about how we as researchers engage with the archaeological data, and considerations about how people in general 'actively' rather than 'passively' conduct two-way interactions with visual imagery. Many different approaches have been introduced in this chapter; one idea derived from the works of Duchamp and Ernst is of particular interest, that of the oeuvre, which can be defined as consisting of objects extended in space and time, each related to their neighbour due to the possession of traces in common (Gell 1998, 221-58; A. Jones 2001a, 340). Considering the oeuvre or networks of Irish passage tomb motifs allows us to further penetrate processes of selection, citation, repetition, superimposition, transformation, production, planning, installation, location and context. Later chapters will demonstrate, with details from particular sites, how the sequenced application of motifs to individual stones from distinct locations within the passage tombs, existed as parts of chains or series of
engagements, which procreated experiences that were strung out over time, distance and space. It will be shown that appraisals of these various dimensions produces more fine grained ‘reflections’ of the possible social relations, routines and interactions that may have occurred at Irish passage tombs.

Outside the discipline of archaeology, there is a large body of knowledge encompassing art history. Most of this discourse, however, addresses ‘art’ in a specific cultural context of literate societies, and is therefore of little use within a prehistoric milieu. Frustratingly, the areas of archaeology that have demonstrated a specific interest in visual aesthetics, such as studies of the Greek Classical world, present a tendency to project back contemporary artistic aesthetics, values and judgements onto past societies (Gill and Chippindale 1993). The trend is to create a framework for artistic study that demonstrates relationships between the image and its social meanings (Layton 1991). This orthodox art historical application, informs little of indigenous and pre-Renaissance European contexts, and more of Western notions of universal human ‘culture specific’ and ‘period specific’ aesthetics (Gell 1998, 3). If one is to adopt such an approach, ‘art’ might be better thought of as much a product of work, being a tool or a process, as in any other craft (Wolff 1981; Gell 1998; Conkey 2001), rather than being based upon ‘...Graeco-Renaissance traditions of taste...’ (Renfrew 2003, 65; see Fig 2.10).

The motion requires that one is able to make a distinction between ‘art’ practices and ‘non-art’ practices. One possible way of achieving this is to acknowledge that for an exercise to be an ‘art’ practice, it must be embedded in a further specific practice, the practice of ‘art’ (Tillinghast 2003, 135). Clearly such positions are untenable and do require an understanding that differentiates ‘art’ practice from ‘non-art’ practices that are not based upon the specific production of ‘art’. Indeed, the question arises as to whether one can produce a list that separates ‘art’ from ‘non-art’. For this to be possible, the ‘non-art’ list should present characteristics that are not comparable to the ‘art’ list. If such a list existed, one could argue that there would be no need to puzzle-out the popular Western question of ‘what is art?’

The institutional (involving a body of governing rules) theory of art is was first conceived by Danto (1964) and later developed by Dickie (1997). This contextual theory helped Dickie formulate the assertion that ‘...a work of art is art because of the position it occupies within a cultural practice...’ (1997, 52).

Bell argued that ‘art’ could transcend all ‘cultures’, based upon an analysis of ‘significant form’, which is defined as a ‘harmony of lines and colours’ (Bell 1914, 29, cited in Crowther 2003, 122). Bell stated that no more than one in a hundred of the artworks produced in western Europe between 1450...

Fig. 2.10. Past people producing images that adhere to the ‘modern’ or ‘Cubist’ philosophy of representing what one knows rather than simply what one sees from a single ‘Graeco-Renaissance’ viewpoint (After Chris Garratt and Mick Kidd).
and 1850 can be described as 'art' (Bell 1914, 154, cited in Crowther 2003, 122). Such 'formalist' approaches do, however, have their limitations when applied to non-Western or prehistoric visual imagery. For imagery to transcend 'culture' and be labelled ‘art’ it must conform to Western aesthetics concerning harmonies of line and colour, to the exclusion of the often complex social contexts that helped produce the imagery in the first place. For anthropological ‘art’ to be considered ‘art’, it must first satisfy the criteria of a select Western elite (Crowther 2003, 122). Even the most ‘naturally gifted connoisseur’ is unable to view ‘art’ with the naked eye, but rather through the lens of a ‘Western cultural education’ (Price 1989, 92). Such problems are magnified when considering prehistoric ‘art’. The Upper Palaeolithic horses at Pech Merle, France (Lewis-Williams 1991, 157) may for example incite an aesthetic contemplation and enjoyment in the present day, but it is unlikely that they were originally made with that precise purpose. It is doubtful that prehistoric images were made solely to be ‘good to look at’ (Renfrew 2003, 77).

* The modern argument over what is art is unfortunately paradoxical. For an object to become ‘art’ it merely requires an 'artist' to pronounce it as ‘art’ to an ‘artworld’ public (Dickie 1997). This notion is distilled by Dali’s alleged claim that some rocks were ‘art’ because he had pointed at them and said they were ‘art’ (Dickie 1997, 46). If this is indeed the designation criteria for ‘art’, then it reduces the dimensions of ‘art’ to no more than ‘preferences’ and ‘fads’ of a distinctively Western network (Crowther 2003, 124). Renfrew has commented upon this trend within the ‘artworld’ community in discussing how Cycladic sculptures from the island of Amorgos, Greece were regarded as ‘repulsively ugly’ within the nineteenth century, yet are now considered ‘exceedingly beautiful’, due to their clean simplicity (2003, 51-54). As Danto asserts on prehistoric aesthetics ‘...it would, I should think, never have occurred to the painters of Lascaux that they were producing art on those walls. Not unless there were neolithic aestheticians...’ (1964, 581 original emphasis and chronological period error).

vi Monographs dedicated to exploring Duchamp include Adcock (1984) and Hopkins (1998).

vii In reviewing the concept of primary and secondary agency, Gosden (2001, 164-5) argues that such distinctions perpetuate the dualism of animate people and inanimate things. He proposes that such dichotomies can be side-stepped by acknowledging that things ‘...are active in the manner of objects not in the manner of people...’ (Gosden 2001, 165), with an ability to elicit and channel particular sensory responses or effects, which in turn can influence social action (see also Gosden 2005, 194-7).

viii I follow Morris and use the term ‘symbol’ to define a thing regarded by general consent as typifying or representing something else by possession of analogous qualities or by association in thought or fact (1987, 241).

ix The criticism that there cannot be a ‘pure’ sign theory that will successfully cross the borders of time and place has also been addressed in the context of films and other visual media (Mirzoeff 1999).

x Latour (1993) has questioned whether we were ever modern. It is argued that if the project of modernity has not begun, let alone reached completion, it is unlikely that we have started a ‘post’ modern era (Latour 1993, 46-7). More recently, Russell (2006, 19) has argued that as the epistemological foundation of ‘post-modernity’ is the same as ‘modernity’, it is an oxymoron to assert a ‘post-modern’ episteme.

xi Here I follow Douglas’s ‘Bongo-Bongoism’ approach, by acknowledging that anyone may interject, ‘but what about the Bongo-Bongo’ to validate or dispute any assertion (1970, 15-16).

xii This process can be briefly defined as occurring in four stages:

1) **Retina:** Light focused by the eyeball’s lens passes into the eyeball and is projected as an inverted image on the retina. Photosensitive cells in the retina are stimulated in varying degrees according to the arrangement of the pattern of light. Some of the cells are able to detect the frequency (brightness) of light waves, while others detect wavelength (colour). The retinal cells thus stimulated begin the process of electrochemical transmission along the visual pathways, via the ‘optic nerve’, a thick bundle of nerve fibres.
2) **Optic chiasm**: Each retina has a left and a right half (or hemifield) feeding separately into the optic nerve. This separation forms the basis of binocular vision. The two optic nerves (one from each eyeball) meet at the ‘optic chiasm’, where the left and right halves of each optic nerve separate again and pair off; left with left and right with right. Thus, information from the left and right halves of the retinas travels respectively to the left and right cerebral hemispheres.

3) **Lateral geniculate nucleus**: After leaving the optic chiasm, the ‘optic tracts’ lead to the ‘lateral geniculate nuclei’. These two parallel bodies on the underside of the brain sort and pass on the encoded visual data.

4) **Visual cortex**: From the lateral geniculate nucleus, the ‘optic radiation’ feeds out to make multiple contacts in the ‘primary visual cortex’ or ‘V1’. The cortex is the outermost layer of the brain. The visual part of the cortex is located about two-thirds of the way down the rear of the brain. At the primary area of the visual cortex, data are processed and segregated into highly specialised parallel and sequential areas before resulting in conscious vision (Hubel 1995; Coren *et al.* 1999; Zeki 1999; Hoffman 2000).

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It should be noted that engraved motifs have recently been discovered on a limestone roof-lintel of Tomb 51 (*Listoghil*), Carrowmore, Co. Sligo (Curran-Mulligan 1994, 14-15). The presence of nested arcs, concentric circles and cup-mark design in an area previously thought not to contain motifs does not, however, diminish the plausibility of Eogan’s (1986, 148) assertions.

I have chosen not to use the term ‘complex hallucinations’ as it encompasses auditory, olfactory and paraesthetic sensations, all of which are not considered in this chapter.

Clegg (1987) stated that images of ‘fish’ only reminds one of a fish, whereas a ‘fish’ is a depicted fish. As such, images of ‘entoptic’ reminds us of neurological images, whereas ‘entoptic’ is a depicted neurological image.

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**Endogenous type 1:** meander.

This is distinguished by an irregular meander, which is steeply curved and often turns back upon itself. It is unlike the shallow, more regular undiagnostic sine wave type. The neurophysiological origin of this shape is thought to be retinal (Dronfield 1996a). This form can be found on kerbstone 83, Knowth Site 1 (Eogan 1986).

**Endogenous type 2:** fortification.

This pattern has most commonly been associated with migraine and occipital lobe epilepsy and is generally referred to as the ‘fortification’ illusion or *teichopsia* (see W. Richards 1971; Niedermeyer 1990). The pattern is a zigzag constructed of scintillating coloured bars which vary in complexity, but which do not usually meet to form corners. It is considered to be different from the plain zigzag common to both entoptic and non-entoptic imagery. The fortification shape is engraved into passage orthostat R18 at Newgrange Site 1 (O’Kelly 1982).

**Endogenous type 3:** arc-spiral.

Although the status of this rare element is uncertain, it is regarded as exclusively endogenous. The arc-spiral diagnostic is demonstrated on kerbstone 56, Knowth Site 1 (Eogan 1986).

**Endogenous type 4:** filigree.

This pattern, which varies in complexity, is presumed to derive from entoptic images of retinal blood vessels. Described as one of the glories of Newgrange Site 1, the filigree diagnostic can be seen on the east recess roof stone (O’Kelly 1982, 181).

**Endogenous type 5:** loop arc.

This form is a subtype characterised by the way it turns back upon its terminals, thus completing a looped pair of concentric arcs. Located on a stone (kerbstone 13, Knowth Site 1) that Eogan described as ‘lavish’, can be found the loop arc form (Eogan 1986, 160).
Endogenous type 6: multiple spiral.
The multiple spiral was chosen as it displayed patterned distributions in sufficient numbers, to allow analysis. Although vortex and rectilinear spirals incorporated patterned distributions, they were deemed insufficiently numerous. The multiple spiral form can be found on the famous kerbstone K1, Newgrange Site 1 (O’Kelly 1982)

Endogenous type 7: small arc.
This pattern was regarded as the most dubious of the endogenous types, since small dots or blob like elements are common in the human environment and can be seen endogenously without experiencing an altered state. Dronfield (1996a, 380) cites spots before the eyes as an example.

Non-endogenous type 1: square/rectangle.
Squares and rectangles are not regarded as endogenous visual phenomena; their presence in visual imagery is suggested to indicate a non-endogenous derivation. These shapes are proposed as distinct from undiagnostic lozenges and grids.

Non-endogenous type 2: triangle.
As with squares and rectangles, triangles are not found to occur endogenously. The triangle, we are advised, is not to be confused with a zigzag set on a line that may resemble a row of triangles or the triangular shape formed by the addition of a bottom line to replicated scrolls.

As with squares and rectangles, triangles are not found to occur endogenously. The triangle, we are advised, is not to be confused with a zigzag set on a line that may resemble a row of triangles or the triangular shape formed by the addition of a bottom line to replicated scrolls.

As discussed earlier in this chapter, I have since my Masters dissertation distanced myself from ‘design grammars’ and textual analogies.

Non-chemical modes of induction can include the direct manipulation of the eyeball through pressure and by remote manipulation via prolonged dancing (see Cochrane 2001, especially Chapter 4).
Chapter Three

Introduction

The Neolithic period in Ireland occurred between 4000 and 2500 BC and it is when archaeologists begin to see complex transitions in many spheres of activity. Later Mesolithic foraging activities shifted to the cultivation of domesticated crops and the herding of domesticated animals within settlement patterns that were often sedentary or 'rooted' but also mobile in other important ways, with the use of different burial and ceremonial sites and unique sets of material culture and technologies (Cooney and Grogan 1994; Cooney 2000a; 2003a; Monk 2000; Bradley 2003; Bamforth and Woodman 2004). Previous debate over the Irish Neolithic was largely influenced by a culture-historical view, that interpreted isolated and de-contextualised material assemblages, removed from the landscape and chronological phases and then transformed the data into a 'people', 'society', 'cults', 'culture' or 'tradition', such as the 'passage tomb people', 'passage tomb society', 'the cult of the passage graves', 'passage tomb culture' or 'passage tomb tradition' (e.g. Powell 1938a; Case 1969; Herity 1991; Bergh 1995; Eogan 1999; Stout 2002). Some have even suggested the terms 'Knowthians' and 'Newgrangers' to distinguish the perceived makers of the Boyne Valley passage tombs (e.g. Lewis Williams and Pearce 2005, 209). Following more complex approaches to archaeological evidence (e.g. J. Thomas 1996a; Bradley 1998b; Cooney 2000a; Whittle 2003a), this thesis will acknowledge that there can be widespread similarities in material culture (e.g. axeheads and ceramics), food (e.g. plants and cattle), burial (e.g. cremation and inhumation) and space (e.g. settlement and boundaries) within western Europe, but that there can also be regional differences that help create a mosaic of heterogeneous patterns of material and land-use in different areas. By engaging with the diversity of their material culture and land-use we are confronted with some of the implications of their thought, the nature of the world of being as they may have conceived it. Following Waddell who comments that '...few human events have a single, simple explanation...' (1978, 121), I will explore these disparate avenues by which we can approach the series of concerns that the Irish Neolithic people may have experienced about themselves and their world.
In order to further understand the complexity of these differences, it is important to work within chronological and landscape frameworks. Such an approach allows scholars to question how people produced their own social histories at specific places and times during daily life, thereby countering very general abstract models that are enhanced by the power of analogy (Whittle 2003b, 601). By adopting a ‘chest-of-drawers’ approach (Case 1970, 8) and by incorporating Sheridan’s (1995; see also Case 1961; Brindley 1999; Cooney 2000a; cf. ApSimon 1985/6) discussions on ceramic sequences, this thesis will compartmentalise the Irish Neolithic into three phases:

a) Early Neolithic (4000-3600 BC).
b) Middle Neolithic (3600-3100 BC).
c) Late Neolithic (3100-2500 BC).

The following sections provide a brief précis of some of the complexities that are incorporated into each time period. Such an introduction is designed to serve as a back-drop on to which I will superimpose the events discussed in detail in the following chapters. Often, individual happenings were not constrained within particular time frames (e.g. 4000-3600 BC), resulting in epoch fragmentations sometimes being blurred. Yet for descriptive purposes the time-span analogies are useful in that they serve to demonstrate the longevity of the Irish Neolithic period, while evincing the transformation of actions and episodes over time. Since the predominate focus of this thesis is on the early and middle Irish Neolithic, I only offer a very brief résumé of the late Irish Neolithic.

**Early Neolithic: building new worlds**

During this phase stone ‘tombs’ and wooden mortuary structures were employed and developed, such as Tomb 27 at Carrowmore, Co. Sligo (Sheridan 1986; Bergh 1995) and the wooden structure at Ballymacaldrack, Co. Antrim (Evans 1938; Davies and Evans 1961). Depositional evidence suggests that cremation was generally employed over inhumation, for instance at Ballyconneely, Co. Clare (Read 2000), possibly following an early Mesolithic cremation trend, which is evident at Castleconnell, Co.
Limerick (see discussion in Collins and Coyne 2003, 27). The usage of the term 'tomb' was originally proposed by de Valéra and Ó Nualláín (1972, xiii), and later argued at length to be the correct appellation, due to its basic simplicity by de Valéra (in Ó Riordáin 1979, 102). It has more recently been adopted in Irish studies by Eogan (1986), Shee Twohig (1990), Cooney (2000a) and (M. O’Sullivan 2005). It has been suggested that the terms ‘tomb’ and ‘grave’ are problematic in themselves (Daniel 1976, 189; Whittle 1999, 67), as they install a priori assumptions to the nature of these structures. Tilley has raised similar concerns with the indiscriminate usage of the term ‘monument’, stating that this label in many cases amounts to a simple synonym for ‘megalith’, another problematic term (1998, 145; see also Corlett 2002b, 36). Instead it may be better to describe these structures as shrines, communication devices, sepulchres or sanctuaries that were acknowledged or venerated by offerings or visits (Coffey 1912, 1; F. Lynch 1973, 152; Whittle 1996a, 247). Within this thesis I will refer to the stone built megalithic structures as ‘tombs’ in complaisance to current literature, although I provisionally suggest the term ‘passage chambers’ to replace ‘passage tombs’. This designate has the advantage of describing the actual structural features, while still utilising recognised terminology. I acknowledge, however, that this term may be less appropriate for passage tombs that have no ‘passages’, such as Knockmany, Co. Tyrone (see Chapter Six).

There are more than 1450 known megalithic monuments in Ireland (Bergh 1995, 9). Irish tombs are compartmentalised into court, portal, ‘simple-form’, passage tombs, Linkardstown cists and wedge tombs (Shee-Twohig 1990, 9), replacing the older terminology of court cairn, portal dolmen, passage grave and wedge-shaped gallery grave. The later wedge tombs were probably conceived in the later Neolithic, but belong more to the Early Bronze Age (M. O’Kelly 1989, 115-22). Indeed, much discussion has been concerned with identifying the development of tomb types in chronological patterns and with internal or external origins (e.g. Sheridan 1986; 2003a). More recently it has been acknowledged that due to the ‘coarse time framework’ (Cooney and Grogan 1994, 54), that we have for the Irish Neolithic, it is prudent to accept that tomb types overlapped, with interactions with the structures,
landscape and imagery altering from person to person and from generation to
generation (see Corlett 2002a, 35; Bradley 2002, especially Chapter 4).

The term ‘court tomb’ replaced the previous terms ‘court cairns’, ‘horned cairns’ and
‘lobster-claw cairns’ (cf. Ó Riordáin 1946; De Valéra, R. 1960; Darvill 1979; Shee
Twohig 1990). These types of tombs have been discussed in depth since the early
nineteenth century when John Bell first described Annacloghmullin, Co. Armagh
(1815), and Caesar Otway published Ballyglass, Co. Mayo (1841). Irish court tombs,
of which there are over 400 known examples, appear in their basic form as trapezoidal
or rectilinear cairns, ranging from 20-35m in length. Court tomb entrances generally
face east, with the edges of the cairn demarcated by kerbstones. The most
characteristic feature of these tombs is the open court, often U-shaped, and lined by
slabs or drystone walling. A chamber is located in the centre of the U-shaped façade,
aligned along the long axis of the cairn, and usually contained human remains. The
chamber is often divided into two or three segments, as is seen at Annaghmare, Co.
Armagh (Waterman 1965), with activities in some examples being focused in the right
side of the structure, as at Ballynamona, Co. Waterford (T. Powell 1938b). The
priority of ‘...dexter over sinister...’ (Herity 1974, 123) is interestingly also reflected
in passage tombs, in the size of the right hand recesses, the motifs, artefacts and
human remains (see Chapters Four, Five and Six). The court monuments can be fully
enclosed by the cairn. The court tombs are found as single monuments, in as much as
they rarely occur in pairs or clusters. Some have rather commanding positions in the
landscape, whilst others occur in flat locations in the lowlands. In a study of 354 court
tombs, Ó Nualláin (1983) found that 60 per cent lay below the 122 metre contour and
90 per cent below 213 metres. Material deposits within these tombs consist of
cremated bones, found mainly in the chambers, pottery – plain, round based
shouldered vessels, and flint artefacts, such as leaf and lozenge-shaped arrowheads,
javelin heads, scrapers and plano-convex knives (Shee Twohig 1990; Bergh 1995;
Cooney 2000a). For instance, at Ballymacaldrack, Co. Antrim, excavation revealed a
‘cremation passage’, which had three pits containing cremated bone and pottery,
sealed by burnt flagstones and decayed bark (Herity 1987).
Chapter Three

Bones of cattle, sheep and pig are also found at many sites, with some other instances of red deer, wolf or dog and a possible bear’s tooth. These bones are usually interpreted as indicating feasting activities (Shee Twohig 1990). It is proposed that this evidence suggests that these tombs were not primarily for burial; as Flemming notes, they may have been ‘tombs for the living’ (1973). Indeed, Case commented that ‘...the forecourts, not the complex of chambers, may have been the precincts for continuing rites...’ (1969, 13). The pronounced forecourt in many examples would certainly allow access and attention for the living community (Darvill 1979, 315), suggesting that the structure continued to play an important role for the engaging social groups, long after it was constructed and used for burial (see also Thomas and Whittle 1986). The proposal that the exteriors of the passage tombs played an equally active role as the interiors will be explored in Chapters Four, Five and Six.

The portal tomb, of which over 170 known examples exist (Bergh 1995, 10), consists of a rectangular chamber, usually narrowing towards the rear or deepest end, with an entrance flanked by two slabs of greater height than the other orthostats in the chamber. These chambers are covered by a larger ‘roofslab’ or ‘capstone’, which is often angled down towards the back of the chamber. The ‘capstone’ is often raised clear of the sidestones and rests on the front portal orthostats and rear-stone (De Valéra and Ó Nualláin 1972), giving the impression in some examples that they float in the air (see discussion in Cummings 2001). It is argued that the conventional appellations of ‘roofslab’, ‘roofstone’ and ‘capstone’ are too generalised and fails to express the complex expressions that the architecture emphasises, such as stone selection, mass, visual effect, orientation and the fact that they have been raised (Whittle 2003a, 120). Instead it is proposed that we use terminology that makes these constructions sound less familiar, for instance ‘...stones-that-float-to-the-sky...’ (Whittle 2004). The famous example at Poulnabrone on the Burren, Co. Clare (A. Lynch 1988; see Fig. 3.1) demonstrates many of these themes. The entrance often has an easterly orientation, and sometimes portal tombs have a recessed sillstone which creates an antechamber between the portal stones. At some portal tombs a long cairn has been recorded, with the chamber being located at the eastern end, but no trace of a cairn or mound survives in the majority of examples (Shee Twohig 1990). Portal
tombs are located predominantly in the north of Ireland, although there are some examples in the south-east and even fewer in the south-west. Ó Nualláin (1983) suggests that the majority of portal tombs occur within 8km of the coast, with inland examples being along river valleys. Most also occur below the 122m contour. The burial remains predominately indicate cremation, although at Poulnabrone on the Burren in Co. Clare, the disarticulated bones of approximately 33 people are represented, 17 adults and 16 juveniles were excavated (A. Lynch *pers. comm*). Most of the adults seem to have been relatively young, with one nearer middle age at around 40 years old. The children range between five to 15 years old, with a few being infants. There is evidence of possible violence with a bone having the tip of a chert projectile point embedded into it, while two other bones suggest healed fractures. The chert impacted bone demonstrated no signs of infection and therefore indicates both a quick death and possibly a social tension. The bones were disarticulated and it is thought that they were exposed until the flesh decomposed, or buried until it decayed (A. Lynch 1988). Lynch also suggests that these bones date to the earliest Neolithic, and that they were stored through the centuries of the fourth millennium BC and then deposited in the tomb around 3000 cal. BC (Cooney 2000a, 96; Lynch *pers. comm*). The finds discovered at portal sites are similar to those found in court tombs, and include stone disc beads, chert arrowheads, and fine, coarse, flat-bottomed and decorated Neolithic ware pottery (Shee Twohig 1990; Cooney 2000a).
It is within the earlier Neolithic period that we first begin to see the introduction of passage tombs in the fourth millennium BC (e.g. the Mound of the Hostages, Tara; see Chapter Six). We can also detect a small number of ‘first generation’ (Gibson 2002; Grogan and Roche 2003; Svensson 2002) palisaded enclosures, all of which are classified as ‘domestic’ or ‘fenced’ sites (Gibson 1998, 73), such as the pre-passage tomb phase, double palisade at Knowth, Co. Meath (Eogan 1986; see Chapter Four).

At Knowth there are two concentric arcs of palisade trenches, which form part of an oval or circular enclosure about 70-100m in diameter on the west side of the hilltop. The trenches supported closely spaced upright posts, with no evidence of an entrance, that may have been up to 2.5m in height. Due to its association with a small ancillary building, dwelling structures and a flint working area, it has been suggested that the enclosure represents a stockade for cattle (Grogan and Roche 2002, 24). Palisade enclosures have also been recorded at Donegore and Lyles Hill, Co. Antrim (Gibson and Simpson 1987; Simpson and Gibson 1989), Thornhill, Co. Derry (Logue 2003), and Tara, Co. Meath (M. O’ Sullivan 2005). Earthen enclosures are also present in Neolithic Ireland, and are in the main associated with passage tombs. For example, at Tara, Co. Meath there is evidence for the construction of a palisaded enclosure, which
is followed by a passage tomb (the Mound of the Hostages) and then a henge (Cooney 2000a, 169; M. O' Sullivan 2005).

As an overview it is certainly useful to categorise architectural structures into types, but I am concerned that only interpreting Irish Neolithic stone, earthen and wooden structures through typologies negates the possibility of fluid relationships and diverse transformations. Barrett for example states that Neolithic architecture ‘…originated in neither the idea nor the plan, but rather in the practice and the project...’ (Barrett 1994, 23). Barrett (1994) argues that archaeologists focus more on what they expect monuments to look like, rather than the possible functions and significances of particular forms (see also Whittle 2005). As such, less attention is paid to how these processes are employed and punctuated at different ways and at different times (see also Whittle 2003, especially chapter 5). Barrett postulates that ‘...the building program was not founded upon a pre-set plan. It was created more in the tradition of 

bricolage, the reworking of the available resources by those with a competent and inventive understanding of particular orders of spatial practice...’ (1994, 24 original emphasis). Similarities in scale and construction between many Irish passage tombs do suggest the possibility that there was comparable significance attached to particular traditions or styles of monument form. This simple model does not, however, account for particular traditions that would have been susceptible to subtle negotiations at different sites and at different times. The position is supported by recent research on the Cotswold-Severn cairns of southern western Britain (McFayden and Pollard 2002), which has suggested that emphasis on the established forms of architectural structures does not consider the often complicated and subtle processes apparently involved in their construction. The following chapters here will dissect specific locations and describe the possible events and processes that occurred.

As a result of the amounts of substantially built Irish Neolithic structures or ‘houses’ discovered in the last twenty years, there are now over 90 (Grogan 2002, 517), the early Neolithic in Ireland is marked by the spread of more sedentary occupation sites throughout the island (Cooney 2000a, 52-56). Within recent times, the neutrality of the term ‘house’ has been brought in to question (cf. Lawrence 1987; Whittle 1996b;
Traditionally the house has served as the locus for domestic activities, such as cooking and eating, reproduction and the nurturing of children. These practices were thought to be not only universal, but also cross-cultural. These assumptions have, however, created numerous problems; the foremost being that domestic practices are not easily identifiable archaeologically, and that it is difficult to distinguish structures as being ‘houses’ as opposed to other alternatives, such as ‘storage locations’ (Hayden 1999). To compensate for these difficulties and to remove the Western tendency to relate house with home, scholars are now adopting the less culturally laden term ‘dwelling’ for residential architecture (cf. Ó Riordáin 1953; Bourdier and Alsayad 1989; Ingold 1995). Houses, dwellings, occupation buildings and ‘habitation sites’ (A. Gibson 2003, 140), can therefore be thought of as structures in which people protect themselves from the elements. In addition they may embody cosmological beliefs, the adaptation to the local climate and building materials, whilst being a complex artefact that can express physical, social and symbolic aspects of the lives of the people who dwell in them (Stevanovic 1997; Cooney 2000a).

Most Irish Neolithic dwelling structures are broadly categorised into two groups, with some being rectangular while others are circular or oval (Grogan 1996), such as Ballynagilly, Co. Tyrone (ApSimon 1976), Ballygalley, Co. Antrim (Simpson 1996) and Knowth, Co. Meath (Eogan and Roche 1997a). The rectangular structures are further sub-divided into plank-walled structures and post and wattle buildings (Grogan 1996). The plank-walled structures are constructed with single, double and triple roomed buildings. These buildings are defined by walls of vertical split planks set in trenches and supported on a framework of vertical posts, such as at Cloghers, Co. Kerry (Kiely 2003). Based upon these trends in type and size, some scholars have transposed the undifferentiated internal nature of the structures themselves, onto the societies that constructed them (Stevanovic 1997). By doing so, some writers have attempted to demonstrate a direct relationship between the ‘house’ and social organisation (see Carsten and Hugh-Jones 1995). The ‘house’ is seen as a created artefact, which demonstrates the relationship between people and the space in which they live; moreover, ‘houses’ are thought to build the context of social action (Hodder 1984). No longer are we to imagine the house as being purely a shelter, but rather as
an expression of social space as place. Furthermore, the act of constructing a house can be seen as a means of defining and engaging in the functions and significances of a particular space. Recent excavations have also demonstrated that although the structures of building maybe similar, for example most large rectangular examples are 20-50m² in internal area (Armit et al. 2003, 146), the dwelling spaces are far from uniform. For instance, the buildings at Corbally, Co. Kildare (Purcell 1999) are clustered and numerous, while the structures at Thornhill, Co. Londonderry (Logue 2003), are enclosed by a palisade.

Within Neolithic ‘house’ studies, the dichotomy between functional and symbolic is increasingly becoming inadequate, as we see that every aspect of life was interrelated (Darvill 1996, 79). By removing these bounded perspectives, one can begin to envisage the multi-faceted roles that a house could play. Bailey (1999) has commented how one can begin to see how spatial demarcation via dwelling structures incorporates these decompartmentalised perspectives. These buildings are the physical embodiment of a community’s beliefs; they literally project ideas via their stature, and exclude not only the extremities of the climate, but also members of the community not involved in the intra-mural engagements. It is also possible that these internal in-structure activities were thought of as ‘external’ (Rapoport 1990, 18). Dwellings demarcate the physical division between the ‘cultural’ space and the ‘outside’ world (cf. Hodder 1990), whilst serving to separate or to aggregate members of the community. Thus the ‘house’ is not just the arena in which social life takes place, but also the medium in which social relations are produced and reproduced (Gregory and Urry 1985, 3).

No appraisal of Irish Neolithic dwelling structures would be complete, without incorporating the characteristics and techniques of construction. Throughout Neolithic Ireland, the main ingredient in ‘house’ composition was wood, such as the structures in rectangular form discovered in Tralee, Co. Kerry (Dunne and Kiely 1999); there are, however, exceptions, such as Lough Gur in Ireland. In this instance wattle and post walls are partly filled with limestone for drainage and foundation (Grogan 1996). Recently, the predominance of wood in ‘house’ construction has been contrasted to the prevalent adoption of stone in ceremonial or mortuary structures and tombs.
The differing structures are seen in terms of dichotomy and duality; short-term versus permanent construction, mundane versus monumental and living versus ancestral (Parker Pearson and Ramilisonina 1998). It has been argued that wood was for the living and that stone was for the dead (Parker Pearson and Ramilisonina 1998). It is, however, possible that the uses of wood and stone were more varied, subtle and complex than the above proposal suggests (e.g. Coles et al. 1978; Newman 1996). In commenting on Norse mythology and shamanism, Coles (1998) presents a particular worldview in which it is stated that the first man and woman were fashioned from two wooden logs. By fashioning artefacts in wood, the shamans were able to bring the ‘ancestors’ and anthropomorphic beings to life, and imbue them with power (Coles 1998, 169). In recent studies, Gibson has demonstrated the impressive strength, size and durability (estimated rates of decay being approximately some 15 years for each 25 mm of radius) that oak tree wood can offer the user (1998; 2002; see also Jane 1970). One cannot ignore that wood was used in preference for dwelling construction throughout most of the Irish Neolithic, and this is even the case in areas where hard wood was not readily available, such as at Drummenny Lower, Co. Donegal (Dunne 2003). This suggests that the materials used did have an active role in defining what the structure meant and how long it stood for (see Bloch 1998, 33 for discussion on maturation processes of wood, people and structures, and Chapter Two here).

As the majority of Irish Neolithic dwellings are rectangular, some scholars are now beginning to review these structures within a broader social context in which space is structured and given meaning through architectural devices. These devices, or ‘houses’, are now regarded as symbolic or unique expressions of the communities and builders’ beliefs (cf. Thomas 1996; Whittle 1996b; Cross 2003). Indeed, Kent (1990) has argued that the more socially and politically complex groups become, the more segmented by function their use of space and architecture will be. One must, however, be wary of imposing modern western social and psychological concepts of privacy, when interpreting the internal divisions as personal space or congenial ‘cultural’ zones (Duly 1979). Following these models, it would be feasible to propose that rectilinear houses replaced circular ‘penury’ ones (Ó Danachair 1972, 77), if only because rectilinearity allows for a more segmented approach to the use of internal space. In
Neolithic Ireland this, however, was not the case; dated and stratigraphic evidence clearly suggests that the opposite is true (Grogan 1996). Interestingly, this trend is also evident in England within the Late Neolithic period, with rectangular buildings being largely superseded by trapezoidal, sub-rectangular or circular structures (Darvill 1996).

Recently, Bailey (2005a) has proposed that most archaeologists have approached these structures from the wrong scale, being more absorbed in micro details (e.g. building morphology and aggregation), rather than the environmental aspects of the architecture. That ‘houses’ are similar in structure across time and space can no longer be satisfactorily explained through culture historical, economic or functional dynamics (Bailey 2005a, 92). Instead, Bailey (2005a) argues that we should attempt to further understand the ways in which engagements with these structures would continually force people to (re)assess their position in the world and relations with others. These structures are environmental, they create movement for people, they draw them near and can push the away, they create visual tensions, frustrate meanings, they are provocative, producing stimuli to think whilst choreographing social relations (Bailey 2005a, 96). Through consideration of these aspects, and acceptance that these architectures are not rational and ‘anti-compositional’, it is hoped that better understandings of Neolithic engagements with similar shaped structures will be achieved. The environmental features of passage tombs that share similar and dissimilar architectural forms and visual imagery across time and space will be further considered in the following chapters.

Within both rectangular and circular structures, the central location of the hearth indicates that there was a central smoke hole in the roof, suggesting a place ‘...where people’s eyes would have taken a while to adjust to the dark and smoky atmosphere within...’ (Cooney 2000a). It might not have been all gloom. For instance, recent studies of *Linearbandkeramik* houses in Cuiry-lès-Chaudardes seem to suggest the presence in the side walls of opening doors or windows, although this cannot be seen on the ground plan (Hachem 2000). Furthermore, one must consider that although the hearth produced acrid smoke, it also provided a means of light, warmth and cooking, as well as structuring, positioning and orientating daily life whilst possibly defining
gender roles (Levi-Strauss 1969; Richards 1990). This suggests that fire within Neolithic dwellings may have served ‘functional’ as well as cosmological roles. It is, however, interesting to note that evidence from an excavated rectangular structure at Drummenny Lower, Co. Donegal suggests that there were no hearths or associated pits (Dunne 2003, 165).

Since the beginning of the last century, scholars have focused on dwelling structures as a major source of information regarding the past. As Woolley stated, ‘…an ancient building… is important, not merely as illustrating the history of architecture but as the setting for the lives of men and women, and as one of their chief forms of self-expression’ (1954, 76). More recently questions have been raised regarding the possibility of anthropomorphic symbolism in occupational architecture. These notions have fundamentally stemmed from the proposition that settlements had lifecycles (Bailey 1990; 1996). Such perspectives challenge the opinions of the French Modernist architect Le Corbusier, who pronounced in 1923 his axiom that ‘Une maison est une machine à habiter’ – ‘A house is a machine for living’ (Duly 1979, 8).

By reviewing the anthropological record, one can indeed find evidence to counter such a claim that is entrenched within a Western perspective. For example, in many southeast Asian societies, the ‘house’ is thought to be an animate object with its own vital force. These structures are compared to human bodies, with both external and internal structural features being described as ‘bones’ and ‘navel’ (Waterson 1990). In other societies, the dwelling is considered to possess a life force or soul of its own. As such, they are often viewed as living entities. The process of ‘house’ building amongst the Batammaliba of Togo and Benin Republic is analogous to stages of human development, with the building being conceived by male and female. Again, architectural elements are likened to the human body; for example the entrance is thought of as a ‘mouth’, and the women’s bedroom as the ‘womb’ (Blier 1987). Blier even proposes that ‘…anthropomorphism is… one of architecture’s universals…’ (1987, 118). Bloch (1995; 1998, especially chapters 2 and 6) has made similar observations in studies of the Zafimaniry of Madagascar, by commenting on the ‘house’ and its fluid constituent and structural elements with decoration.
Although it has been argued that such generalisations are hard to accept (Brück 1999), the premise that Irish Neolithic dwellings had lifecycles very similar to those of their inhabitants is indeed attractive. The Irish Neolithic does afford some standardised 'house' types and settings, and it has been suggested that societies that employ 'universal' forms of dwelling, do so because they view the human body, another 'universal', as a metaphorical way of understanding the world, society and the cosmos (cf. Douglas 1966; Bourdieu 1973; Parker Pearson and Richards 1994). Occupation sites do, for example, occur in a variety of modes, yet one can detect several basic concerns common to all locations. Cooney and Grogan (1994, 44) argue that the most dominant feature is accessibility to suitable land, that is with soils that could be cleared and exploited for agriculture. The next concern was the availability of fresh water, which is essential for all life and aids movement, from streams, rivers or lakes. Most sites seem to be orientated in a south or south-west direction, and are therefore likely to be on sunnier and dryer locales (see Fig. 3.2)\textsuperscript{i}. By incorporating this evidence, studies are now proposing that Neolithic dwellings were not single event products, but rather that they had phases of use-life. These may be thought of as, construction, use, maintenance, reuse and destruction (see Tringham 1995; Walker and Lucero 2000). Indeed, there is currently evidence from sites such as Opovo, in Southeast Europe, hinting that house construction and destruction were closely related architectural practices. It is suggested that dwelling structures were built with the intent to be destroyed at a point in their life, by an act of conflagration (Ó Riordáin 1954; Chapman 1994; Tringham 1995; Simpson 1996; Stevanovic 1997). Examples from Neolithic Ireland include the burning of the 'houses' at Lough Gur Site A (Ó Riordáin 1954, 302), the 'aggressive' burning of House 1 at Ballyharry, Co. Antrim (Moore 2003, 157) and the burning of a rectangular structure at Drummenny Lower, Co. Donegal (Dunne 2003, 165). Other modes of termination, be it via domicide or domthanasia (Tringham 2005, 106-8), include the dismantlement of two rectangular structures at Ballygalley, Co. Antrim (Simpson 1996), and the disassembled and burnt House 2 at Coolfore, Co. Louth (Ó Drisceoil 2003, 181). The reasons for destruction maybe heterogeneous, for instance, the result of an over zealous social feasting activity (see Cross 2003; Tringham 2005), but the association with birth and death is certainly striking. Such rhythms and temporalities will be addressed in more detail in
the following chapters, in relation to the varied activities that may have been played out at the monuments.

As with some monument studies, some pottery interpretations have viewed stylistic trends as representing particular groups of people or their identities; for instance, the Western Neolithic pottery represented a social group that was distinct from ones who produced Carrowkeel pottery (e.g. Eogan 1991; Herity 1991). More recently it was proposed that pottery styles can be contemporary and used by different groups or ‘...communities who enjoyed widespread contacts within and outside Ireland, who adopted and adapted design ideas resulting from contacts, who used their initiative to create new styles of pot and who selected specific ceramic types for use in particular contexts (Sheridan 1995, 17). The shape of the pottery supports this proposal. For instance, middle Irish Neolithic Carrowkeel ware which is an open, decorated globular bowl of coarse fabric and is possibly best suited for food and drink, rather than just storage; it is therefore unlikely to have been used in isolation (Cooney
2000a, 181). In the early Irish Neolithic, we see the inception of fine, mainly undecorated carinated, and uncarinated bowl pottery (sometimes termed Western Neolithic) like that used in Britain (Sheridan 1995, 2000). Similar to Britain, these ceramics were dominantly produced from locally available resources (Sheridan 1995), that did not move far from where they were manufactured, even if ideas on decoration and shape did (Cooney 2000b). It is interesting to note that decoration in this period is less pervasive than in later ones, suggesting that the focus was concerned more with shape rather than texture or design motifs. The high quality of the pottery vessels indicates that the producers were aware of the plastic properties of the clay, and therefore could have created alternative vessel types. Thomas (1991) has argued that it was the process to making the pottery and adhering to specific shapes that helped define early Neolithic ideas and worldviews. How the performance of pottery in the early Neolithic linked in with other variables (e.g. monuments) will be discussed in Chapter Seven.

There is increased establishment of regional lithic assemblages, which include leaf-shaped arrowheads, convex end scrapers and plano-convex knives (M. O’Kelly 1968; Woodman 1994). It is within the early Neolithic period in Ireland that the procurement of stone as ‘gifts from the earth’ or ‘sky’ (Whittle 1995; A. Watson 2004b) and the organisation of axe production at specific sites, such as Mad Man’s Window, Co. Antrim, and Lambay Island, Co. Dublin, commenced (Woodman 1992; Cooney and Mandal 1998). Within this period we can notice the shift from distinctive Mesolithic technology to another suite of implements that used pressure flaking to produce piercing arrowheads, knives and scrapers (Woodman and McCarthy 2003, 31). Axes and stone in general, unlike ceramics, were used in areas different from their production and are therefore an ideal focus for regional and local identities, exchange networks and webs of contact for ideas, materials and maybe people (Cooney and Mandal 1998; Meighan et al. 2002). Non-local materials might demonstrate alternative senses of social identity, if perceived against a backdrop of daily life that incorporated more local materials (Cooney 1998, 108; 2000b, 56). If the use of pottery is deemed to indicate a more sedentary society (e.g. Cooney 2000a, 184), then the procurement of stone from areas far from the dwelling zones, for tools (e.g. Bamforth and Woodman 2004), and for use in monuments (e.g. Mitchell 1992;
Meighan et al. 2002; 2003), may suggest that movements were part of a process of making one's way in the world and understanding it.

Excavation reveals evidence for the use of red deer (Cervus elaphus), and domesticated animals, commencing with finds of domesticated cattle bone (Bos taurus), from the Later Mesolithic sites of Ferriter's Cove, Co. Kerry (Woodman and O'Brien 1993), and in a shell midden at Kilgreany Cave, County Kerry (Woodman et al. 1997). On the east coast, domesticated cattle and sheep bones have been discovered in a shell midden at Dalkey Island, Co. Dublin, dating to the beginning of the fourth millennium BC (Woodman et al. 1997). Interestingly, it is not the discovery of domesticates in Irish Mesolithic contexts that raises surprise (see Woodman and McCarty 2003; and Tresset 2003, 26 who argues against husbandry or management models), but rather that there is so little other evidence of these domesticating processes elsewhere (Bradley 2003). Such paucity of evidence has been used to question the extent to which some scholars conflate pastoralists and hunters just because they practice a mobile economy involving animals (Bradley 2003, 220; cf. Tresset 2003). The Irish Neolithic is termed a 'mammalian revolution' (Cooney 2003a, 49). It is, however, noted that overall there is a scarcity in faunal evidence, with some interesting examples being derived from burial locations (McCormick 1986). Although one should always be cautious when drawing conclusions from faunal evidence within passage tombs, as they were often occupied by numerous species (e.g. hibernating frogs and savaging foxes) in later periods (van Wijngaarden-Bakker 1986, 218; M. O’Sullivan 2005, 125). The early Neolithic period is also characterised by the production and processing of cereals (Cooney and Grogan 1994; see G. Jones 2000 for discussion on Britain). For instance, excavations of a small rectangular house (7.40m in length and 6.40m in width) at Tankardstown, Co. Limerick, revealed large samples of charred emmer wheat grain (Triticum dicoccum), with hazelnuts (Corylus avellana), dried wild crab apples (Malus sylvestris), cattle, sheep, pig and possibly red deer bones (Gowan 1987; Monk 2000).

The environmental evidence from excavations in the Boyne valley, Co. Meath suggest a complex usage of the land for both arable and pastoral purposes (M. O’Kelly 1982; Eogan 1984; Cooney 1991; Corlett 2001; see Fig. 3.3, and Chapter Four). This is
supported by the charcoal found in the turfs of Newgrange Site 1, within layers of soil and stone, which may suggest a cleared woodland environment (M. O’Kelly 1982, 230). The evidence from pollen analysis and turf sods at Knowth Site 1, which produces traces of undomesticated herbs and weeds, might also denote clearings within a landscape with open areas of space (Eogan 1986, 115; Whittle 1996a, 245). Although continued human activity in this region throughout the ages has obliterated traces of Neolithic boundary organisation, it is suggested that fixed boundaries between open areas would have been likely (Cooney 1991, 132). An excellent example of early Neolithic fixed boundaries or field systems is that of Céide in northwest Mayo (O’Connell and Molloy 2001; O’Sullivan and Downey 2004). The stone walls enclose fields that are predominantly rectangular and large, being approximately 0.05 to 0.5km² (O’Connell and Molloy 2001, 100). The construction of these stone walled ‘field’ systems in the north-west of Ireland, is argued to resonate with notions of a more sedentary society rather than a purely mobile one (Cooney 1997a, 28; 2003, 48; see also Endnote iv here). Cooney further suggests that ‘...we need to think of the organisation of landscapes into fields as not exceptional, but rather a recurring aspect of Neolithic life...’ (2000a, 47). This proposal is derived from numerous pre-bog field systems in regions covered by blanket bog in Donegal, Connemara, the Dingle, the Iveragh peninsulas and Valencia Island (Cooney 2000a, 46). Such evidence does question the role of bog in determining the distribution pattern of Irish Neolithic field systems. Traditional responses are that Neolithic landnam took place in a landscape that was already open as a result of blanket bog growth (Caulfield et al. 1998, 638), or that settlement patterns and field systems were determined by pre-existing bogs (Caulfield 1983). These proposals are as yet unsubstantiated by scientific evidence, but are areas that will be investigated in the future (e.g. O’Connell and Molloy 2001). Interestingly, field systems have been discovered also in north-east Co. Clare (Condit 2000), in areas which are largely devoid of blanket bog (Jones and Gilmer 1999).
Combined with the evidence of environmental temperatures that were 2 to 2.5°C warmer than today, we can envisage a situation where cereal crops and undomesticated plants may have thrived within, and as a result, of protected field systems and localised deforestation (Herity 1974, 155; Cooney and Grogan 1994, 39; Monk 2000, 81; O’Connell and Molloy 2001; 123). To counter ‘island-wide’ (see Cooney 2000b, 49) arguments that such boundary systems are merely a feature of the west of Ireland and therefore cannot represent a sedentary island as a whole, Monk cites the degree of use and continued rebuilding of structures on the same spot at Ballyharry, Co. Antrim (approximately 300 years) and Tankardstown 2, Co. Limerick in supporting this position (2000, 80; see also Moore 2003). Furthermore, in other ‘non-domestic’ contexts we find evidence of what might be stone boundaries that are subsumed into monuments, as demonstrated at Millin Bay, Co. Down, where a wall runs under the centre of a tomb and oval mound (Collins and Waterman 1955, 8; cf. Murphy 2003 for discussion on period date; see Fig. 3.4). Interestingly, 64 of the stones within this structure are decorated with a plastic style, with incised circles, arcs, ovals, spirals, cupmarks and picked motifs being present (Shee Twohig 1981,
There is also further evidence of bounded field systems to the east of Céide at Rathlackan, Co. Mayo (Cooney 2000a), and on the west coast at Roughan Hill, Co. Clare, where the field systems or ‘mound walls’ cover an area over 1.5km² (C. Jones and Gilmer 1999; C. Jones 2003). This suggests that ideas of bounding and enclosing were prevalent in different places and at different times (see also A. Gibson 2003 for discussion on shrub hedgerows). It is argued by some that although these features are probably Later Neolithic (C. Jones and Gilmer 1999), their conception derives from less intensive Early Neolithic activity (C. Jones 2003, 193; Bradley 2003, 219). The development of boundary systems combined with land-use histories may suggest an increased awareness of the visual in Neolithic societies.

Fig. 3.4 Stone wall through centre of Millin Bay, Co. Down (Cooney 2000a, 50).

Land division and structure was also created through the use of routes and trackways, such as the practice of laying down wooden causeways across bogs to enable the movement of people. These trackways varied in form and construction, according to the requirements and skills of the builders. These paths are useful as they further tell us how people interacted with their surroundings by peregrination between the places that they connect; it is noted that most are straight and therefore require smaller amounts of wood. The simplest and earliest consisted of loose logs or branches on the bog, whereas others were more complex, being built from packed brushwood, woven hurdles or heavy split wooden stems. Bogs in Ireland provide excellent environments.
for trackways to survive as the conditions are anaerobic. Some of the oldest examples are found in the Corlea bog, Co. Longford (Raftery 1996; see Fig. 3.4). Corlea 9 averages 1.60m in width, being constructed from longitudinal stems and brushwood, supported by stout tranverse timbers of hazel, alder and birch. Contemporary with this track is Corlea 8 and possibly Corlea 10, which is of brushwood construction, although radiocarbon dates have yet to confirm this association (Raftery 1996, 11). More recent discoveries include a 70m substantial plank trackway at Derryarkin Bog of east Offaly (Murray et al. 2002). This route-way is constructed of longitudinally laid pieces of brushwood, roundwoods and planks and is 3.7m wide and 0.26m deep. Dendrochronological results suggest a date of c.3643 cal. BC, making this the oldest dated trackway and the earliest extant plank-built structure in Ireland (Murray et al. 2002, 17). Coles (1998, 172) has recently argued that particular types of wood were selected for their ‘magical’ properties and acted as guardians and protectors of the traveler. These trackways act as communication routes and appear to perpetuate over many generations through patterns of recursivness. Interestingly, this point has recently been made by the landscape artist Richard Long, who demonstrates how successive encounters with an area influences future engagements (see Fig. 3.5).

![Fig. 3.5 A line made by walking (Richard Long 1965).](image)

The above Long example illustrates how paths and routes can be easily created in dry land conditions. Clearances in areas could be also produced by large animals, storm...
throw or other natural disturbance factors; generating histories of earlier encounters. Dry land paths are unfortunately undatable and are harder to discover (Cooney 2000a, 224). Although we have evidence for wooden trackways preserved in wetland environments, it should be noted that these areas are in very dramatic and diverse landscapes and therefore may not have been in use as long as dry land ones (Cooney 2000a, 75; see Fig. 3.6). Paths and trackways demonstrate that some of the people in the Irish Neolithic were not stationary, but rather actively mobile within and around their environments (see also discussions in Ingold 2004; J. Mills 2005; Kador 2005).

![Fig. 3.6 Neolithic trackway, Corlea 9, Co. Longford (Raftery 1996, 12).](image)

**Middle Neolithic: the continuation of material culture**

The middle Neolithic incorporates the development of the Linkardstown cist monument type (ApSimon 1985/6; Eogan 1986). This structure consists of a polygonal chamber without any aperture to the exterior, set within a circular covering mound, and was first defined and classified by Barry Raftery (1974). Outside the cist are located the chamber stones with supplemental slabs set leaning inward towards the chamber, forming a palimpsest of overlapping capstones around the chamber. The
chamber is roofed by one or two flat stone slabs. This is demonstrated in an excavated example at Ashleypark, Co. Tipperary (Manning 1985), where the stone structure was located under a cairn with a covering mound of clay. This cairn was 26m in diameter and 5m high. It was surrounded by a low wide outer bank with two internal ditches separated by a penannular ring of undug ground, giving the site an overall diameter of 90m. The stone structure was 4.85m long and 2.30m wide, being constructed from and around a large oblong limestone block with a sloping surface (Manning 1985). A human bone from this site was radiocarbon dated to 3420-3380 cal. BC (ApSimon 1985/6, 8). Linkardstown cist tombs are characterised by the remains of one or more inhumed persons, generally male, articulated or disarticulated and located in the chamber. In one example, an adult male skull exhibited possible fractures from violent blows (J. Raftery 1944). Combined with the earlier evidence for possible social turbulence at Poulnabrone on the Burren, Co. Clare, this further suggests that Irish Neolithic life did not always enjoy peaceful convivial relationships (cf. Whittle 2005, 64). The grave goods consist of decorated round based bowls, with decorated bi-partite bowls being of particular preference (Sheridan 1995). Other objects found include mushroom shaped pins or toggles, flint leaf shaped arrowheads, jet ornaments and stone axeheads (Eogan 1986). This type of monument is mainly found in the south eastern part of Ireland, with the majority being distributed in northern Munster and southern Leinster (Eogan 1986; Bergh 1995; Cooney 2000a).

The middle Neolithic period in Ireland is also characterised by the continued use of enclosures, such as the large ‘second generation’ palisaded enclosure that was part of the sequence of settlement at Knowth, Co. Meath (Eogan 1986; see Chapter Four), and the hill-top palisaded enclosures at Lyles Hill, Co. Antrim (Gibson and Simpson 1987; Simpson and Gibson 1989) and Donegal Hill, Co. Antrim (Nelis 2003). Case identifies what are now termed ‘Goodland sites’ after an upland site at Goodland, Co. Antrim (1969), in which there is an irregular ditch that may have supported palisades, enclosing a series of depositional pits. This location also presents evidence for both the extraction and subsequent working of flint from surface chalk deposits. The pits at these Goodland sites often produce deliberately placed material objects, such as sherds, flints and charcoal (Case 1969, 12), in what might constitute a ceremonial act
designed to create a ‘sympathetic magic rite’ (Case 1969, 13), a sense of ‘unreality or disorientation’ (Newman 1996, 35), or a special sense of place (Cooney 2000a, 70). Indeed, Case (1969) questioned whether Goodland sites and court tombs (he used the term ‘court cairns’), although different in construction, shared similar roles as shrines or some other consolatory role for society. Court tombs are certainly evident within the middle Neolithic period, such as Altanagh, Co. Tyrone (B. Williams 1986), and Annaghmare, Co. Armagh (Waterman 1965).

It is within the Middle Neolithic phase that the development of the passage tombs became more complex. For instance, within the Boyne Valley complex, Co. Meath, the initial construction of smaller passage tombs at Knowth, were followed by the larger tombs at Knowth Site 1, Newgrange Site 1 and Dowth, and then smaller ones again (see O’Kelly and O’Kelly 1983; Grogan 1991; Eogan and Roche 1997a; Eogan 1998; Chapter Four here). The following chapters will appraise these punctuated construction events and the implications of the visual impact of the structures and attempts to understand how some people viewed and thought about their world. The increased complexity of passage tombs is also illustrated by associations with dwelling structures. For example, Eogan and Roche (1997a) suggest that the circular structures surrounding Knowth occurred in this period. Such details will be discussed in depth in Chapter Four.

It is within this phase that we see the occurrence of passage tomb imagery with rectilinear and curvilinear motifs (M. O’Sullivan 1993). There has been much discourse between the connections between passage tomb motifs and those images found on natural rock surfaces. Previously it was suggested that passage tomb images pre-dated ‘rock-art’, with there being continuity into the Early Bronze Age (Shee Twohig 1981; S. Johnston 1993; Jackson 1995; Bradley 1997; Cooney 2000a). Recently, however, Waddington (1998) has argued that the evidence of cup and ring marks (normally associated with open-air rock-art) on orthostats from Newgrange Site 1 that were incised before inclusion, suggest that the ‘rock-art’ tradition is older than the act of carving passage tomb images (see also Van Hoek 1988; Edwards and Bradley 1999; Coyne 2001; Purcell 2002; O’Connor 2003). Waddington (1998) does, however, concede that cup and ring marks do occur in later periods, with examples
Chapter Three

deriving from the stone circle at Newgrange, and the Early Bronze Age. The possible roles that cupmarks played at passage tombs will be discussed further in the following chapters.

Dwelling structures appear to continue utilising the rectangular shape that was evident in the earlier phases, as is evident at Ballyglass 1, Co. Mayo (Ó Nuaíl 1972; Cooney 2000a), Ballyharry, Co. Antrim (Crothers 1996; Moore 2003) and Corbally, Co. Kildare (Tobin 2003); although some ‘hut sites’ are still being found, such as in the western Pap mountains, Co. Kerry (Coyne and Connolly 2002). The data suggest that some sites operated on a seasonal basis, such as at Carrigdiry, Co. Limerick (A. O’Sullivan 1997), and on a longer basis, such as in the Boyne Valley (Eogan 1991). Some of the best evidence for occupational structures derives from Lough Gur, Co. Limerick, where approximately fourteen ‘houses’ have been identified (Grogan 1996). Whether circular or rectilinear, the main structural component of Irish Middle Neolithic houses was wood, with stone very occasionally being used, such as at Lough Gur, Co. Limerick (Grogan 1996). The dwellings within the Boyne Valley were mostly circular, approximately six metres in diameter, and smaller in area and less substantial than some of the earlier rectangular ones. It has recently been argued that some of the Knowth dwellings were abandoned some considerable time before the tomb-building commenced, with others being left immediately prior to the first passage tomb being built (Grogan 1997, 30).

The Irish Middle Neolithic phase demonstrates increasing interest in regionalised material culture; for example there is a distinct regional style of carinated bowl pottery in the Lough Gur area (see Sheridan 1995; 2003a for discussions). This traditional version of the carinated pottery style is modified throughout the Irish middle Neolithic, such as the usage of decorated bipartite bowls, Carrowkeel bowls, which are impressed with strokes of different lengths called ‘stab-and-drag ornament’, and the heavily decorated globular bowls and pots (Case 1969; Herity 1982; see also Chapter Seven). This localisation of material culture is also demonstrated in the lithic material, with the development of the classic concave or hollow scraper, which for the first time appears in a range of contexts and locations with specific styles (Woodman 1994, 215). Examples of contexts include mortuary deposits (Herity 1987), enclosed
uplands sites, such as Donegore Hill, Co. Antrim (Nelis 2003), and specialised upland sites, such as Knocknarea, Co. Sligo (Bergh 2002). Landscape organisation is again demonstrated by trackways, with one of the best Irish Middle Neolithic examples being from Corlea in the Mount Dillon complex of bogs, Co. Longford (B. Raftery 1996).

**Late Neolithic: creation and transformation**

This final stage of the Neolithic is generally characterised by developments and changes in burial activities (Cooney and Grogan 1994, 75). In this period a number of smaller tombs were constructed after the main mounds at Knowth Site 1 and Newgrange Site 1, Boyne Valley (Eogan 1998; M. O’Kelly 1982). With the exception of the wedge tomb, over seventy have been discovered in north-east Co. Clare, for instance (Condit 2000, 27), and the construction of megalithic tombs seems to fall out of fashion, with activities focusing more on different social engagements with the existing monuments acting as focal points. Knowth and Newgrange, Boyne Valley are excellent examples of locations in which there is evidence for continued usage, albeit of a largely non-funeral nature (Cooney and Grogan 1994, 78). This desire to incorporate existing monuments with new practices is demonstrated by the encirclement of Newgrange Site 1 by the Great Stone Circle^x and by the evidence of settlement activities around the perimeter of Knowth Site 1 (Stout 2002). Two timber circles have also been discovered close to Newgrange Site 1; the larger one is located to the south-east east and pre-dates the Great Stone Circle, whereas the other smaller one is situated 30m to the west on the summit of a ridge. The Knowth timber circle is 9m in diameter was excavated outside the entrance to the eastern passage at Knowth Site 1. All three have been dated to the late Irish Neolithic period, although the Knowth timber circle does contain quantities of Grooved Ware in some of the post-holes (Condit and Simpson 1998, 57). Earthen enclosures are also a feature of the late Neolithic. For instance, the Giant’s Ring is one of the largest Irish henges, being 190m in internal diameter and surrounding a passage tomb, is located at Ballynahatty, Co. Down (Hartwell 1998). This is an interesting example, as the topography of the
environment is similar to that of the Boyne Valley, in that the henge and passage tomb are framed by water in the form of the River Lagan. Associations with ridges, passage tombs and water will be explored in more depth in Chapters Four, Five and Six.

The wedge tomb, with over 400 known examples to date (Eogan 1986, 28; Bergh 1995, 11) is currently thought to occur in the very late stages of this phase. The chamber of the wedge tomb consists of a long narrow gallery of orthostats covered by flat roof-slabs, it is generally higher and broader at the entrance, whilst decreasing in height and width towards the back. The wedge shape is normally emphasised by one or two rows of upright stones located outside and parallel to the chamber. The whole construction is enclosed in a D-shaped cairn, with entrance being gained via an aperture on the centre of the straight side, as is seen at Cabragh, Co. Sligo (Ó Nualláin 1979). Although the main burial evidence is derived from cremation, there are occurrences of inhumations as well. This change in burial rite, combined with the presence Beaker pottery and C14 date evidence, has indicated that wedge tombs may date to the later Neolithic/Early Bronze Age period (Shee Twohig 1990; Bergh 1995; Cooney 2000a). Coarse ware and Beaker pottery is often discovered with undiagnostic flint tools and barbed and tanged arrowheads (Eogan 1986, 28; Shee Twohig 1990, 56). Wedge tombs, as with court and portal tombs are located often as single monuments, and are predominantly found on the western coast of Ireland from Cork to Derry. Most are located above the 183 metre contour (Shee Twohig 1990, 57), suggesting an increased interest in upland areas in the later Neolithic.

Although the evidence is difficult to interpret, it is believed that there were also a substantial number of dwelling structures at Newgrange (M. O’Kelly 1983, 53). Based on the spacing of fourteen rectangular hearths, it is suggested that buildings that were utilised on a daily basis rather than for special ‘ritual’ activities, and that the structures represent more than one occupation phase (M. O’Kelly 1983). There is also evidence for a structure, that is believed to have had a ‘non-domestic’ function, located to the north-west of Newgrange (Sweetman 1987). There is evidence for the use of ‘hut sites’ in the Later Neolithic, with a minimum of 23 being discovered at Knocknarea, Co. Sligo (Bergh 2000, 17). At Knowth there are clusters of small stake-holes, whose sequences are interpreted as forming circular ‘huts’ or ‘houses’ (Eogan
1986). Based upon the size of these stake-holes it is estimated that some of these structures were substantial, possibly being covered with a straw or rush conical roof that was supported on a ring of upright posts. The less substantial buildings are believed by some to have been flimsy, and supported by stakes pushed into the ground, bent over and covered in hides. In both the structural examples, hearths are found within or in close proximity to the buildings (Roche 1997).

Decorated Carrowkeel pottery is still discovered occasionally in the occupational detritus and more often in passage tombs (Case 1969; Herity 1982). Another style of pottery that is associated with passage tombs and dwellings in this period is the ‘Broad-Rimmed Ware’, which was globular with a wide complex rim. These pots were decorated in a technique that employed cord and comb type impressions, incised lines and dots (Roche 1997). It is near these tombs and in this phase that we begin to see the appearance of flat-based Grooved Ware pottery, around 2900-2700 BC (Eogan and Roche 1994). At Knowth, the majority of discovered Grooved Ware pottery is from the timber circle, which is located in front of the eastern tomb, Site 1 (Eogan and Roche 1994). At Newgrange, substantial amounts of Grooved Ware pottery has been found, some of which is associated with the large timber circle near Site 1, and in occupation contexts in front of the main mound near the hearths (Roche 1997). Carinated pottery is still found in ‘domestic’ contexts.

Within the Late Neolithic in Ireland, there is increased emphasis on the deposition of individual or ‘status’ objects, with many being found in lakes, bogs, tombs and sometimes rivers. Lithics such as transverse arrowheads and stone maceheads of ovoid and pestle form are found with Grooved Ware and Beaker pottery (Sheridan 1995). Scholars have argued that the occurrence of Grooved Ware alongside these styles of macehead at this time suggest strong links between Ireland and Orkney (see Simpson 1996b; Eogan 1999; Sheridan 2000). The end of the Irish Late Neolithic phase is marked by a preference for Beaker pottery, the beginnings of metallurgy and the construction of wedge tombs and Tramore-Scilly V-shaped entrance tombs (O’Brien 1999; Sheridan 2003b, 72). Trackways continued to be used from this period into the Early Bronze Age, such as at Cloonbony, Co. Longford (Raftery 1996, 11-12). This trackway can be followed for almost 400m, in an east west direction, with
the route forking into two diverging branches towards its eastern end. Recently, a possible Late Neolithic/Early Bronze Age trackway has been excavated in Roundstone Bog, Co. Galway (Kelly 2002); this trackway was constructed from stones rather than wood and seems to be associated with possible field boundaries (Kelly 2002, 26).

The above description of the Late Irish Neolithic is deliberately brief as this thesis is primarily concerned with activities from the earlier phases. My main sphere of interest is with the visual imagery of the Irish Neolithic and how we can use this to further understand the possible mentalités of the people who lived at these times. The motifs on the passage tombs in particular offer an excellent starting point, and I will explore them in more detail in the following chapters.

Summary

As proposed in the introduction, this chapter is not intended as a detailed analysis of all the themes and arguments concerning the Irish Neolithic, but rather a comprehensive, albeit brief, overview (see Fig. 3.7). The patterns that emerge from the three period phases include an increased awareness of material culture, suggesting that some people used and possibly perceived it in fluid and complex ways. This means that the engagements that people had with monuments, imagery and artefacts
Chapter Three

were not static, but rather susceptible to constant change, whilst maybe still incorporating past histories and memory.

The landscapes can be seen as an important component to Irish Neolithic life. Specific locations would have been used for settlement, farming, gathering and hunting during the daily round, and may have felt very familiar. Other sites may have been frequented less, such as areas where stone might have been procured and manufactured into tools, or other locations such as burial or special complexes. These latter places may have been viewed as important and only visited at special times of the year, and may have had different rules or beliefs governing them. It is these ‘special’ areas that we will now focus on, paying particular attention to variations in regional differences and similarities. I will for example review east versus west (e.g. the Boyne Valley and Loughcrew complexes) and north versus south (e.g. Sess Kilgreen and Knockroe) Ireland.

The following chapters will consider the themes introduced so far and incorporate them with case studies of particular sites and locations. I will discuss these data, with issues of timing, scale, performance, intensity, similarities and differences in order to further appreciate the variation and fluidity of the Early and Middle Irish Neolithic periods.

1 Interpretations of the Irish Neolithic have not always enjoyed such confidence; in the early part of the twentieth century, Mahr stated, ‘...I deny the existence of a neolithic [sic] phase in Ireland, and of an “Irish neolithic pottery”...’ (1937, 332). See also Evans for Irish period divisions as Mesolithic, Megalithic, Sandhills and Bronze age (1931, 190). Recently, Ashmore has denounced the usage of the term ‘Neolithic’, unless used in a very general ‘fuzzy’ context (2003, 46).

2 Burenhult (1980; 1984; 2005) has claimed that the tombs in the Carrowmore complex were of a mid-fifth millennium BC date, with Tomb 4 being suggested to date to 5400 cal. BC. Bergh has argued that these estimates are contentious, and offers a construction date of c. 4000 cal. BC (1995, 98-110; see also Sheridan 1985/6; 2003b; Shee Twohig 2004).

3 The most common evidence for red deer in the Irish Neolithic is found in the shape of the mushroom-headed pins made from antler in passage tomb contexts, such as Knowth Site 1, Co. Meath, Fourknocks I, Co. Meath, Carrowkeel, Co. Sligo and Belmore Mountain, Co. Fermanagh (van Wijngaarden-Bakker 1974; 1986). Deer antlers have been discovered in primary contexts, such as at Loughcrew, Co. Meath (Woodman and McCarthy 2003), but bones are only ever discovered in very late contexts. Interestingly, at Cairn D, Loughcrew, Co. Meath, possible deer bones are associated with teeth and skull fragments (Coffey 1873, 50). Sharples (2000) has recently argued that there was deliberate introduction of red deer into the Orkneys during the final stages of the Orcadian Neolithic, for symbolic and economic purposes. It is still debated when red deer was introduced into Ireland (Cooney 2000a,
Chapter Three

43), with Woodman and McCarthy (2003, 37) recently suggesting that only the antlers and some bones were imported to Ireland during the Neolithic for prestige purposes.

iv Scholars have debated for some time now the extent to which Neolithic occupants of Ireland and Britain were sedentary, with some suggesting that people were possibly more mobile and pastoral (e.g. Darvill and Thomas 1996; Whittle 1996; 1997; Bradley 1997; J. Thomas 1999). Such proposals are regarded by some as a move away from rethinking the Neolithic to understanding it (J. Thomas 1991; 1999). It is now largely 'understood' that the Neolithic was a very diverse period throughout Europe. By working at regional levels and scale it is becoming apparent that in some areas animal husbandry played an important role with large scale mobility (e.g. southern England, especially in Wessex models), whereas in other areas, such as Ireland, evidence for houses and field systems suggest a more sedentary based populous. It is possible that both these models are appropriate for the areas that they describe, and that there is no need to harmonise them (Bradley 2003, 218). Even though the Irish Neolithic is now appearing more sedentary than was previously proposed (see Cooney 2001a; 2003), one must remember that the increased tetheredness of people does not limit them to their dwelling bases (Waddell 2000, 39-42). They were still moving around the landscape in important ways on trackways (e.g. Raftery 1996) and venturing to diverse locations to procure wood for dwellings (e.g. Dunne 2003), stone for tools (e.g. Bamforth and Woodman 2004) and monumental structures (e.g. Meighan et al. 2002). In appreciating the complexity in which all humans move across their landscapes (Kador 2005; J. Mills 2005), we can progress from models that describe the Irish Neolithic as '...sedentary communities who only utilized [sic] the immediate vicinity of their farmsteads...' (Woodman et al. 1991/2, 34).

v Cooney has recently argued, however, that the two forms are contemporary, with the round structures representing a more temporal element in an overall settlement system, with the rectangular buildings at its core (2000a, 67). Radiocarbon dates have yet to resolve this debate, one way or the other (Cross 2003, 195).

vi Interestingly, a recent study of 50 megalithic tombs in south-west Co. Donegal, also noted a preference for tombs to be sited on '...warmer southerly facing slopes...' and within 200m of fresh water (Keeling et al. 1989, 153). This predilection for locations near water will be further explored in Chapters Four, Five and Six.

vii Compare with Briggs (1988) who challenges stone distribution patterns purely in anthropogenic terms; instead he argues for glacial erratic movements. Such discussion is interesting, but fails to engage with any social practices or explain why certain stones were selected in preference to others.

viii Domesticated animal bones have been discovered at Sutton in Dublin Bay, dating to the mid-sixth millennium BC, but it is claimed that the species identification is unreliable (Woodman et al. 1997).

ix It has recently been suggested that Lyles Hill may in fact be a causeway enclosure, containing more ditches than have previously been identified (Oswald et al. 2001, 158).

x In considering the relationships between passage tombs and stone circles, Burl proposed that the Great Stone Circle is '...no later than the passage grave and therefore the earliest stone ring yet recognised...' (1976, 242). This interpretation has resulted in much debate, with O'Kelly (1982, 82-83) arguing that the stone circle was either built before the tomb was constructed, or both were created at the same time as one another; Sweetman (1985, 214-216) proposed that the circle is much later and pushes its erection in to the Beaker period; while Bradley (1998b, 102; 1998c, 4) posits that Newgrange was a composite structure, combing monoliths with passage tomb. I have entered its erection into the Late Neolithic section, as both the published excavation reports might be interpreted as suggesting a later date for the stone circle construction (see also Cooney 2000a, 165). As Bradley states, '...[t]here does not seem to be any way of resolving the problem...' (1998b, 103).

xi Parallels between Breton, Scottish and Irish Neolithic pottery have been made, but these diffusionist models focused more on a Scandinavian connection for influences between cultures (see Coffey 1912, 69; Case 1961, 220; 1963, 14; 1969, 17; Herity and Eogan 1977, 111). Breuil stated that such...
perspectives are influenced and ‘...afflicted severely by the *mirage oriental*...’ (1934, 290; see also Waddell 1978, 127).

*ii* The initial claims that the *allées couvertes* of Brittany provided the prototypes for the wedge tombs (de Valéra and Ó Nualláin 1961, 115; Case 1969, 21), were later replaced by a changing indigenous development processes (Cooney 2000a, 152; for similar discussions of internal social changes and megaliths see Darvill 1979; ApSimion 1985/6; Sheridan 2003b).
Chapter Four

Introduction

Summarising the themes of the previous chapters, it is clear that there are multiple ways of thinking about and seeing the world in which one lives in. I believe that these various and sometimes conflicting perspectives were played out and often central to the design and execution of passage tombs, their settings and their associated motifs. This chapter begins to reconstruct and describe some of the social processes that may have facilitated these practices. I review in detail the Boyne Valley complex focusing on the individual sites within the lower Boyne Valley, also known as ‘Brugh-na-Boinne’ (Wilde 1849), ‘Brú na Bóinne’ (Coffey 1912) or ‘Bend of the Boyne’ (Ó Riordáin and Daniel 1964), and their relationships to the engraved motifs, the river and landscape. As a starting point to introduce the reader, this chapter will examine in detail the geological, environmental and archaeological histories of the area. In doing so, we can further appreciate how the concepts of gaze, engagement, performance, cosmology, distance, familiarity and otherness effected the Irish Neolithic daily routines.

It is not my intention to repeat all the archaeological data that have been previously published, but rather to extrapolate particular sequences and themes and consider them within worldview and visual engagement frameworks, as detailed in Chapters One and Two. It is proposed that it is paradoxical to retrospectively regard the Boyne passage tombs as representing complete œuvres, as when they were constructed it was unlikely that they were meant to be prospective. If indeed the tombs were, they would be acting as though the work (i.e. the creation of structures and application of motifs), pre-existed and sensed their end in the beginnings, as though the sites were static and closed (see Baudrillard 2003). In considering this we can propose that the tombs and motifs emanated and altered via a network of social relations (Gell 1998, 221). The notion that the early Neolithic people thought of or characterised the Bend of the Boyne as an ‘island’ (see also Powell 1938a, 243; Cooney 1987, 84; 2000a, 153), with cosmological significance and as a realm for the dead and living, will be explored in
this chapter. It will also be debated whether these locations may have had particular special characteristics, where the sky, land and river conjoin; possibly creating an axis mundi worldview perspective at places that could be regarded as liminal (see Chapter One). The idea that some passage tomb complexes adhered to an overall linear arrangement, which was connected with particular spatial movements, has been previously discussed (e.g. Cooney 1990; Thomas 1992). The extent to which the settings are bounded by water has not, however, been reviewed and will be here.

The passage tombs and their motifs will not be regarded as static, but rather ‘animate’, fluid and prone to transformations. Detailed accounts will be made of episodes and temporalities, multiple meanings and overlapping phenomena. The superimposition of motifs will be reconsidered within a carnivalesque framework. This perspective is pregnant with conflicts, tensions and paradoxes, all of which allow a more complex understanding of the immediacies and non-uniformities of overlain passage tomb visual images.

The Bend of the Boyne: background

Geology

The river Boyne and other geological factors require consideration if we are to appreciate the significance of this area for the people who first settled and created the enduring structures. The river Boyne is characterised by its bend as it flows eastwards below Slane, making a right-angled turn to the south. The rock against which the river is turned forms the western end of a ridge of Carboniferous shales, that lies at a height of approximately 61m above sea-level, and continues east for three miles, supporting the three passage tombs, Knowth Site 1, Newgrange Site 1 and Dowth and their associated smaller tombs and features (C. O’Kelly 1971). The next turn of the river river swings east, flowing parallel with the ridge and then northwards, thereby completing the Bend of the Boyne (G. Mitchell 1997; see Fig. 4.1). The Boyne River meets the Mattock river to the north, which itself originates in the Louth massif (Stout 2002). This bend lies within the ‘eastern triangle’, a part of Ireland that receives less rain and has less bog and mountain than any other compact area of similar size in Ireland (Andrews 1967, 21; see Fig 4.1). Bogs do, however, still exist in the Boyne,
being formulated by the five drainage systems in the area. For instance, north of the river at Knowth several streams flow into the Mattock River creating a marshy bog area between Newgrange and Dowth. During the late Mesolithic early Neolithic transition, the sea was approximately 4m above its present level and was tidal up to Glenmore (G. Mitchell 1995, 34).

The Boyne is now tidal as far upstream as Oldbridge, where the Mattock River meets the Boyne. Where rivers cut through glacial ridges, shallows or fords are formed. These fords are important as they can either create aids for river crossings or barriers for river travel, and as such may have been a central component of daily life (Stout 2002, 11). These rivers or ‘riverscapes’ may have been seen and thought of as being alive, diverse, dangerous, eternal, contoured and imbued with cosmological significance and ambiguity. These fluid worldviews may have helped create senses of identity, place and history (see also Wilde 1849, 2-3; Cooney 2003b, 323, 325). The sitting of passage tombs near these waterways may also have altered the significances of them into places that carried connotations of journeys, transformation and death (Richards 1996a), and different places, such as the sea and the mountains. As well as being regarded as being active, alive and regenerative, rivers may also have been thought of as dangerous; they can be physically felt and entered into, whilst also being able to cause injury, sickness and death (J. Buxton 1973, 363). Indeed, for the Saami of Finland, rivers are symbolically used for the dead, as they are able to decompose, rot and putrefy life (Bradley 2000, 27); Eliade termed these types of rivers ‘Waters of Death’ (1964, 355). Journeys on rivers may have therefore been associated with acts of personal transformation (either alive or dead), in rites of passage (Fowler and Cummings 2003, 2). Rivers can be incorporated into a three-tiered axis mundi worldview, although they are not always associated with the earth. For instance, the Mandari of southern Sudan, believe that both water and rivers are from the Sky or ‘Spirit-of-the-above’, as it is thought that all water was once rain (J. Buxton 1973, 364). Interestingly in a more modern context, a recurrent feature in English and German folklore is that the souls to be born or unborn children exist first in fountains, springs, lakes and flowing water (van Gennep 1960, 52).
Environment

The entire Bend of the Boyne area lies at 45.72m above sea level and is mantled by glacial deposits. Two parent deposits contribute towards these deposits; an eastern component from the Irish sea, rich in clay and with a high content of calcium carbonate and a western component, which is less rich in these ingredients (McCabe 1973, 356-7). Today the Boyne is mostly dominated by grassland with fertile yet poorly drained, grey-brown podzolic soil, which is a medium to heavy clay loam that very occasionally contains flint. During the early Neolithic it is thought that the soil
would have been looser in texture and richer than today in basic nutrients (e.g. nitrogen, phosphorous and potassium) (G. Mitchell 1997, 5). As the Boyne is one of the drier parts of Ireland, it is therefore possible that this area could have produced rich cultivated crops. Today the area is described as oceanic, with mild moist winters and cool cloudy summers (Stout 2002, 12). This maritime climate is associated with the Gulf Stream, which moderates temperatures and helps produce a high humidity with prevailing winds being south-westerly to north-westerly (Stout 2002, 13). Such a position generates higher air temperatures in winter than in any other part of Ireland. During the Irish Neolithic period, environmental temperatures were 2 to 2.5°C warmer than today (Cooney and Grogan 1994, 39; see Chapter Three); we can therefore envisage a situation where cereal crops and undomesticated plants may have thrived. Outcrops of rock, approximately 61m above sea-level, protrude through the glacial deposits. These knobs of rock are mainly of limestone, which have low crags and hollows. Yet one area in this region there is a triangular zone of black shales stratigraphically placed above the limestone; this area is the Bend of the Boyne. The three main passage tombs of Knowth Site 1, Newgrange Site 1 and Dowth are located directly on top of these knobs of black shale rock (see Fig. 4.2 and Fig. 4.3). The topographical association that these monuments have with water creates the visual impression of an island. The passage tombs are almost surrounded by the rivers Boyne and Mattock. This geological 'island' is largely floored by glacial outwash gravels rich in limestone, with clayey soil, part light gravelly soil, part light slaty, but all fertile (G. Mitchell 1984, 10). This combination of soils at the Boyne 'island' meant that in theory neither excessive rainfall nor excessive drought could destroy all the crops of the area (G. Mitchell 1997, 6). This island setting was formed at the end of the Ice Age c. 12,000 years ago, as the ice sheet retreated towards the north-west (Stout 2002, 9).
Flora

Palaeobotanical investigations carried out in the Boyne Valley indicate that a diversity of trees once grew in the region, such as pine, birch, elm, oak, alder, hazel, willow and hawthorn (Groenman-van Waateringe and Pals 1982; Eogan 1986). Before forest clearance began, it is believed that there must have been oak woods on the heavier lands in the higher northern ridges, hazel and birch woods on the podsoils and brown earth to the south and alder thriving on the gleys in the river valley (Eogan 1986, 13). At Knowth the evidence for herbs and weeds suggests that considerable forest clearance had taken place for agriculture by the time the tombs were built (Eogan 1986, 13). At Newgrange the evidence from pollen and seed analysis and macroscopic plant remains indicates an open landscape that was used for agriculture with wet soils and damp pastures similar to those found today (Groenman-van Waateringe and Pals 1982; Monk 2000). Although palaeomycological investigations have not been conducted, it is interesting to note that these conditions are optimal for fungal growth, be they psychotropic or other (Svrcek 1999).
Fig. 4.3 Schematic plan of the passage tombs of the Boyne Valley, Co. Meath (adapted from Eogan 1986, 13).

**Understanding the Boyne: some stimulating solutions**

Associations between the tombs and their motifs and their settings, especially with water, are among the first themes that this chapter considers. I am interested in accounting for the role that water-flow may have played in altering the viewer's engagement or experience with the monuments. I will review how these liquid solutions may have assisted in developing snapshots of an interpretation of reality, on the surface of the stones. I follow an approach adopted by Ego (2001), who considered how some visual images on San rock art in southern Africa are influenced by liquids. In this model the images metamorphose from a static state, to an animated form via the flow of water. The San regard rain as an entity, and in its various incarnations, it has the power to transform pictorial depictions and precipitate...
meaning. This chapter will investigate how this approach resonates with the evidence from Irish passage tombs, and whether we can consider these data as playing an active and animated role via liquidation and sequence.

The visual images on Irish passage tombs are not produced via the application of pigment or paint; although it is possible that they were originally decorated or enhanced with colour. It is noteworthy that the importance of colour to past societies has only just begun to be discussed in depth, with scholars now proposing that colour impacts upon most conceptual systems and worldviews (e.g. Lynch 1998; Jones and Bradley 1999; Taçon 1999; Jones and MacGregor 2002). As with the engraving, the possible paintwork that might have adorned the stones may not have been applied to all motifs at the same time, since there may have been episodes of superimposition and more fluid sequences. If the stones were painted, we can argue that the erosion of the paint over time by the elements could have altered the experiences of the sites as unchanging and timeless stone reflections, into a simulation of life that time transforms. These painted images may have been periodically re-applied and slightly distorted each time by different ‘artists’ or agents. This would result in the individual forms having two faces, erasure and metamorphosis, and in both of them the image becomes animated. Unfortunately there is no hard evidence at the moment for the stones in Ireland ever being painted. In the early part of the twentieth century, Breuil and Macalister (1921, 4) suggested that some stones were originally painted (e.g. red/brown lozenges on a corbel over C10 in Cairn T, Loughcrew, Co. Meath) and that environmental conditions have not permitted survival. Certainly, Iberian megalithic imagery in more favourable conditions has surviving paintwork, where motifs in red, or in red and black, were applied to a white background (Shee-Twohig 1981, 32-5). For instance, on C5 backstone from the central part of Antelas passage tomb, Viseu, Portugal, we can see traces of red and blackish pigment with pale bare stone (Bueno Ramirez and Balbin Behrmann 1997; see also Fig. 4.4). The colours employed are equally interesting as they fit with Turner’s (1967) study of the Ndembu of northwestern Zambia and their initiation rituals and worldview belief systems, in which the colours black, white and red represent cosmological rivers and bodily products. Turner notes that the Ndembu sense these three colours as ‘...rivers of power flowing
from a common source... permeating the whole world of sensory phenomena with their specific qualities...’ (1967, 68). For the Ndembu, the colours provide a kind of ‘primordial’ classification of their realities, while standing for basic human bodily experiences, such as hunger, fear, aggression, submissiveness and excretory drives (Turner 1967, 89-90). Buxton’s (1973, 382) account of the Mandari of the southern Sudan also suggested that the colours black, white and red are used to influence perception and create oppositional states that reverse a given order. The colours black and white particularly affect this reversal process, for instance black has a primary ‘death’ association, but in a rain context it is regarded as life-bringing, though at the same time it retains a reversed characteristic that embodies death through being a rain-storm, a killer or destroyer (J. Buxton 1973, 385). Tilley’s contextual investigation of some Middle Neolithic passage tombs in Southern Scandinavia, argued that the use of red ochre, white bones, the black of clay and flint for axe blades, and the various colours of the stones used in the tomb construction, represented the mixing of ‘blood’ with the ‘semen-milk’ of the ‘ancestors’ (1996, 316, 322). As discussed in Chapter Two, traces of pigment have recently been found by taking infra-red photographs of a number of decorated surfaces in the main chamber at Maeshowe, Orkney (Bradley et al. 2000). It may be that the examples considered were treated in a similar. Yet at the moment this is just conjecture and I am therefore more concerned with how one could animate images without paint; the next most obvious option to me seems water. Water as a liquid is an interesting element that requires further consideration within a Neolithic setting. In particular we should examine the ways rain and river water, both of which are prolific in modern Ireland, frame certain passage tomb settings, and continue to influence our experiences with monuments today.
Rain water marks the rhythm of the passing seasons and the blossoming of berries and fruits. No society has ever managed to rid itself of meteorological fluctuations. With respect to some of the attributes of water, be it from the sky or the river, we should note that associations with life and liquid can transcend time, society and geography. Life depends upon liquid; this is universal. From the concept of water being essential to life and the fountain of youth, to semen, milk, blood, bile and saliva and the like, a constant principle in most societies is that liquid means life while loss of liquid means death. For example, the Mandari of southern Sudan, make associations between life, fertility, women and water, and these are demonstrated by the euphemism for pregnancy, which is termed *sipi i pele* ‘water in the belly’, while the word for semen is *kula yunusi* ‘making water which promotes conception’ (J. Buxton 1973, 369). A structural approach to this might suggest that ‘wet’ and ‘dry’ as an oppositional pair
mean ‘life’ and ‘death’. Therefore, liquids are living, whereas drying is dying. This may be an element to cremation activities, which is the predominant rite at Irish passage tombs (Herity 1974; Eogan 1984; 1986). Burning the dead expedites the ‘drying’ process, the final removal of the liquid of life. Burning and fire also universally produce the three colours black, white and red in the colour spectrum when in contact with organic and non-organic materials (Borić 2002, 26). The colours black, white and red may also then transcend associations with water and fire, life and death. Interestingly, as fruits age they lose liquid and they wrinkle. Might old age be thought of in the same terms? Might the tradition of drinking to another person’s health, a toast, replenishing the vital liquids within oneself and stating that you do so for another as well, be tied in with notions of beings having limited liquid supply and the task of life having to be constantly ‘stimulated’ and worked at? Certainly for the Mandari of southern Sudan, the human body is regarded as being both moist and dry at different stages of life (J. Buxton 1973, 363). By thinking in these terms, we might suggest that the large stone basins in the passage tombs, such as the one located in the right hand recess of the eastern tomb at Knowth, K1, contained wet water as opposed to just dry ash and bone (see Fig. 4.5). Such observations are not new, with Edward Lhwyd commenting on Newgrange in the late seventeenth century that he ‘...observed that Water [sic] dropped into the right-hand Bason, tho’ it had rained but little in many Days; and suspected that the lower Bason was intended to preserve the superfluous Liquor of the upper (whether this Water were Sacred, or whether it was for Blood in Sacrifice), that none might come to the Ground...’ (cited in Coffey 1912, 8 original emphasis). An interesting modern example of liquid activation is derived from the Mangang ceremony in Malaysia, in which they pour Tapai, an alcoholic beverage, on to standing menhirs, to appease and refresh the spirits within (Phelan 1994; see Fig. 4.4). For some of the aborigines in the Kimberley region of Australia, the Wandjina belief system allows people to accept that some rocks represent clouds, whose power is renewed via the applications of liquids (mostly paint) (Vinnicombe and Mowaljarlai 1995, 234). In a prehistoric context, Schefer has remarked on the Palaeolithic engravings of Foz Côa in Portugal, that ‘...water not only preserves the figures but it feeds them periodically. It keeps them alive...’ (1999, 100 my emphasis). While Coles (2004, 204) comments that some Bronze Age images at Bro
Utmark, Sweden were placed in locations that are often wet to make viewing them more dramatic. The notion of bathing images and keeping them alive through dynamic flows will be further discussed below.

If the stones were painted we could see how the erosion of the painted images could mark the passing of time, with the periodic bathing process by rain creating a gradual destruction and movement of the image. This might generate relationships in which there are ‘biographical perspectives’ for the spectator, thus imbuing the stones with volition and ‘life cycle rhythms’ (see Gell 1992). Without paint we can think of the water not destroying but rather distorting, enhancing or ‘enchanting’ the image and creating animated qualities, possibly as a form of ‘technology’, which acts to captivate a viewer (see Gell 1998; 1999d). Such a process or display may have been thought of as ‘magical’, producing effects which do not articulate to the spectators ‘normal’ sense of self, embodiedness, agency and being in the world (Gell 1998, 71). In a modern context, one might describe such engagements with visual images as stimulating ‘uncanny’ rather than ‘magical’ sensations. On K1 at Newgrange Site 1 (see Fig. 4.6) one can notice the difference between the areas stimulated by water and the areas not. This enhancement or activation through water or any liquid, be it milk or blood, literally adds dimension to the image and makes it stand out. The water
running is giving a ‘suggestion’ of movement. The liquid is adding dimension and illusion to the ‘performance’ of the image, which is objectively congealed in the stone. One can notice the ways in which the water has enriched and literally brought out of the stone the red colours in the granite, exploring the surface tensions of the ‘false relief’ motifs. The water has brought to life and refreshed the engraved images and the subtleties of the stone in the viewers’ minds eye, with it maybe vitalising the cosmological powers in the rock, defeating a static spectatorial recapitulation. The contrast in colour and brightness between the wet and dry states of the stone might also reflect connotations with the vividness of blood and the emotive and animate aspects of life (see also Cooney 2002, 101). Interestingly, K1 has a vertical channel dividing the upper half of the decorated surface in the centre. A similar channel is present on K52 that is diametrically opposite on the rear of the mound. This feature also occurs on the entrance stones for the eastern (K74) and western (K11) passages at Knowth 1 (Eogan 1986). At Dowth on K50 there is also a vertical line on the surface, and this stone is located directly opposite the rear of the north passage tomb, on the eastern side of the mound (O’Kelly et al. 1983). McMann (1994) argued that the vertical strokes implied that the builders believed that an axial alignment extended through the structure and into the landscape, whereas Eogan (1996) has taken these vertical channels to indicate the presence of an entrance (see also Lewis Williams and Pearce 2005). This latter statement is clearly true in three examples, but is not, however, universal. I suggest the channels served a more active role, allowing liquids to flow and resonate down and through these particular, and possibly significant stones.
As discussed in Chapters Two and Three, I believe that our experiences of realities are influenced by visual images and that these images literally create visual or virtual realities. Whether the Irish Neolithic peoples did create complex cosmologies to experience the decorated kerbstones as being animated, momentary, fluid and flexible is something that we will never ultimately really ‘know’. What we can ‘know’ is that people, be they modern or Neolithic, depend on water and liquids for life and that people universally in temperate Europe live in realities that are periodically altered and influenced by the effects of water and rain. I am not suggesting that peoples in the past only experienced or used the monuments in the rain or with water, but rather that we should consider that some passage tomb settings, such as the Boyne Valley passage tombs, are framed by water and that the tombs are orientated in a context so that they repel water (that is with the corbelled roof) and also incorporate it (such as with water flowing over the kerbstones and possibly in the basins). We are not just dealing with the structural dichotomies of wet and dry, but also inside and outside. These points are themes that will perforate the following sections that dissect in detail the three main passage tombs of the Bend of the Boyne.
The first site we will look at in detail is Knowth, which comprises one large mound and at least 17 smaller passage tombs, often termed 'satellites' (Eogan 1986; see Fig 4.7). This site is located on the western part of a ridge that is approximately 800m long by about 340m wide and possesses a commanding view southward over the flat lands of Meath to the Dublin and Wicklow mountains (Eogan 1984). Looking closer to the southeast, one will see the Ardcath and Bellewstown ridges; the latter restricts visibility of the Fourknocks ridge. To the southwest one will see a landmark, the Hill of Tara. The view northward is restricted by high ground, behind which is located the Hill of Slane, Sliabh Breagh and the Collon hills. During the Neolithic the area would have been covered with forests of oak and elm on the high ground with hazel, birch and alder in the river valley. It is argued that large clearances were made in these woodlands throughout this period, and that by the time passage tombs named Sites 1, 3, 14 and 15 were built the landscape was mostly open with forests being confined to the valley (Eogan 1984; 1986).

Fig. 4.7 Knowth Site 1 from the south-west, with reconstructed timber circle (photo: author).

Extensive excavations over the years have indicated that there was settlement activity on the Knowth ridge (3900-3400 BC) before any monuments were constructed (Macalister 1943; Eogan 1986; 1998; Grogan 1991). The earliest evidence derives from three rectangular dwelling structures that were built around 3900 cal. BC, with
two of these extending beneath the north-east section of the main large mound (Site 1). Carbon 14 results suggest that the structures date respectively to 4324-4045 cal. BC; 3975-3789 cal. BC, and 3948-3784 cal. BC (Eogan and Roche 1997b, 39). As of yet it has not been possible to state whether these structures represent shifting sequences of a single dwelling structure, or whether a settlement existed with the buildings in simultaneous use. Excavated material from these single-entranced timber buildings includes flint tools, leaf-shaped arrowheads and undecorated pottery that derive from round-bottomed vessels with shouldered and out-turned rims (Eogan and Roche 1997b, 7-18). Only the slot trenches for the walls survive, but Roche suggests that the walls were possibly constructed with vertical split planks set in bedding trenches, with the roofs being formed from straw or rushes (Roche 1997, 28). In one of the foundation trenches of these buildings, the remains of hazelnut shell fragments and charred grains from wheat (*Triticum* sp.), emmer wheat (*Triticum dicoccum* L.), barley (*Hordeum* sp.) and possibly oat (*Avena* sp.) were discovered (Collins 1997, 295-6).

Around 3500 cal. BC a second phase of building activity commenced, with two dwelling structures in the western area of the main mound (Site 1), one under a smaller satellite passage tomb (Site 16), and another beneath the passage of the western tomb of the main mound (Eogan and Roche 1997a, 31; Roche 1997, 28). This latter example found near the entrance stone was seeded with a turf line, which was contemporary with the original ground level on which the main mound was constructed. It is thought that this sequence demonstrates that the dwelling structure was abandoned for some time before the tomb was built (Eogan and Roche 1997b). Within these structures there is evidence for sheep and cattle bones, wheat grains (*Triticum* sp.), flints tools (including scrapers, blades and flakes), and pottery that is similar to the earlier phase, but with limited decoration. Increased interest in the visual is also demonstrated by the discovery of two beads made from serpentine stone, which may suggest the use of personal adornment (Roche 1997, 28), or complex interactions with specific objects (see discussions in Chapter Seven). One of the dwelling structures was emphasised and incorporated within two curved wooden palisaded enclosures. The palisade trenches suggest upright posts that were closely set and averaged 25cm in diameter (Eogan 1984, 219; Eogan and Roche 1997b, 44), and
possibly up to 2.5m in height (Grogan and Roche 2002, 24). The area within these posts produced evidence of considerable activity, with the discovery of pits and flint knapping zones and a large roughly cobbled ‘yard’ towards the north-eastern side of the interior; there is no evidence for dwelling structures (Eogan 1984; Grogan and Roche 2002). The inner palisade is thought to be the primary circular enclosure, approximately 70m in diameter, succeeded by a later large palisade that was about 100m in diameter, making the earlier one obsolete (Eogan 1986, 201; Eogan and Roche 1997b, 44-5). This later palisade also rendered the dwelling structure redundant as it crossed over the top of it. Eogan and Roche (1997b) have argued that the lack of building structures and end terminals of the palisades makes interpretation of these areas as habitation settlements problematic, while Grogan and Roche (2002) see the evidence as suggesting a stockade for cattle.

I would concur with these interpretations and add that these wooden posts were possibly designed to enhance and restrict the spectators’ gaze, creating a new social and visual focus for the area. Such observations on the restricted visual nature of wood, woodlands and forest on experiences of a place, have been documented in anthropological literature. For instance, Gell (1999c) noted that whilst living with the Umeda of Papua New Guinea, the close proximity of forest surrounding the dwelling space, restricted most of the senses, primarily sight and sound. Gell lamented that one of the most annoying problems he encountered was that he had spent ‘...fourteen months in visual surroundings limited to tens of metres, and at most, half a kilometre or so...’ (1999c, 237), and that he had no idea what the Umeda village looked like from any distance. One can speculate that the development of a wooden palisade surrounding a dwelling space was conceived to recreate or remember the experience of encountering a wooded and maybe visually or emotionally ‘reassuring’ environment (Gell 1999c, 238; Garner 2004, 91), restrict or dictate views, and order access (see also Cummings and Whittle 2003, 263). It is possible that these palisade post were carved and decorated, as is demonstrated by the Iron Age post discovered at Corlea, Co. Longford. This ‘totem pole’ is a stem of ash, approximately 5m in length and about 16cm in diameter, and was incorporated into the substructure of a track, where it was used as a runner. One end of this pole has been worked to form an
anthropomorphic or zoomorphic representation of a head with a ‘snout’ (Raftery 1990, 59). The carving of the wood may also have facilitated the releasing of different colours and textured grain below the bark (A. O’Sullivan 1990, 72). If the palisade posts were carved, we can imagine them possibly being imbued with fluid animacy and agency, with the act of carving being a matter of ‘liberating’ forms that inhere in the uncut wood. This notion parallels the discussions in Chapter Two, regarding Michelangelo’s belief that the images he carved were extracted from stone. One could describe this as a process in which the identity of the index in its living form imposes form on the index in its subsequent carved state (see Gell 1998, 30).

The navakaevara ceremony of the Puri Jagganath Hindu Cult, India is an interesting instance of the activation of inanimate wooden objects. This event incorporates cylindrical sections of tree-trunk, which have anthropomorphic images carved into them. These wooden posts are derived from trees grown near water, and are consecrated by the insertion of ‘life-substance’ via the application of paint, carving and cloth. After this ceremony the wooden post is spiritually endowed with life, flesh, blood and sense organs (Gell 1998, 144-45). Conversely these posts may have remained un-carved and therefore might be thought of as non finito’s. By these posts remaining ‘unfinished’, one is invited to be imaginatively engaged, with the spectator’s (non finito) view activating previous thoughts, concepts and beliefs (see extended discussion in Chapter Two here).

The passage tomb phase, between 3200 and 2900 BC, is argued to be associated with the use of at least nine wooden circular dwellings or ‘huts’, covering an area approximately 40m by 30m, on the eastern edge of the main mound (Eogan 1991; 1998). From the evidence of the surviving post holes, it is argued that some of these structures were quite substantial, about 6-8m in diameter, with possibly straw or rush conical roofs supported by a ring of light upright posts. Others were flimsy, being formed by stakes that were bent over into the ground to form a hemispherical frame, perhaps covered by animal hides (Roche 1989, 102; 1997, 29; see Fig. 4.8). These structures include hearths and pits within or near by them. It has not yet been determined how many of these structures were in simultaneous use. One area does, however, provide evidence for a succession of up to six separate dwellings (Roche
1989). The fill from the stake-holes suggests that the structures decayed naturally rather than being burnt; furthermore, as none of the artefacts recovered from this occupation layer were burnt, it is proposed that no large-scale burning took place in the area as an act of closure (Roche 1989). As these structures are predominantly beneath the existing passage tombs, with no evidence for the development of a natural turf line between the dwelling material and the construction of the large tomb, they might be thought of as representing distinct forms of temporality, suggesting an early interest in the significance of the place with a desire to demarcate these beliefs or worldviews through recursive transformations. Interestingly, there is no evidence for delimiting features, such as palisades, banks or ditches (Eogan 1991, 108).

The passage tomb complex at Knowth comprises one large mound (Site 1) surrounded by at least 17 smaller satellites (see Fig. 4.10). With the exception of one example (Site 7), which is over 100m away, all the satellites are within 20m of the large mound (Site 1) (Eogan 1984, 13). The incorporation of one of these satellite tombs (Site 16) into the edge of the main mound and the flattening of its kerb to avoid another (Site 13; see Fig. 4.9) suggests that these two sites at least pre-date Site 1 (Eogan 1998, 170). Six satellite tombs (Sites 2, 3, 8, 14, 17 and 18) are all within 10m from Site 1. The average distance from Site 1 to the remaining satellites (Site 4, 5, 6, 10, 11, 12
and 15) is 15m (Eogan 1984; see also Fig. 4.10 and Fig. 4.11). A natural turf line covering the area underneath Site 1 was discovered at only six other tombs (Sites 2, 9, 12, 15, 16, 17 and 18). At the other sites it is suggested that the areas were stripped before tomb construction, as the result of cultivation in the period before the construction of the tombs (Eogan 1984, 14). The average external diameter of the satellite tombs is c. 12m (Eogan 1984, 170).

Cooney (2000a, 153) has proposed that there are four phases in the development of the Knowth complex (see also Sheridan 1985/6; see Fig. 4.11). During phase one, we see the construction of 11 small tombs (Sites 3, 5, 6, 7, 8, 9, 10, 11, 13, 14 and 16) with mounds of up to 15m in diameter containing simple chamber designs of rectangular and undifferentiated form (Eogan 1986, 66; see Fig. 4.10). The images on Sites 13 and 16 (the smallest tomb with an external diameter of 8.60m), were predominantly incised and consisted of angular motifs that were placed internally (Eogan 1984, 78). These first 11 tombs were not visible from any distance and were located generally in sympathy with the existing topography (Cooney 2000a, 155). The orientation of the entrance on these smaller tombs towards the area that would become the kerb of Site 1 (all fall within an arc extending from the north-east to the south-west), suggests that this was already a focal place in the landscape (Eogan 1984; 1998; Dronfield 1996b; Cooney 2000a).
Chapter Four

Fig. 4. 10 The passage tomb complex at Knowth (source Lewis-Williams and Pearce 2005, fig. 43).

Fig. 4. 11 Phases in the development of the passage tomb complex at Knowth (adapted from Cooney 2000a, 155).
**Phase two** in the development of the Knowth complex is marked by the addition of a further four tombs (Sites 2, 4, 12 and 15). Eogan (1986, 66) has remarked that Site 15, which is exceptionally large with its 20m straight kerb façade, and Site 4, form counterpoints to the northeast and southwest respectively of the area that will become Site 1. It should, however, be noted that this perspective may be as a result of modern analysis of plans, maps and aerial photographs, a dehumanised perspective that the Irish Neolithic people were unlikely to have had (Cooney 1990; Thomas 1992; 2001; Shee Twohig 1996; Fraser 1998). It is argued that sites have to be examined from human eye level rather than as plans or bird’s eye views of landscapes (Ingold 1997).

**Phase three** involved the construction of the large and complex mound named Site 1, measuring 80m by 95m and outlined by 127 kerbstones (Eogan 1986; see Fig. 4.10). Dates for the construction of the main tomb at Knowth, Site 1, derive from three sources. The first is from material spread prior to construction and is dated to 3345-3040 cal. BC. The second is from the layer of turves which form the base of the mound and is dated to 3330-3035 cal. BC, while the third comes from higher up in the mound and gives a date of 3295-2925 cal. BC (Grogan 1991, Table 1). The covering cairn, approximately 11m high, was built from layers of redeposited turfs (featuring grass and carbonised twigs), tip-heaps and brown clay between which were placed layers of loose pebbles and local shale stone. Eogan (1968, 305) reported that the consistency of this layering throughout most of the cairn is proof that its building was the result of a single operation. Under this mound are two separate internal passage tomb structures. The eastern tomb is cruciform and has a passage 35m long, and the western is undifferentiated and angled with a passage 32m long. The entrances to both passages are diametrically opposed to each other and appear to be aligned on the equinoxes (see discussion in Chapter Three). It is on the kerb and interiors of Site 1 that a large quantity of engraved parietal motifs are found (more than 300 decorated stones have been discovered). According to Eogan (1986, 168), about 45 per cent of Ireland’s passage tomb imagery is found at Knowth, with Site 1 accounting for 83 per cent of Knowth’s total. Such a wealth of visual imagery suggests that contrary to Herity’s arguments (1974, 107), the motifs were not a ‘by-product’ or surplus extra, but rather that their importance was integral to the worldviews that helped shape the
monuments. Other visual stimuli that may have supported these worldviews include the incorporation of white quartz and dark granodiorite in the structure with additional spreads of quartz in front of the eastern passage (Eogan 1986, 47; see below). Mitchell (1992, 128-9) has suggested that the importance of white quartz is demonstrated by the fact that it originated over 50km to the south in the Wicklow Mountains and was transported to the Boyne Valley. I will discuss the possible significances of quartz in depth below.

The location of Site 1 is not considered to be a random one, as it had been used for settlement both before and during the passage tomb phase (see above). Recently it has been suggested that a tomb was removed to make way for the construction of Site 1. Some of the decorated orthostats from the passage of the western tomb at Site 1 appear to be re-used from an earlier structure (Eogan 1998). Eogan (1998, 166-168) has further argued that decorated stones from an earlier tomb were also used in the eastern tomb at Site 1 and also in Newgrange Site 1. Eogan (1998) states that the most likely location for this earlier tomb was in the area now covered by the large mound, and that the existing tomb may have been a hindrance. It is interesting to note that the orthostats appear to be placed upside down (Eogan 1998). Lewis Williams and Pearce (2005, 208-9) have suggested that the stone basins (one in the eastern passage tomb and two in the western) were in place some time before the Knowth Site 1 passages and mound were constructed, and served as open-aired features where performances were enacted. Thus the mound enhanced a pre-existing significance of place. After the mound was built, open-air 'public' emphasis seems to also have been invested into the entrances of both the eastern and western passage tombs. Features include standing stones, stone settings, and oval shaped spreads of quartz, granite and banded mudstone (Eogan 1986, 46).
At the eastern passage tomb, seven settings were constructed: setting 1 was the largest (c. 4.2m in diameter) and placed 4.5m directly in front of the entrance and 22cm below the old ground surface (see Fig. 4.12). The interior of this saucer shaped setting was filled with broken, quarried and water rolled stones with pieces of quartz included. The largest stone was placed in the centre of the oval area and was made of grey limestone. Over this paving was spread small quartz chips. The western edge of the oval setting (facing the passage tomb entrance) was delineated by 23 smooth glacial erratic stones that were in turn framed by an arc of clay ironstone nodules. This feature may have continued around the entire oval setting, being removed at a
later date, sometime after the Iron Age (Eogan 1986, 47). Placed immediately to the western edge of the setting, in the arc of clay ironstones, was a limestone standing pillar, 1.6m long by 23cm wide and 20cm thick. Interestingly, the standing stone aligns both with the vertical line that runs through the centre of K11 and the passage itself beyond (Lewis Williams and Pearce 2005, 215). Setting 2 is also circular in shape, although smaller, with an average diameter of 1.25m. It is demarcated by ten smooth glacial erratic, with the interior being paved with water rolled stones. Setting 7 is smaller still, being c. 70cm in diameter, filled with fist-sized angular stones. The other four settings are U-shaped with the open sides abutting onto the kerb of Knowth Site 1. The average 1.4m in length, with edges constructed by elongated stones set end-to-end (Eogan 1986, 48).

The settings outside of the western passage tomb are similar to those at the entrance of the eastern passage tomb. There are six settings all on the old ground surface and demarcated by smooth stones. Three of these features (Settings 1, 5 and 6) were filled with quartz stones, whereas the other settings (2 and 4) were hollowed out and filled with dark earth (Eogan 1986, 48). It is possible that these settings were deliberately dug out to contain liquids with different performances occurring here than in the quartz filled features (Lewis Williams and Pearce 2005, 215). The western passage tomb entrance also has a standing stone of coarse yellow quartzo-sandstone, 2.56m high, 37cm wide and 35cm thick (Eogan 1986, 65). The eastern face of this pillar has been artificially smoothed and aligns with the vertical groove on the entrance stone K74 and the passage beyond. Eogan (1986, 65) has suggested that the standing stones may have served as cosmological ‘standards’ that were lowered after particular performances were complete, and raised again when required. These stones may also have been periodically bathed with liquids to refresh them or other non-human entities (see discussions above). How standing stones may influence some people’s movements and actions will be discussed in more detail in Chapters Five and Six. On the old ground surface, by the entrance of the western passage tomb, a conical shaped, polished and carved stone object (c. 250mm in length) was discovered (Eogan 1986, 146). This has been interpreted as a possible ‘phallus’ (Sheridan 1985/6, 28; Shee
Trowig 2004, 42) and in this respect is similar to the one found near the entrance of Newgrange Site 1 (see below).

Between 2800 and 2500 BC the focus appears to have shifted from the use of tombs (Cooney 2000a). At this time, in phase four, a small timber circle was built to the east of the eastern tomb entrance (see Fig. 4.7) with Grooved Ware deposited with in it (Eogan and Roche 1999). There is still, however, evidence of passage tomb construction at Knowth (see Fig. 4.11). Site 17 is a cruciform tomb located to the north of the entrance to the eastern tomb, and appears to be constructed on the spill from the main mound. The images from Site 17 consist of both incised angular and picked circular motifs (Eogan 1999). Site 18 is earlier than 17 as part of its mound was overlain by that of 17, but it also post-dates Site 1 (Cooney 2000a).
Figure 4.13 Plan of the eastern tomb, Knowth Site 1, Co. Meath (after Eogan 1986, figs. 76, 83).

Passage tomb motifs are one of the distinguishing characteristics of Knowth. It is non-representational and consists of geometric and other abstract motifs, placed singly or in a combination on surfaces (see Fig. 4.13). It is found on mobile objects, but it particularly occurs on the structural stones of the tombs: the orthostats, lintels, corbels and kerbs. Motifs were predominantly placed on flat, smooth surfaces. It is unknown
whether Neolithic people purposely selected such stones, or whether the motifs were just applied to what appeared to be suitable stones after erection (Eogan 1997, 221). The designs are generally confined to the outer faces of the kerbstones and the inner faces of the orthostats, suggesting that it was mostly intended to be seen (Eogan 1986, 150). Eogan (1997) suggests that 'hidden' imagery is best demonstrated on stones that were previously used in a different tomb and were later recycled, such as orthostats 17, 18, 74 and 81 in the western tomb, Knowth Site 1. Certainly the notion that some stones were decorated before their incorporation into passage tombs is not new, with Pownall suggesting that stone C4 at Newgrange is ‘…a mere fragment… [which]… is of a more ancient date than the building wherein it is found…’ (1773, 259 cited in M. O'Sullivan 1986, 69). A reoccurring feature of reused stones is that the original motifs were partly or wholly ‘hidden’ (see also supporting observations in Chapter Five). Motifs are not known to occur on the inner sides of any kerbstones in the satellite passage tombs. Of the 123 kerbstones that have been examined at Site 1, 90 are decorated and engravings are only found on the backs of 11 (Nos. 1, 13, 18, 32, 35, 46, 49, 51, 68, 71 and 85) (Eogan 1986, 150). Motifs are not found on the back of the kerbstones in the smaller tombs, yet are found on the back of orthostat No. 8 of Site 14, No. 14 of Site 15 and No. 11 of Site 18 (Eogan 1986, 150). Decoration is rare on the sides of the stones. This evidence contrasts with Newgrange Site 1 which has a considerable amount of ‘hidden’ motifs (see M. O’Kelly 1982, 147). The notion that some imagery was deliberately ‘hidden’ will be discussed further below. The largest and most highly decorated stones occur in the kerb close to both entrances. Their length varies from 1m (Kerb 4) to 3.5m (Kerb 47) (Eogan 1986, 150).

Recent criticisms of studies in Irish passage tomb motifs have questioned a perspective that seems to privilege the static form of the motifs, over more fluid social processes (A. Jones 2004). Jones has argued that this attitude has partly developed from the ways in which academic studies dislocate panels and motifs from their original contexts, and presents them in isolation, in two-dimensional form, predominantly in black and white line drawing on paper (2001b, 335; see similar discussions in M. O'Sullivan 1986; and as an example Fig. 4.13). Such conventions create a situation where the spectator in studying motifs in a corpus (e.g. C. O’Kelly
1973; Shee Twohig 1981) is under the illusion that the image is a 'realistic' representation of the original design (A. Jones 2001b), and is also given a 'observer-imposed' selection of 'acceptable' visual images (M. O'Sullivan, 1986, 71). Furthermore, it presents the motifs as spatially and temporally static. I have previously addressed this phenomenon within some modern archaeological discourse (Cochrane 2000), whilst contextualising Dronfield's entoptic forms with the material evidence from the passage tombs in the Boyne Valley. Dronfield (1994; 1995a; 1995b; 1996a; 1996b) refused to consider any chronological sequence for the construction of passage tombs, the styles of motifs depicted, locations and associations or landscape settings. Dronfield stated that he had '...no wish...to enter into debate on this matter...' (1994, 170). This resulted in a mathematically valid concept that floated within a single timeless framework, rather than engage with the archaeological evidence. The presentation of motifs in this format also can facilitate the selective representation of carved panels to reinforce a point. This is demonstrated by Shee Twohig's (2000, 91) criticism of Dronfield's (1996b, fig. 9) paper which has deleted some motifs from the original O'Kelly (1982, figs. 41-51) illustrations. In another example, Cooney commenting on the same Dronfield (1996b) paper stated that one would have to be a '...contortionist to see both the passages and the concentrics on the stones in the west recess or on the roof stone of the same time...' (1996, 60). Jones (2004, 202) has utilised Cooney's (1996a, 60) point to demonstrate that the presentation of motifs in a published medium does not consider the physical position of a spectator in or by the passage tombs. It should be noted, however, that Dronfield (1996b, 66) did qualify his proposal and further argued that his experience indicated that although one would not have a perpendicular sight-line of the relevant motifs, it is possible to see them clearly and still view the passage.

The approach that I am adopting in this chapter, incorporates Jones's (2004) position, but was initial inspired by C. S. Lewis's (1971) paper 'meditation in a toolshed', in which he stressed the differences between looking at and looking along a particular idea. I am concerned that past models regarding Irish passage tomb motifs have focused more on the structural forms of motifs (see discussions above and in Chapter Three here) than the processes that helped produce them. They therefore are more
about looking at the forms rather than looking along the processes. Indeed, Conkey (1982) stated that archaeologists tend to focus more on the 'secretions' of a process (that is the structured motifs), because they do not know how to deal with the process itself. The motifs at Irish passage tombs, and in particular the Boyne Valley tombs, offer a unique opportunity to focus on these processes of 'secretion' as they were produced in chronological sequences.

When we as modern spectators engage with passage tomb motifs today we see them as complete compositions. These images have, however, not always appeared as one complete composition; there were episodes and sequences, be it by substitution or replacement of existing motifs by imposed motifs (Eogan 1997; Jones 2004). O'Sullivan (1986; 1996a) was one of the first to attempt to track the evolution sequences from the standard Irish style, through to the extreme 'pick-dressing' style, and he proposed four steps or stages of development (see Fig. 4.14, and detailed discussion in Chapter Three).
Chapter Four

Step 4
Amorphous areas of dense picking. Awareness of contours, edges and profile of stone. Traditional elements absent. (O'Kelly 1982, figure 41; Eogan 1986, plate 49).

Step 3

Step 2
Standard Irish elements forming aesthetically ambitious designs, reflecting and enhancing the configurations of the surface. E.g. Newgrange entrance stone (K1).

Step 1

Fig. 4.14 The proposed four stages for the development of art styles in Neolithic Ireland (source: O'Sullivan 1996a, 396).

After investigating the content and context of the motifs at Knowth, Shee Twohig (2000) has recently suggested three phases for development and placement of the
motifs within the sequence construction of the tombs. The *early* phase consists of incised motifs on the inner sections of both the eastern and western tombs in Knowth Site 1, and in some of the satellite tombs (13 and 16). The next stage was the *main* phase which incorporated mainly a depictive style, using a variety of motifs and picked and plain panels. This stage is common on most of the satellite tombs. The final phase is the *mature* one, in which there is predominantly ribbon/plastic style and all-over picking. These stones are almost exclusively on the inner sections of the passages of Knowth Site 1, with the exception of the entrance kerbstones in front of each tomb. The notion that these images might be ‘private’ ones that were to be viewed by particular persons has been raised by Eogan (1986), and will be discussed in depth below.

Superimposition is more apparent in the interiors of the passage tombs than the exterior (see Fig. 4.15). On the kerbstones at Knowth Site 1, one can document two
and sometimes three episodes of superimposition (A. Jones 2004, 204). In the interior of Knowth Site 1, incised angular motifs (triangles, lozenges and zigzags) are the earliest images (Eogan 1997, 222). They occur on 30 stones in the chamber and passage of the eastern tomb, and on 11 of the stones in the western tomb. Some of these incised motifs were later superimposed with an infill of picking. This later picking occurs as angular in shape, angular in shape and confined in space, formless loose area picking, broad picked lines in ribbons, and formless close area picking (Eogan 1997, 221). As not all the early incised angular motifs were filled by later picking, such as orthostat 41 in the western tomb, Knowth Site 1, it is believed that some incised lines were not just guide lines but motifs in their own right (Eogan 1997, 223). Although others definitely do act as guide lines, as is seen on Corbel 37/38 of the western tomb, Knowth Site 1, where picked angular motifs and dispersed area picking overlay the angular incised motifs (Eogan 1997, 223 and fig. 8 on 225). Including the incised motifs, there are five episodes of superimposition on the interiors of the two passage tombs in Knowth Site 1 (there are four principal forms of overlay at Newgrange Site 1; see also Fig. 4.15). If we examine Orthostat 48 from the eastern tomb, Knowth Site 1, we can see an excellent example of these processes of imposition (see fig. 4.16). Note how the visual imagery from the initial angular incised phase is different from the later angular picked overlay. What we are witnessing are two distinct chronological style episodes, which if taken together would form one complete composition. An excellent example of all five overlays occurring on the same stone is from Orthostat 45 from the western tomb, Knowth Site 1. This stone is decorated with angular incised motifs which were followed by angular picked motifs, then dispersed area picking, next picked ribbons and finally close area picking (see fig. 4.17).
Fig. 4.16 Succession of overlays on Orthostat 48 (Or. 48), eastern tomb, Knowth Site 1 (adapted from Eogan 1986, 31; 1997, 228).
We do not know the time periods between the motif depictions, but we can speculate how the addition of each new motif on each tomb may have altered and affected the viewer’s subjective experience. This may have in turn influenced social cosmologies or worldview perspectives. By studying overlays in detail, we can see that the visual motifs were not all applied at the same time, rather they developed over time through a series of successive applications. What is interesting is that the degree of superimposition is more intense on the insides of both Knowth Site 1 and Newgrange Site 1, possibly suggesting that the internal motifs, below the earth, were developed or
used through separate processes than the external motifs. This is a theme to which we will return.

So what does all this mean, and what can we deduce from knowing that images were sometimes applied in succession? One possible answer to these questions might be that it does not mean anything. This response takes its influence from the writings of the anthropologist Maurice Bloch. As discussed in Chapter Two, Bloch (1995) commented on the geometric abstract carvings on Malagasy wooden house posts. The visual images on these house posts are stated by the Zafimaniry engravers to be meaningless and pictures of nothing. They may possess the names of other objects or entities, such as the moon and the rain, but they do not in any sense mean those objects (Bloch 1995, 213). For the Zafimaniry, it is the process of successive decoration that is important, rather than the completed composition itself.

By considering anthropological examples, I am not suggesting that the Irish Neolithic people were like the modern Malagasy. Furthermore, I also appreciate that although one can interpret motifs through specific social contexts as being ‘meaningless’ (e.g. Bloch 1995) and more about the ‘enchantment’ (e.g. Gell 1999d) of places and mood enhancement, they are possibly just relevant to the people that they study. Moreover, they unfortunately detach themselves from other interesting arguments, such as Jones’s (2004) proposal that motifs represent social citation and memory. In order to amalgamate the nuances from various theoretical positions, I wondered what other ways of engaging with the motifs from passage tombs, these Neolithic traces, could be considered. What other ways of seeing should we engage with to further understand how the people of the Irish Neolithic may have seen their world?

One approach that I have been drawn to is the notion of the carnivalesque and its pervasive and influential visual imagery. The word ‘carnival’ often evokes an image of an amusement park, Disney theme park, or state fair. Historically, however, carnivals in Europe were quite different affairs. For instance, although they share the same ideas of merriment with their modern counterparts, European medieval carnivals were much more all-encompassing. Contemporary carnivals are diminished examples
of the physical lusting, mutating and mutilating activities that were played out during some previous carnival environments whilst consuming excessive psychoactive substances. Mikhail Bakhtin was one of the first authors to coin the term ‘carnivalesque’ (1968). He describes the carnivalesque as something that is created when the themes of the carnival subvert, distort and invert habitual or established society. In carnival, all that is marginalised and excluded, such as the mad, the scandalous and the uncertain, takes centre stage and liberates in an explosion of otherness (Stam 1989, 86). In this environment, ‘negative’ bodily expressions such as hunger, thirst, defecation and copulation become a ‘positive’ corrosive force; life enjoys a symbolic victory over death. Bakhtin (1968) argued that folk-humour based societies in early modern Europe created manifestations of the carnivalesque that laughed at and mimicked those in authority, who believed that social mentalités, history, destiny and fate were static and unalterable. The carnival is not ‘irrational’; it is the bodily immersion into false façades, monstrous creations, feasts, comic rites and protocols, games and dramas, parodies, processions and visual imagery. It is the ‘overlay’ of many things and worldviews at once, it is the world turned upside-down, razing and generation coupled with comic, sensuous and abusive performances. It incorporates unbridled juxtapositions, grotesque ruptures and impugnation between binary oppositions and their parodies; it is the mundane routine with fantastical images. Thus it creates an environment where ‘...everything is pregnant with its opposite, within an alternative logic of permanent contradiction...’ (Shohat and Stam 2001, 35). Within carnival, all barriers, norms and prohibitions are temporally suspended (Bakhtin 1968, 15). The carnival incorporates a different kind of communication, based on free and familiar contact (Bakhtin 1968, 17; Stam 1989, 86). The term ‘carnivalesque’ therefore refers to the carnivalising of normal daily life fluctuating within fleeting permanence. It incorporates a number of themes and these can be summarised as follows:

a) The activation of life and love and the actualisation of myths, with communal and cosmic reunions.

b) Emphasis on sacrifice through the concatenation of life and death.
c) The idea of bisexuality and the practice of transvestitism as a release from socially imposed sex or gender roles. This can also incorporate same-sex orientated practices.

d) A celebration of the grotesque, excessive bodies, orifices and protuberances, with a rejection of social decorum and polite speech.

e) Subversion through the world being turned upside-down, emphasising the permanence of change.

f) Anti-aesthetics that illuminate asymmetry, heterogeneity and the oxymoron, while erasing boundaries between spectators and objects or performers (Stam 1989, 93-94).

Yet the carnivalesque is not only a Western, pre-Renaissance tradition; anthropological examples include the Navajos of Utah who have special social practices for overturning ‘good’ order and respectable aesthetics. In another instance, the Sioux of North America use ritual clowns or heyoka to violate conventional expectations. The heyoka are noted to perform seemingly ‘foolish’ acts; in an example a man is described as riding backwards on his horse with his boots on backwards so that he is coming when he is really going; if it is hot he covers himself in blankets and shivers as if cold and always says ‘yes’ when he means ‘no’ (Tedlock 1975, 106). These performances are designed to entertain, but more importantly they are designed to open up the spectators through laughter to a desired ‘power-filled’ and spiritual experience. These clowns perform in a similar manner to the Yukagir ‘shamans’ from Siberia, who by wearing masks of fat or wood, and the opposite sexes clothing, avoid recognition by the souls of the dead and transcend daily norms (Eliade 1964, 165-8).

For the Navajos of Utah, clowns ‘open’ people up with a mixture of laughter and panic, and when they approach certain spectators ‘...the smiles of the women and children quickly change to expressions of surprise, tempered with fear...’ (Tedlock 1975, 107). The children may have cause for alarm as they are often told that the clowns will carry them off and eat them. Certainly the ‘Fool Dancers’ of the Kwakiutl native Americans occasionally kill spectators by throwing stones or stabbing them with sticks (Tedlock 1975, 107).
Turning to other locations, in Xishuangbanna Dai Autonomous Prefecture, southwest Yunnan, China, carnivalesque sensibilities are played out through ‘water splashing’ engagements during the Dai New Year (*Sonkran*) celebrations. The Dai belief system states that water splashing is conducted when the gods visit the land to appraise peoples’ sins; splashing water beseeches gods for future abundance (Komlosy 2004, 357). The water splashing practice does, however, subvert normal codes of practice in that the young people often go ‘beyond bounds’ and enjoy throwing buckets of water (sometimes muddy) on everyone indiscriminately (Komlosy 2004, 358). Indeed, the carnival is often employed as a tactic for acceptable ‘bad manners’ between the young and old, and the male and female (Calavia Sáez 2004). The associations between water, the carnivalesque and some passage tombs will be explored further. In these examples not everyone has to invert or participate, they can watch if they like (sometimes at some personal risk), while the marginal is briefly brought to the centre. Through these performances the carnivalesque creates more than alternative realities and worldviews, it is life itself, but formed via certain patterns of play (Bakhtin 1968, 7).

Some studies show that often when one finds inequalities of power, wealth and status, one also finds practices that ‘turn the world upside-down’ (e.g. Tedlock 1975; Gilmore 1998; Bailey 2005b). I intend to take the theme of a world inverted, and demonstrate how it is played out by the architecture of the passage tombs themselves. For example, when one enters the tombs, there is a sensation of entering the earth itself. This feeling of a ‘world inverted’ is *magnified*, possibly in the manner that the Zafimaniry ‘magnify’ their house posts (see Chapter two here), by the processes of overlaying the motifs with other motifs. Through ‘unfinished’ and ongoing processes (see Gell 1998, 80) ‘senses’ of permanent resistance are literally etched away, as one engraves a permanent and timeless stone. The possible application and erosion of natural pigment (via liquids?) may also have subtly evoked ‘energies’ against diverse authority that was opposed to change. Whether these authorities opposed to change were the dead, mythic entities or social elders, will remain unknown. We can, however, argue that the idea of the carnivalesque allows people to move beyond the limits of the material, beyond the stone and beyond the motifs themselves. The
superimposition of motifs in this context maybe a sublime celebration of a world layered upon layer and turned upside down, the celebration and animation of life in a place of the dead. Such a proposition recalls Nietzsche’s description of a Dionysian fête, in which the revellers under the influence of narcotic drinks forever exult in the transformation of appearances (Stam 1989, 89). The superimposition of particular passage tomb motifs may be viewed as the embodiments of these eternally creative principles.

Returning to our superimposed motifs, within underground settings, and in considering engagements with them, we may think of these processes as the reversibility of perspectives (Merleau-Ponty 1962). By entering the passage tomb itself, we are seeing a reversal of the idea of Plato’s cave. It is the people entering the artificial cave (passage tomb) or artificial worlds that are presented with alternatives to an interpretation of reality, rather than the people who remain outside. We can therefore, envisage an Irish Neolithic spectator entering a decorated tomb and being absorbed in the pleasures or horrors of an artificially constructed world, the sublime experience of temporary immersion in an inverted world. Irish Neolithic motifs, through their nature or superimposed construct, are therefore not stable, but rather change their relationship to exterior reality at particular moments in time and place. As one mode of reality that is represented by an image loses ground, or is superimposed, another takes its place, creating a matrix consisting of realities within realities. Thus the images create difficulties and tensions.

Newgrange

The ridge on which Newgrange stands runs east-west and is one of a series of low hillocks and terraces which descend towards the flood plain of the River Boyne. The main tomb (see Fig. 4.18) shares the ridge with three smaller passage tombs (see Fig. 4.3). Sites K and L are located to the west, while Site Z is to the east. Situated upon this ridge there is evidence for tumuli, standing stones and enclosures (M. O’Kelly 1982). Looking to the north-east, one can see the mound of Dowth, which is comparable in size to Newgrange and lies on high ground. The views from
Newgrange are similar to those of Knowth which lies upstream, about three-quarters of a mile to the north-west and Dowth, which is downstream and is a little over a mile away. From the summit of any of the three mounds the other two are visible.

There is currently no evidence for pre-tomb dwelling structures below Newgrange Site 1. There is, however, evidence for dwelling activity at Newgrange in the area in front of the entrance to the main mound set in the subsoil. This consists of a round wooden structure, 4.2m by 3.2m externally (M. O’Kelly 1982, 77). There were also two circular post-built structures, one was approximately 7m in diameter in the eastern part of the site, with the other being about 4m in diameter, located by the large standing stone GC-1. Beneath the satellite passage tombs of Sites L and Z, there is evidence for possible settlements (O’Kelly et al. 1978, 263-9, 293-7, 332-5). Below Site L, a habitation layer 5-10m thick was discovered that produced lots of charcoal, hollow and round scrapers and blades made from flint. Also found were sherds from undecorated round-based shouldered bowls (O’Kelly et al. 1978, 263-9). Underneath Site Z animal bone and burnt flint was discovered in a hearth location. There were also eight post-holes forming a rough arc, which may have been part of a dwelling structure or small palisade (O’Kelly et al. 1978, 294). At Sites L and Z there appears to have been a long period of time delay between the ‘habitation’ episodes and the passage tombs construction events as turf and humus was allowed to develop (O’Kelly et al. 1978, 333). Although there are currently no dates for these buildings, they have structurally been compared to the circular post-built dwellings at Knowth (Eogan 1991, 110). Recent field-walking surveys have, however, begun to provide new insights into settlements around Newgrange. Preliminary results have indicated
that there was substantial settlement and related activity not only outside Newgrange Site 1, but also on the south side of the River Boyne (Brady 2002, 11). The areas representing prolonged intensive activity are located nearest the passage tombs. This information is based on only 20% (5km² of land) of the total land surface of the study area. When the survey is complete, it will certainly be interesting to ascertain whether settlement existed primarily on the Boyne ‘island’ to the north side of the river, or on the southern side facing the monuments.

Site K is a 5m long undifferentiated tomb, orientated north-south, with a small triangular or V-shaped ‘annexe’ attached to the right (north-east) of the chamber, and was constructed in phase one of Cooney’s (2000a) developmental scheme. It is located at the western end of the Newgrange ridge and to the west of Site L. This passage tomb was constructed in two stages; the first involved the above features with a covering mound c. 8m in diameter, and in the second stage the passage was extended by 3m and covered by a mound, c. 20m in diameter. The closing slab of the primary tomb remained in situ and did not reach as far as the underside of the capstone above. The extended passage also incorporated a closing slab, and this too did not reach the lintel (M. O’Kelly 1982, 125). Although there may have been other blocking stones that have been subsequently lost or destroyed, it has been suggested that this aperture was a possible precursor for the Newgrange Site 1 roof-box (F. Lynch 1973; Cooney 2000a). The predominate motifs on this passage tomb are arcs and concentric circles, with images located on the fronts, backs and edges of some stones. Two stones demonstrate the later plastic style of carving. One of these is on the inner face of a backstone (No. 5), and it has concentric circles and arcs picked in broad bands. This imagery has been compared with the impressive K1 entrance stone, Newgrange Site 1, and the basin stone in Site Z (O’Kelly et al. 1978, 321). The sillstone that demarcates the chamber, from the first construction phase of the tomb, also has close pick dressing plastic style motifs on its top edge (O’Kelly et al. 1978, 321). This would suggest that although the tomb was constructed in Cooney’s (2000a) phase one, and before the construction of Newgrange Site 1, there were later episodes of activity with people returning later in time to add more visual images (see Shee Twohig 2000, 99).
Site B is also constructed in this phase and is located immediately north of and on the lowest terrace above the River Boyne. The positioning of this monument is most appreciated when one approaches from the south, where across the river the rising slope to the north and northwest of the tomb creates an impressive visual engagement. This positioning of the tomb sympathetically with the existing topography indicates the importance of the physical features in the landscape, its close association with the river and its visual impact (Cooney 2000a; see Fig. 4.19).

Fig. 4.19 Viewed from the south, the River Boyne and Site B in the foreground with the quartz façade of Newgrange Site 1 illuminating the horizon (photo: Dúchas The Heritage Service).

Site L was built in phase two to the east of Site K, with its kerb flattened to avoid the kerb of Site K (Cooney 2000a, 156). Excavations revealed that this area had been occupied before the passage tomb was built (O’Kelly et al. 1978, see above also). The tomb was cruciform in plan, with a long passage opening to the south. The entire structure was covered by a mound of sand and a turf surrounded by kerbstones (about 12 survived of a possible 60), and contained areas of cobbled and runs of small stones. Wilde (1849, 203) discovered evidence for a large fire in the central chamber and suggested that cremation practices occurred within the tomb. The tomb was unfortunately badly ruined by modern farmers who had built a limekiln into it (F.
Lynch 1973, 149). As a result only nine chamber orthostats survived; four of these display visual motifs of O’Sullivan’s (1986) depictive style. One of the surviving kerbstones (LB), which is located on the edge of the mound adjoining Site K, has two engraved faces (sides). Face one has circles and possible cupmarks enclosed by circles, a serpentiform and some dots. While Face two has a line of possible cupmarks, picked triangles in a panel, zigzags, radials and an incised offset motif. Shee Twohig (2000, 100) has proposed that Face two was the original outer face and was positioned to signal the presence of Site K along side. Shee Twohig (2000) also suggests that this stone’s area-picked motifs were produced later than the simpler depictive style found internally in the chamber, and may have been added when Site K was modified with the addition of plastic-style motifs and extended structurally.

Site Z is difficult to chronologically place as it was practically destroyed in the past, with most of the orthostats being broken and removed. It was originally constructed to the south-east of Newgrange Site 1, and was 10m long (20m diameter), opened to the south/south east and was V-shaped in plan. (M. O’Kelly 1982, 125; Shee Twohig 2000, 100). Located to the east (right) of the passage, and just in front, was sillstone that separated the chamber and passage. Turf-stripping had occurred under this tomb, and excavations produced post-holes, a hearth, a burnt area, animal bones, flint debitage, a stone axehead and a hollow-based arrowhead. This area was later covered by another turf layer (10 cm thick) before Site Z was built. O’Kelly (1982, 128) has suggested that Site Z was built later than Newgrange, with the striped turfs being used in the construction of the mound of Newgrange Site 1 (see also O’Kelly et al. 1973, 343). This interpretation would place its construction in the later stages of phase three. Surviving features include a decorated stone basin, containing some cremated bone and two beads. The imagery on this basin is pick-dressed with faint plastic-style motifs. The basin contains a hollow which is similar to the two hollows in one of the basins in the east cell (cell 3) of Newgrange Site 1. Shee Twohig (2000, 100) has taken this late style of decoration on the basin to support the notion that Site Z was built late in the Newgrange sequence (phase three). I will discuss the possible significances of this type of basin in depth below, and offer only a brief example here of how basins are sometimes utilised within carnivalesque environments. The Hopi of
northeast Arizona, dress some of their male clowns as women and make them wash their ‘female’ legs in a ‘ritual’ basin whilst displaying a false vulva. Another clown wearing a false penis then climbs on top of the ‘female’ and proceeds to ‘...imitate copulation with her with the utmost grossness right on the sacred shrine...’ (Tedlock 1975, 115). This role reversal and perversion of social norms at special zones and with ‘ritual’ material culture is performed to fragment prescribed realities as a means of enlightenmentvii. This perversion mirrors one of the features of the carnivalesque, with its tendency to laugh at death and violence (Stam 1989, 101). The only other surviving carved visual image is found on a fragment of broken orthostat and is an incised zigzag. Site Z1 is located outside the present Newgrange enclosure, to the east, and is presently unexcavated (M. O’Kelly 1982, 115).

As with Knowth Site 1, the Newgrange Site 1 main mound was constructed in phase three. The main tomb structure is dated from two samples of burnt soil caulking between the passage roof slabs, which produced dates of 3295-2925 cal. BC and 3265-2925 cal. BC respectively at one standard deviation (M. O’Kelly 1982, App. H; Grogan 1991, Table 1). These ranges are broadly comparable with Knowth Site 1. O’Kelly (1982, 92) has suggested that a small consolidated turf mound covering a structure may have been incorporated into the northern side of the large mound, suggesting a concern with existing foci.
The large tomb at Newgrange is one of the only two image-bearing passage tombs in Ireland (see Fig. 4.20) in which all the main structural stones have survived intact and in situ; Knowth and Dowth have stones missing from the main mounds. The other tomb is the Mound of the Hostages at Tara, Co. Meath (see Chapter Six). The main tomb consists of a kerbed ovoid mound (c. 85.3m diameter) containing a cruciform internal tomb structure. A distinguishing feature of Newgrange is the roof-box, which is located above and 2.3m back from the main entrance to the passage (see Fig. 4.25).
Before excavation the decorated edge of a second lintel over the entrance lintel was visible. Excavation revealed that a deliberate aperture, 1m by 0.25m, had been constructed behind the first lintel and below the second. O'Kelly (1982) proposed that the aperture was constructed as an opening through which the midwinter rising sun illuminated the chamber at the end of the passage. This phenomenon occurs for about a week before and after 21st December, but the sunlight beam only reaches the end chamber on the day of the winter solstice. Ray (1989) has, however, estimated that when Newgrange was first built, the light-beam would have been less than 10 cm wide, approximately 2m long and that it bisected the chamber. That the roof-box lintel is decorated might suggest a deliberate attempt to enhance spatial divisions or the visual appearances of this feature positioned at a liminal juncture (see similar discussion in Sharples 1984, 116-7). The chamber is entered through a 18.5m-long passage constructed from upright stones (orthostats), which average 1.5m in height above ground level and most of which are decorated and dressed (M. O'Kelly 1982, 21). There are 22 stones on the west side of the 1m-wide passage and 21 on the east side. The roof over the passage begins from the entrance with transverse lintels, which are then corbelled, to provide greater height as it approaches the chamber (M. O'Kelly 1982, 21). These passage lintels had grooves or water channels cut into the upper surfaces. The grooves were up to 5cm wide and 1cm deep and were designed to drain rainwater outwards on to each side of the passage. Although the passage was designed to repel water, the act of entering the tomb may have been associated with plunging into the earth or even water, with the loss of light and change in temperature being immediately noticeable (Fowler and Cummings 2003, 14). It has previously been suggested that passage tombs can often amplify or distort the effects of temperature, humidity, sound and light or darkness (Bradley 1989b; Watson and Keating 1999; Watson 2001).

Interestingly these passage tomb environments create ideal places to experience entoptic images as they can be easily produced via sensory deprivation. Methods include inducement by extreme stress, which Siegel (1984) has termed 'hostage’ hallucinations. Hostages, prisoners, soldiers in action and victims of violent crime often experience entoptic phenomena. Emotional stress is regarded as effective in
escalating the tendency to hallucinate in conditions of sensory deprivation. Drab has reported that patients who are nearing the end of a terminal illness, or are close to death, also have reported ‘near-death’ hallucinations, ‘...unique scenes were reported by 12 cases: a light blue universe; a mouthless figure leading the way over a bridge; a stream of people; a bare room with dead relatives; a room or box-like area in mist; an empty room; a desert of a ‘lower-order world’; a celestial city; fantastic landscape; a ‘spiritual sphere’; scenes of the experienc’s past; and an encounter with a deceased relative... [a further] 10 experients found themselves in country settings... dead friends and relatives were encountered by 6 of the 10 cases...’ (Drab 1981, 137-8).

One may imagine the stress undergone by an inexperienced initiate isolated in a place associated with enormous non-human power (Dronfield 1996b), such as the Newgrange passage tombs. It has been suggested that architecture and location are a deliberate exercise in controlling and manipulating how tombs and the activities that would have taken place at them were experienced (Thomas 1990; Kirk 1993; C. Richards 1993). As previously mentioned above, passage tombs can restrict and influence bodily movement, the senses, space, airflow and temperature. Furthermore, tombs can disorientate, humble and generate fear in those who enter, creating what Squair has called an ‘architecture of inconvenience’ (1998). This stressful environment could be accentuated with repetitive sound waves produced by percussive instruments or by an infrasonic component of thunderstorms, both of which can induce altered states of consciousness (Devereux and Jahn 1996; Watson and Keating 1999; Devereux 2001). It is suggested that tinnitus (a condition of ringing, buzzing, hissing, or humming in the ears) from any cause, such as drumming, can trigger auditory hallucinations of music, or even speech (Gordon 1993). The recent discovery of a prehistoric musical instrument constructed from six graded cylindrical hollow yew wood pipes, arranged side by side, at Charlesland, Co. Wicklow and dated between 2120 and 2085 cal. BC, does suggest an early knowledge for the generation of sound waves (Molloy 2004). Indeed it has been suggested that no known societies, past or present lack ‘music’ or rather the ability to produce sounds (Seeger 2002, 686; Zhang et al. 2004). These altered states of consciousness have sometimes been described as feeling like one is submerged underwater or underground (Lewis-Williams and Dowson 1990, 10-11).
Coleridge reflected on similar underwater and underground sensations after consuming opium as an anodyne for his poem *Kubla Khan: or, a vision in a dream* (Hughes 1996). In another context, the Ju/'hoan San shaman, K"au Giraffe, described a shamanic journey in which he and his spirit protector ‘...travelled until [they] came to a wide body of water...’ (Lewis-Williams 2002, 146). After being immersed in it and then dry again, K"au suddenly discovers himself submerged again and states ‘...[b]ut I was under water! I was gasping for breath, I called out, “Don’t kill me! Why are you killing me?” My protector answered, “If you cry out like that, I’m going to make you drink water... I fought the water for a long, long time... Then my protector told me that I would enter the earth. That I would travel far through the earth and then emerge at another place...’ (Lewis-Williams 2002, 147).

Such underwater or underground description certainly fit with the ‘cavernous’ or ‘under-earth’ architecture at Newgrange Site 1. At the deepest end of the passage is located a chamber, measuring over 5.25m by 6.5m. This is cruciform in plan, consisting of the central chamber at the end of the passage and three smaller chambers or recesses on the north (cell 2), east (cell 3) and west (cell 1). Cell 3 is the largest of the three and is the most profusely ornamented. Cell 1 is only one orthostat deep, while cells 2 and 3 are both two orthostats deep, resulting in an irregular cruciform plan. Stone basins are set on the floors of each of the recesses; there are two basins in the eastern recess (M. O’Kelly 1982, 21). Uistin (1999, 46) has suggested that the lower slate one resided on the hill for some time before Newgrange Site 1 was constructed, being too heavy and big to place after it was built. The original function of these basins is unclear, but they might suggest that grinding and mixing of materials formed a part of the practices that occurred within the chambers. Some have suggested that these materials may have been cremated bone (Herity 1974, 119; Shee Twohig 1990, 43), and I suggest that liquids may have been added to the mix, possibly activating and refreshing the dry human remains. Liquids are certainly recorded at some Neolithic cruciform chambered sites; for instance at Barclodiad y Gawres, Anglesey, Wales, a ‘magical’ liquid stew that contained wrasse, eel, whiting,
frog toad, natterjack, grass snake, mouse, shrew and hare, was used to douse a fire in
the central area of the tomb (Lynch 1970, 37).

The liquids may also have included milk and semen, as is demonstrated by the
semen/milk transactions by the Sambia of Melanesia (Gell 1999e, 58-63). In these
Sambia ‘rituals’, semen is used to activate the semen in other males and the
production of milk and children in females; liquids are therefore used actively in
systems that create the generation and continuation of life. For the Mandari of the
southern Sudan, milk is used in certain rites, first because it is white and second
because it is a ‘living thing’ (J. Buxton 1973, 389). Certainly the notion of symbolic
‘semen-milk of the ancestors’ (Tilley 1996, 316, 322), has already been raised in other
prehistoric contexts. I suggest that it possible that these liquids were also used
literally. Furthermore, and in fitting with the archaeological data, in some past
societies (such as the ancient Egyptians and Greeks) the act of ‘drinking’ any liquid
with the dead was regarded as an act of incorporation and consequently allowed one
to travel amongst the dead and out of danger (van Gennep 1960, 165). Which ever
liquids were possibly used, their inclusion as a ‘magical lubricant’ (van Gennep 1960,
172), might be considered to have existed in certain ceremonies, or transitional rites of
passage for the living or dead at and with the stone basins. In making these types of
observations one must, however, be aware that although some Neolithic people may
have regarded themselves as integral wholes in which liquids could be transmitted (in
life or death), such boundaries may still have been permeable, with substances being
able to flow through and between them. These permeable boundaries in flux may also
have been extended to include the structure of the tomb and the motifs on it. Busby
(1997) has recently made similar observations in studying personhood in south India.
It is noted that even though south Indian people may be sexually dimorphic, this is
only regarded as a symptom of the presence of liquid substances (milk and semen)
flowing within and between their bodies (Busby 1997, 270; see also discussions in
Chapter Seven).

The roof above each of the chambers is 3m high and the cone-shaped roof of the
central chamber is 6m high. The apex of the roof is capped by a stone lintel slab,
which together with the covering mound provides the relieving forces necessary to support the corbelled roof (M. O’Kelly 1982, 23). Newgrange Site 1 was designed to repel water and keep the inside dry (resulting in a constant temperature of 10°C). The techniques employed to achieve this include, the outward slope of the chamber and passage roof-corbels, the caulking of the roof-joints with ‘putty-like’ burnt soil and sea sand, and the cutting of water-grooves on roof-slabs and passage-corbels (M. O’Kelly 1982, 113, 126). Returning to the Mandari of southern Sudan, it is noted that temperature as well as colour is used to make parallel statements. For instance, ‘hot’ and ‘cool’ apppellations are used to comment on conflicting or complementary elements seen to be present in a given situation (J. Buxton 1973, 396). Although it is unlikely that the Neolithic people understood the tomb to be a constant temperature of 10°C, it is possible that they recognised a temperature change of ‘hot’ and ‘cool’ between inside and out.

If water was regarded as being able to activate life, it was certainly not welcome to permeate the passage tomb; thus they created a ‘House for the Dry’. Such distinctions are of interest as they help create possible dichotomies of ‘dry’ and ‘wet’. For instance, we might regard the tombs as possessing ‘dry’ associations with cremations, bones, chambers, passages, axeheads and stone, while ‘wet’ associations may include pots (made from wet clay), the mound, engraved motifs, and the earth (see Fig. 4.21). Such assertions are supported in Scandinavian passage tombs, where Tilley (1996) has commented on connections between raw materials, symbolic linkages and containers. He states that the dry stone chambers act as containers and are hidden inside a wet mound, and proffers that the decorated outer surfaces of the stones are associated with water as they can sometimes contain or collect it (Tilley 1996, 315).
The exterior façade was reconstructed with a near-vertical facing wall of white quartz and rounded and oval cobbles of granitic and some other mostly igneous rocks, based on interpretations of the collapsed material discovered in front of the cairn (M. O’Kelly 1982, 72, 110; see Fig. 4.22). Whether the quartz was originally presented in this manner or whether it was deposited on top of the cairn as Macalister (1939) suggested, or spread out in front as is found at Knowth’s Site 1 eastern tomb (Eogan 1986, 47), has recently been questioned (Bradley 1998b, 101; Cope 1998, 21; Darvill 2002, 82; Cooney 2006, 704; Eriksen 2006, 709). The lack of a developed pedogenetic profile on the stripped ground that surrounded Newgrange Site 1 has been interpreted to suggest that some of the builders of the tomb would have witnessed the collapse of the wall (Barber 1992, 14). Indeed, the visual effect of the quartz wall may have been conceived for a particular event, in the knowledge that it would eventually collapse afterwards (Bradley 1998b, 104). Alternatively, the façade may not have collapsed naturally, but rather it was deliberately destroyed at a later time by the ‘makers’ of Grooved Ware and Beakers (Meighan et al. 2002, 33).

Indeed, Cooney (2006) has recently suggested that the quartz was removed from the cairn slopes to create a quartz platform on the ground. Which ever model is ‘correct’, it is clear that quartz was important to the role of the tomb in supporting and creating particular belief systems or ‘aesthetics of brilliance’ (Saunders 2002, 209). In many different societies, quartz has been shown as being ‘supernatural’, animated with life.
or souls, and having symbolic values as a result of its whiteness and visual glowing qualities when rubbed together (called triboluminescence) or bathed in moonlight, sunlight or firelight (D. Whitley et al. 1999, 234; Burl 1981, 93; Darvill 2002, 82; Lewis-Williams 2002, 177). Burl has even argued that quartz was used specifically for lunar events; for the ‘...minutes of moonlight when quartz glowed luminescently and when nocturnal ceremonies were performed...’ (2000, 226). This possible human attraction to the ‘light’ qualities of quartz might also be supported neurologically. For instance, Perkowitz (1996, 31-5) noted that evolution has created distinctive human responses to light; as light hits the retina it activates a neural pathway to the brain, which stimulates the visual cortex (areas V1, V2, V3, V3A, V4 and V5; see Chapter Two here), and affects thoughts and perceptions. Although we cannot determine exactly what these responses were, it is pertinent to acknowledge them and that all terrestrial life is phototropic.

Fig. 4.22 (a) Profile of the cairn slip in front of K95 during excavation. (b) the reconstructed quartz façade at Newgrange Site 1 as seen today (adapted from M. O’Kelly 1982, 69; Eogan 1986, 16; photo: author).
Located in front of the entrance of Newgrange Site 1, and contemporary with the quartz façade, were two interesting structures (see Fig. 4.23). One was an oval 'hut' positioned 4m south of kerbstone K3, built on top of a burnt area 1m in diameter, with a floor space (c. 3.75m by 2.5m) delineated by a foundation trench that contained post holes (M. O'Kelly 1982, 76). In the trench was discovered a fragment of a flat-bottomed stone vessel, made from local stone. Positioned so close to the passage tomb, with its entrance facing it, this structure may have served as a 'mortuary house' (M. O'Kelly 1982, 77), that temporally contained the dead before placement in the tomb, possibly as a means of de-polluting the remains (see discussions in Chapter Seven).

![Fig. 4.23. The oval 'hut' and stone features in front of the entrance to Newgrange Site 1, with visual reconstruction (adapted from M. O'Kelly 1973, fig. 2).](image)

The second feature was a low oval mound (c. 4m by 3.5m and c. 50cm high) comprising 607 water-rolled quartz pebbles, with 612 fragments of quarried quartz and 103 rounded boulders of grey granite (M. O'Kelly 1973, 140-1). Protruding
through this layer were the tops of stone slabs forming an inner oval that was $c.$ 3m by 2m. These upright slabs were later discovered to form a border for an underlying stone pavement that was cobbled and flagged. Resting on this floor was a highly polished sandstone 'phallus', that is 24cm long, blunt and fractured at one end and polished at the other (M. O’Kelly 1973, 140-1; 1982, 76). This quartz oval setting is very similar to the ones discovered in front of the eastern and western entrances to Knowth Site 1 (Eogan 1986, 46-65; also see above), and in front of Cairn T, Loughcrew, Co. Meath (see Chapter Five). The creation of a platform setting near the entrance of a passage tomb also occurs at Knockroe, Co. Kilkenny, although in this instance the platform was constructed before the tomb and runs under it (see discussions in Chapter Six). These settings may have served as 'stages' for a variety of performances. The size of the oval settings would have restricted how many people could participate on top of it. Activities conducted may have been emotionally and sexually charged, as is suggested by the occurrence of a 'phallus'. Among the Kumandin of the Tomsk region of Siberia, phalli and masks are often used in an erotic and exaggerated manner to touch spectators and are accompanied by obscene songs. Such actions are performed to renew the world and life itself (Eliade 1964, 79-80). Engagements with the quartz oval setting and mortuary structure may have therefore been enacted by some through regenerative and fertility practices.

As discussed in Chapters One and Two, the concept of objects as static artefacts without agency in and of itself has been challenged and regarded as suspect. For instance in many societies, such as the California Yuman Indians or the Australian aborigines, quartz is considered to be ‘living’ or a ‘live rock’, often derived from water (Vinnicombe and Mowaljarlai 1995, 240; Pearson 2002, 142). The idea that static quartz objects are fluid with a suggested movement is certainly interesting. It has been noted that the stone clutter on the hilltop tors in southwest England create visual sensations, ‘...when one first starts to look hard at clitter the eyes hurt, the stones begin to swirl like looking at an Escher print. A pattern is no sooner seen than it is lost, the stones appear to be an ever-changing kaleidoscope of forms. Such effects would be ideal in inducing trance-like states... [and mediating] between this and other worlds...’ (Tilley et al. 2000, 222). Whilst at Newgrange Site 1 I noted that a similar
captivating experience could be created by staring intensely at the reconstructed quartz façade (see Figure 4.24). Ethnographic data suggests that some shamanic worldviews are conceived as being influenced by enchanting encounters and enveloped in luminescent light. In commenting on the importance of colour and light to some pan-Amerindians, Saunders has noted that "...[t]he capacity of light, shadow, and colours to reveal and transform the appearance of an object, person, spirit, place or phenomenon is symbolically acquired by those whose status is predicated on acknowledgement of their abilities as "transformers" or "shapers" of worlds..." (2002, 213; see also Taçon 1999; and Chapter One here for detailed discussion). In another context, the last known Numic rain-shaman, Bob Rabbit from north America, used quartz crystals in his weather-control ceremonies to create water and release the spirits from within the stones (D. Whitley et al. 1999, 235; see also Vinnicombe and Mowaljarlai 1995, 238-40). For these shamans, vision is widely regarded as seeing the 'essence' rather than the surface of things; in the manner that quartz can reveal the 'sacred' glow within. The decision to create a façade of 'black' and 'white' stone at Newgrange Site 1 (M. O'Kelly 1982), might therefore represent a harnessing of social and mythical significances of light, colour and matter, with the shaping of them into solid forms via technical skills or technologies of enchantment (see Gell 1998; 1999d; Saunders 2002).
The possible animating power of quartz was proposed by Bergh, who whilst studying the passage tombs at Carrowmore, Co. Sligo, suggested that ‘...as a source of power, the quartz can have been seen as giving the dead the power to undertake the journey to the other-world. Quartz as “the stone of light”, can also have symbolized [sic], an assurance of re-birth...’ (1995, 153). Interestingly the roof-box entrance slit at Newgrange Site 1, was originally closed by two blocks of quartz. The roof-box lintel RS1 produced evidence of scratch marks on its surface, suggesting that people had frequently visited the roof-box, and had pulled out and pushed back the blocks a number of times (M. O’Kelly 1982, 96). Lynch saw this opened hollow structure as representing some form of oracle; she stated that ‘...[p]eople might seek the advice of their ancestors by asking their questions through the slot and their distorted words would come back to them as an answer, of which they could make what they liked...’ (1973, 152). Sheridan has also proposed that the quartz was used as a movable roof-box cover, at the winter solstice sunrise, and thus represents a fusion of celestial, ‘ancestral’ and temporal power that helped create a ‘hot line to the gods’ (1985/6, 28). Certainly, Eliade refers to quartz as ‘solid light’ and notes that some shamans ‘...feel a relationship between the condition of supernatural being and a superabundance of
light...’ (1964, 138). The possible significance of quartz to some people’s worldviews in the Irish Neolithic can be further demonstrated by its inclusion as temper in pottery (Cooney 2000a, 178). This particular usage might indicate that it is not the size of quartz that matters, but rather that certain people ‘knew’ of its presence and that ‘light’ could be transformed or embodied into materials and matter. The transformative power of quartz is demonstrated by the Cubeo Indians of the northwest Amazon, who insert quartz crystals into a neophyte’s stomach, to activate a metamorphic process that will create a shaman from a mere layman (Pearson 2002, 142).

Interestingly, the cobbles included in the quartz façade are rock fragments (clasts) varying in size between pebbles and boulders (64-256mm in diameter), and are described as being rounded to sub-rounded in shape due to water rolling (Meighan et al. 2002, 33). The quartz is, however, mostly in the form of angular fragments and does not appear to be water rolled, possibly originating from the Wicklow Mountains to the south (Meighan et al. 2003, 248). Mitchell’s (1992) paper on the cobbles found at the entrances to the passage tombs at Newgrange Site 1 and Knowth Site 1, concluded that most of them originated from the northern shore of Dundalk Bay, whilst others were weathered out of glacial boulder clay. In this report, individual cobbles were given complex histories, involving water, such as pre-glacial weathering, transport by ice and glacial meltwater and exposure to marine wave action. These water worn stones were then transported 30km to the Boyne Valley by Neolithic people. More recent examinations have discovered yet more varieties of cobbled granite, and place their province further away in the Mourne Mountains (Meighan et al. 2002, 35), thus supporting Wilde’s (1849, 191) previous assertions. The usage of materials from distant locations in the mountains (quartz from the Wicklow Mountains, greywacke from Clogherhead and granite from the Mourne Mountains), and from the beaches (Dundalk Bay), might suggest a desire of the builders to symbolically bring the power of the mountains and high liminal places down to the Boyne island (see Bradley 2000, 35; Cooney 2006, 702), and transform an order of life by incorporating stones from the sea. Jones (2004, 207) regards the incorporation of components from disparate locations into the construction of tombs.
as ‘material citations’ of the significance of place and identity. Associations with water and quartz have been made in respect to some monuments surrounding the Irish Sea. For instance, Fowler and Cummings argue that the incorporation or deposition of quartz at a given stone monument may have been performed in a process of ‘making it wet’ (2003, 14), thus marking it out as appropriate for acts of transformation. Since the majority of Neolithic people were not buried in passage tombs (or in any other contexts as of yet), one might speculate that deceased individuals were deposited into the Boyne River. If aspects of life are seen as being transformed in to water, then it may make some sense within that context to include water in the construction of passage tombs in an alternative solid symbolic material medium, such as quartz.

**Phase four** at Newgrange sees the construction of Site Z, located to the east of the main and was built on a surface that had been de-turfed to provide material for the construction of the main mound (O’Kelly *et al* 1978, 343). It has been noted that the placing of this tomb and of the possible Site Z1 further to the east, creates an almost symmetrical effect from afar and that would not have been noticed until Newgrange Site 1 itself was built (O’Kelly *et al* 1978, 252). This suggests that the use and development of the complex continued after the large tomb was completed (Cooney 2000a). As with Knowth, this demonstrates notions of remembrance and ties with the past.

The imagery of Newgrange has inspired discussion ever since Edward Lhwyd in 1699 commented on the rude carving and ‘barbarous sculpture’ of some of the stones (Coffey 1912, 8). A survey demonstrated that the lozenge and zigzag (undiagnostic shapes) are the most common motifs at Newgrange Site 1, with the former being prominent in the tomb. The circle is the next most frequent pattern and occurs predominantly on the backs of kerbstones or in inconspicuous positions (M. O’Kelly 1982, 147). Spirals are the most conspicuous forms, being found on some of the most noticeably placed stones, such as K1. This is interesting as spirals occur the least, with them being numerically inferior to other forms (M. O’Kelly 1982, 147). The finest examples of motifs at Newgrange Site 1 are thought to have lozenge, spiral and zigzag as their main components in varying combinations. These patterns may be composed
of spiral and lozenge, as in K1; or sometimes spirals only, as in C10. Occasionally all three forms are used, as demonstrated in L19. All the motifs employed at Newgrange Site 1 are geometrical and non-representational (C. O’Kelly 1973; 1982).

Fig. 4.25 Kerbstones K1 framed by K2 and K97, with the decorated lintel and roof-box behind (photo: author).

Regarding access into Newgrange Site 1, there probably was always a concern with damage to the motifs once K2 and K97 were placed on either side of K1 (see Fig. 4.25). Shee Twohig (2000) has noted that the only way to enter the passage would have been to climb over the kerbstones, thus crossing ‘over’ a liminal threshold and then proceeding ‘under’ the carvings of the roof-box lintel. This demarcation and distinction may also have been emphasised by the colour of K1, which demonstrates red qualities (see above) and greenish hues (Wilde 1849, 193). The passage might be thought of as comprising two sections; the lower in height being nearest the entrance under lintel RS12, which rests on R12 and L13. Beyond this point the passage roof rises into the corbelled roofed chamber. Almost exactly halfway between the entrance and the backstone of the chamber, there is a slight change in direction of the passage. This threshold between inner and outer passage is demarcated through the carvings which are found on the passage and roof from this point onwards (Shee Twohig 2000, 93). Shee Twohig (2000) has argued that the motifs in the passage were engraved in
three phases. In the first phase, three stones (R3, L19 and L20), were carved before being placed in the passage. We know this as the motifs were hidden below the earth when the stones were upright. These ‘hidden’ motifs in the passage are mostly spirals and circles, with a few angular ones. Similar ‘hidden’ spiral motifs were noted by Coffey (1912, 32) in the main chamber, when several stones which formed the wall-packing fell out.

In the second stage, visible motifs are carved into the passage stones and these are mainly small and consist of lozenge/triangle panels (L15, R8, R12 and R21), zigzag panels (L22 and R18), or small-scale outline circles and lozenges (Shee Twohig 2000, 94). There are six stones on the interior of Newgrange Site 1 with incised angular motifs (A. Jones 2004, 204). There are at least four episodes of superimposition in the interior of the tomb, consisting of picked angular motifs and loose and close area picking (see A. Jones 2004, fig. 21.2). Carvings from this stage are also used to mark the structural change in the passage, with some abstract and indefinable motifs on L13 and triangles on R12. These triangles are low down and are interestingly not overlaid or damaged by the later pick dressing. The final stage consists mostly of pick dressing, and it is believed that it was applied whilst the stones were in situ as it is never discovered on inaccessible parts of the stone or below ground level. O’ Sullivan (1986, 79) remarked that loose area picking is found on nearly all the stones in the Newgrange Site 1 passage. For instance, on the stones R12 and R21 one can see deep pick dressing produced in bands; as noted above R12 is on the junction between the inner and outer passage, while R21 resides between the passage and the chamber (see M. O’Kelly 1982, fig. 13 and 20). The transformation of the passage stones at specific points in the passage may have marked transitional moments in persons’ (dead or alive) decent into the earth or chamber.

In the chamber itself, motifs are present on 10 of the 17 orthostats, on the underside of a large roofslab and on the edges of 10 roof corbels. All of the cells in the chamber contain spiral motifs which dominate. For instance, the shallow set cell 1 produces a dramatic visual impact with its backstone (C3) spiral motifs. The central spiral on this stone consists of 14 closely set turns, which make it appear larger. In all the cells and
the chamber, the spirals turn anticlockwise from centre outwards (except a small spiral in cell 2 on the edge of C10). Sir Thomas Deane originally speculated that the spirals on C3 were intended as a plan of the mound, and supported this by discovering two previous decorated kerbstones. Coffey, however, challenged this interpretation as a ‘fortunate coincidence’ on the grounds that no passages were found behind them (1912, 12). The notion that images on stones could have been used in the laying out of Newgrange Site 1 was again forwarded by Andrew Powell (1994). He believed that Newgrange Site 1 was organised via a front/back, left/right asymmetry and that this was most explicitly and formally represented on K52 (A. Powell 1994, 95). The idea that it is the spirals that suggest possible passageways has also persisted in archaeological literature. For instance, Dronfield (1996b, 54) has proposed that the spirals located near the mortuary deposits and basins, were believed to be passages as well as representations of passages for points of access to other worlds (see also Lewis-Williams and Pearce 2005, 267-9). He also suggested that prolonged exposure to these spirals in certain conditions could produce an optical effect and enable spectators to enter an altered-state of consciousness (Dronfield 1994, 128), as they resemble simple dense patterns (see Chapter Two here for discussion). If indeed this proposal is correct, then the deposition of cremated remains and bones in the basins (O'Kelly et al. 1978, 291; M. O'Kelly 1982, 107), possibly stimulated by liquids, located near entry spirals to other realities or worlds, might have been designed to activate and allow spirits or particular persons to transcend in certain ceremonies.

Cell 2 at the north end of the chamber, houses one of the most famous motifs in Newgrange Site 1 on orthostat C10, the ‘three-spiral figure’, often incorrectly termed a ‘triple spiral’ (C. O'Kelly 1982, 177). The entire motif is 30 x 28 cm. It is interesting to note that although the later pick-dressing on this stone slightly encroaches on the left side of the spiral, in the main it respected the spiral and left it undamaged. At the midwinter solstice, the three-spiral figure is illuminated by reflected light from the sun-beam that enters via the roof-box and fills Cell 2. One can speculate that if this cell contained a large rock of quartz, then the light effect would have been more dramatic. Cell 3 houses two basin stones and one of the most impressively carved roofstones in the passage tomb. This stone contains spiral, zigzag
and lozenge motifs. As these images continue beyond the supporting orthostats, it is believed that the slab was decorated before it was placed in position. This is an observation that seems to have been first documented in the nineteenth century by Wilde, who stated that the ornamentation must have been applied before the structure was completed, maybe being used for some anterior purpose (1849, 200; see also M. O'Sullivan 1989, 139). Apart from this elaborate roof stone, cell 3 is sparsely decorated. A ‘frieze’ of lozenge/triangle angular motifs is, however, carved in at eye-level round the cell (Eogan and Aboud 1990, 135). In the main central chamber, the images on the corbels are mainly angular motifs of lozenge/triangle and zigzag, while the orthostats are predominantly lozenge/triangle, with some spirals and triangles.

In the roof of Newgrange Site 1, three styles of motifs have been suggested (Shee Twohig 2000, 97). On the outer passage, near the water-grooves, there are picked motifs. On the inner passage, where the roof rises, there are both incised and picked designs, ‘...fresh and sharp, though inexpertly executed...’ on stones X and Y (C. O'Kelly 1982, 185), with similar ‘doodles’ on a stone found loose nearby (stone Z). The final style is much like the ‘hidden’ motifs found on the backs of the kerbstones, and is mainly demonstrated on a corbel in cell 2.

Apart from the lower sections of the western kerb (Kerb numbers 21 to 47), all the kerbstones (97 in total) have been exposed and documented. The kerbstones have been categorised by Shee Twohig (2000, 97) as such:

a) 30 visible surfaces of kerbstones have motifs on them and these images include, concentric circles and zigzags, with a few instances of radials and cupmarks being present.

b) Nine hidden surfaces of the kerbstones have a full range of designs on them, such as K13 and K18, which both have a surface area of c. 4m² that is completely covered. The predominate designs are concentric circles and circles with a central dot. Four stones have angular designs and it is estimated from their fresh appearance that they were not exposed for any length of time
before being placed in the passage tomb. The hidden picked designs are also well preserved.

c) Three kerbstones (K1, K52 and K67) are distinct in that they demonstrate plastic style designs (O'Sullivan 1986). The famous K1 is positioned at the front of the entrance, whilst K52 is diametrically opposite it. Both of these stones are believed to have been carved *in situ* as they do not extend below the ground level (Shee Twohig 1973, 169). The motifs are predominantly spirals and lozenges. The assertion by Breuil (1934, 304) that K1 was decorated in two distinct phases (termed series 3 and 4), possibly by two different engravers was later rejected as incorrect by Shee Twohig (1973, 163). More recently O’Sullivan (1986, 79) has alternatively suggested that K1, K52 and K67 were enhanced with secondary picking. On K67, there is also depictive engraving underlying the large spirals. Due to its motifs of lozenges in relief, the lintel of the roof-box has also been included into this section (Shee Twohig 2000).

The majority of the kerbstones, especially near the entrance, are pick-dressed. Incised angular motifs are absent from the visible surfaces of the exterior kerbstones (C. O’Kelly 1982; A. Jones 2004, 204). The occurrence of motifs on the kerbstones at particular points (such as K1 and K52) has led some scholars to speculate that processions or ceremonies occurred clockwise or anti-clockwise around the monument (Shee Twohig 2000; see Eogan 1986 and Thomas 1990 for similar discussions on Knowth). Bradley (1995a, 116; 1997, 124) has taken the occurrence of circular or curvilinear motifs on the exterior of passage tombs in the Boyne Valley, to represent ‘public’ imagery, as opposed to the ‘private’ angular motifs on the insides of the tombs, which were only viewed by particular persons (see also Eogan 1986). With access to particular private or secret motifs restricted, knowledge or power could be passed on to special people at certain times. Some of these ‘private’ motifs conform to Dronfield’s (1994; 1995a) entoptic images. The positioning of entoptic images on the inside of passage tombs may have been to manage altered-states of consciousness, as a socially accepted didactic device to prepare the young for new adult roles. For instance, ethnographic evidence from the Australian aborigines of the central desert
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region, the Chumash of California and the Shangana-Tsonga of Mozambique suggests
that some use hallucinogenic mushrooms and anticholinergenic deleriants in
transition rites of separation, liminality and reintegration. These rites can be
compartmentalised into:

a) Segregation of novices into special isolated camps.

b) Education about ‘sacred’ matters received from elders.

c) Bodily operations such as circumcision and subincision.

d) Disclosure of meanings of particular objects presented to novices in ceremonies
   that were previously ‘secret’ or not encountered.

e) Final cleaning of all traces of the ‘sacred’ world and the ceremonial return to
   ordinary life/reality (see van Gennep 1960; Grob and Dobkin de Rios 1994).

Grob and Dobkin de Rios demonstrate that the societies of the Australian aborigines
of the central desert region, Chumash of California and the Shangana-Tsonga of
Mozambique all employ hallucinogenics to create hypersuggestible states in order to
enculturate the adolescents with a fast-paced experience necessary for their survival
and function as adult members of the community (1994, 325). These states were
induced to heighten learning and to create a bonding among members of the cohort

group, so that particular psychic needs would be subsumed to the needs of the social
group (Grob and Dobkin de Rios 1994, 325). After reviewing individual societies,
Grob and Dobkin de Rios conclude that ‘...hallucinogenic [substance] use was
thoroughly embedded in the social milieu and was of utmost importance. The goal
was to facilitate individual growth and development, allowing society to benefit from
the sacred experiences of its youth. Culturally expected visions were provoked [by]
manipulation of set and setting...’ (1994, 326 my emphasis). I suggest that the
passage tomb environment is both an excellent space to influence ‘expected visions’
through the placement of important motifs, and an ideal ‘setting’ to manipulate desired experiences and responses.

Although Shee Twohig’s (2000) recent analysis does not support Bradley’s (1997) interpretation, as spirals are equally predominant in hidden locations and internally, the use of entoptic images internally and on the kerbstones as elements of socially conducted activities of transformation and acceptance is still possible. Certainly the inclusion of ‘special’ motifs on the inside and outside of the tomb removes a total reliance on an ‘inside:outside’ image dichotomy. As discussed above, dichotomies can be useful, but as Thomas (2004, 127) has stressed it is possible that they are an entirely modern conception originating from Christian doctrination. Another suggestion has been that this idea is a by-product of the process of ‘interiorisation’ of personhood that marked the beginnings of the modern western concept of the ‘individual’ (Ingold 2000, 411). Furthermore, we must be aware that the terms ‘public’ and ‘private’ are not neutral appellations. In questioning these different realms and their relationships to people, Lukes (1973, 62) has argued that if the public domain is the space of politics, then the private world is one that is immune from political interference. I understand Lukes’s (1973) concern with the usefulness of these labels, but disagree and suggest that any social encounter is political and that possible activities within the passage tombs would have probably included some political elements. Certainly the relationship in anthropology with ‘public’ and ‘private’ domains often remains obscure, with scholars having to resort to universals or ‘standardized [sic] hermeneutics’ (Turner 1969, 9-10). Firth (1973, 216) argues that in some societies ‘private’ symbols are ones that the public should be able to recognise immediately. Whereas in a more modern and western context, he stresses that some ‘private’ images are ones that need to be considered and explored or penetrated to see meaning beneath the surface. Thomas (1992) has forwarded that at the passage tombs of the Loughcrew complex, Co. Meath, only participants reaching the deepest recesses of the tombs would have had access to certain restricted elements of a ‘ritual’ discourse as expressed via the visual motifs (see fuller discussion in Chapter Five). The notion that the ‘private’ dark interiors of passage tombs needed to be ‘penetrated’ in order to yield knowledge, is appealing but also very reminiscent of late eighteenth
and early nineteenth century medical and scientific literature (Foucault 1973), and therefore might be of limited use in a Neolithic context. Whether we as writers believe in structural dichotomies or not, we should note that the modern world can still divided into people who use them and people who do not. The past may possibly have been the same.

As with Knowth Site 1, Shee Twohig (2000) has proposed three stages of carving that were related to the various construction stages and sequences of the Newgrange tombs. In the early phase we find on the orthostats mainly spirals and zigzags, which were possibly reused from earlier monuments. This stage is followed by the main phase, where there is a variety of depictive, picked and incised and plain panels with addition motifs on Sites K and L. Finally the mature phase is marked by pick dressing primarily on the passage orthostats, with the completion of whole designs in plastic-style on three Site 1 kerbstones and roof-box; there is also some at Sites K and Z.

**Dowth**

This site is the least known of the three main passage tombs in the Boyne Valley. Unlike Knowth and Newgrange it has not been subject to large-scale modern archaeological excavation, being last dug in the nineteenth century (Deane 1886, 162), and is a reminder of what the other two large passage tombs were like before conservation and restoration. The evidence for the Dowth complex is, however, scant as a result. Dowth or Dubhadh meaning ‘darkness’ (Wilde 1849, 205) is situated on a natural ridge and shares similar views with Knowth Site 1 and Newgrange Site 1 (Herity 1974, 30); it is the easternmost of the three mounds. In phase one an interest with the north-east end of the Bend in the Boyne is suggested by the location of Site F, to the west of the Dowth ridge. This possible interest in prominent places is supported by the location of Sites I and J, to the east of the Dowth ridge in phase two (Eogan 1986, 15). Site J has a chamber with a corbelled roof and when one is at ground level, the chamber seems to divide into compartments formed by stones on the edge (Eogan 1986, 15). Phase three involved the construction of the main passage tomb that is referred to as Dowth. There is currently no data available for the carbon
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Excavations conducted in 1847 by the engineer R. H. Frith, badly mutilated the mound and created a crater in the centre (O’Kelly and O’Kelly 1983, 141, also see Appendix B same volume). Despite this ‘digging’ the mound at Dowth remains an impressive sight. It is 85m in diameter and 13.4m to 15.24m in height (depending on where one measures from), covering nearly 6m² (O’Kelly and O’Kelly 1983, 149; Eogan 1986, 15). The mound is surrounded by a kerb of about 115 stones (although only half are now visible) and contains two tombs, both facing westward (Deane 1886, 161; O’Kelly and O’Kelly 1983, 148). Visual motifs have been documented on only 15 kerbstones so far; the kerbs vary in length from 1m to 3.5m and if restored to the vertical would be approximately 1m above ground level.

The more northerly of the tombs (Dowth north; see Fig. 4.27) has a passage 8.2m long leading to a cruciform chamber with a corbelled roof (highest point is 3m from ground level), 3.85m long by 6.35m wide. The main axis of the tomb is orientated...
WSW-ENE. In this structure, 36 stone orthostats and about eight lintels were used; there are notable megalithic images on 11 of the orthostats and roof stones. An aperture leads to an L-shaped annexe located off the right hand or southern recess. During the 1847 excavations the scattered parts of a basin stone were discovered. These nine fragments were placed together whole and positioned in the centre of the chamber (Wilde 1849, 208; Coffey 1912, 45), where is currently resides (see Fig. 4.26). There is evidence to support that this was its original location, and by analogy with Newgrange Site 1, it may have been housed in one of the recesses. Its dimensions are 1.5m by 1m and the maximum depth of the hollowed part is 25cm. It would therefore only fit in the right-hand recess, it being the larger of the two (O’Kelly and O’Kelly 1983, 153). There are currently no traces of its contents; lipid or reside analysis and further excavations may reveal some at a later date though.

Fig. 4.27 Dowth North passage tomb (after O’Kelly and O’Kelly 1983, figs. 6, 18, 19, 20, 21).
Dowth north passage tomb is unique in that it houses an annexe, which consists of two segmented chambers or cells at right angles to each other, reaching from the south (right-hand) recess. The first annexe cell is the largest and is similar to a cist structure, being divided into two compartments by a septal slab, which does not completely close the two cells from each other. The second cell has a floor consisting of a massive slab, 2.6m by 0.87m, with a natural hollow in the centre (Deane 1886, 161; O’Kelly and O’Kelly 1983, 153). Whether this choice of stone is deliberate with the hole mimicking the basin is unknown, although Wilde did speculate that it could possibly hold approximately one gallon (c. 4.5 litres) of fluid (1849, 208). Interestingly, unlike Newgrange Site 1, the right-hand recess does not contain more motifs than other areas. At a point on the kerb opposite the northern tomb there is an inward curve by Kerb 50, which has been suggested to mark the possible position of an entrance to another ‘main’ larger tomb (Herity 1974, 34; Eogan 1991, 110; 1996, 103; Bergh 1995).

The southern tomb (Dowth south; see Fig. 4.28) is smaller, with a passage just over 3.3m long, 1.4m wide and 1.7m at its highest point, which leads to a polygonal chamber 4.5m in diameter with a single trapezoidal recess to the south or right-hand side (O’Kelly and O’Kelly 1983, 156). The combined length of both the passage and chamber is 8.25m. The original roof is suspected to have been corbelled; it unfortunately does not remain and the passage chamber currently has a concrete roof. The recess still has a corbelled roof, although it has been restored and maintained in modern times also (O’Kelly and O’Kelly 1983, 158). Twenty-one orthostats and five capstones were used (Eogan 1986). Outside of the kerb by the entrance was discovered pieces of quartz (Leask 1933, 167), which suggests that either the sides of the mound were covered in quartz as is seen at Newgrange Site 1 and suspected at Knockroe, Co. Kilkenny (see Chapter Six), or that the scatters lay on the floor, as is seen at Knowth Site 1.
Dowth does not currently have a *phase four* stage due to the lack of available evidence. Like Knowth Site 1, however, it does appear to have been the focus of activity in the first millennium AD, when the souterrain (underground passage/chamber) linking into the western end of the northern passage was built (Eogan 1986). It is similar to Newgrange Site 1, as at the end of the shortest day of the year, the rays of the setting sun illuminate the passage and chamber.
The stones found at Dowth are of similar composition to those at Newgrange Site 1, yet are of an inferior quality (O’Kelly and O’Kelly 1983, 158). Surface boulders of grit or slate were used and the geologically weathered surface of the slabs is visible in most of them. The stone slabs at Dowth are generally crude and uneven, and this is most noticeable in the kerb. The most common motifs at Dowth are the circle and concentric circle (Coffey 1912, 55). The spiral is evident, although it is not regarded as being well executed (O’Kelly and O’Kelly 1983, 159). Interestingly, the ‘serpent’ motifs are recorded on nearly every stone surface in Dowth south, whereas it is only noted on two stones in Dowth north. At Dowth there is a general absence of O’Sullivan’s (1996) stage four pick-dressing from his typological sequence. It has been remarked that Dowth does not overall display the high standard of technique or ‘artistry’ as Knowth Site 1 or Newgrange Site 1 (Coffey 1912, 54; O’Kelly and O’Kelly 1983, 160). There are, however, examples of loose area picking, such as on K16 (O’Kelly and O’Kelly 1983, 163). Some stones have, however, been roughly trimmed, for example L6 and L7 in the passage of Dowth North, but as a rule the orthostats retain their weathered surfaces (O’Kelly and O’Kelly 1983, 158). Thirty-eight decorated stones have been recorded at Dowth of which 15 are in the kerb, 11 in Dowth north and 12 in Dowth south passage tombs. Decoration generally consists of
no more than a single motif, such as a circle, spiral or radial. The figures for the amount of decorated kerbstones at Dowth are to be regarded as provisional, as only 55 have been examined as very few kerbstones are visible in their entirety (O’Kelly and O’Kelly 1983, 158; see Fig. 4.30). From this data it is possible to suggest that only a single episode of engraving occurred on the exterior of the Dowth mound. One of the most famous stones at Dowth is kerbstone K51. This tabular slab is over 2m long and 1m high, with decoration on both the front and back faces. The back face is ‘...more in the nature of idle doodling...', with picked curvilinear shapes (O’Kelly and O’Kelly 1983, 164), whereas the front face appears more formal in structure. The front images consist cupmarks, radials, circles, chevrons and a ‘double comb’ motif near the tomb of the stone. Some of these motifs are more commonly referred to as ‘sun’ or ‘wheel’ patterns, and are best seen in a strong mid-morning sunlight (see Fig 4.31).

Fig. 4.30 Image demonstrating the lack of exposure of most of the kerbstones at Dowth (photo: author).
Fig. 4.31 A ‘sun’ pattern on the front of K51, Dowth, Co. Meath
(photo: Dúchas The Heritage Service).

Only two lozenge/triangle (undiagnostic) motifs have been found on the kerb and none are found in Dowth North. One orthostat in Dowth South, however, has a proliferation of solidly picked lozenges and triangles that occupy over half the surface. The designs at Dowth predominantly occur within stage 1 of O’Sullivan’s (1996a) evolutionary scheme, with some examples of stage two. In this respect, Dowth is comparable to Knockroe, Co. Kilkenny (see Chapter Six).

In the interiors of the passage tombs there is evidence for incised angular motifs, as seen on orthostats C2, C7 and C8 of the northern tomb (O’Kelly and O’Kelly 1983, 170). Regarding the incised angular motifs on C2, which forms the jamb of the left-hand recess in the north passage tomb, being left unpicked, O’Kelly and O’Kelly remark that perhaps ‘...the tomb builders wrestled the stone from the artist before he was finished!...’ (1983, 170). One of the finest decorated stones at Dowth is C19, in the north tomb. This example is engraved on two faces and demonstrates two episodes or workings, with a picked radial ‘sun’ image cross-cutting an earlier curvilinear or concentric circle design (O’Kelly and O’Kelly 1983, 173). Close area picking is evident on the right-hand recess orthostat C12, south tomb, which is easily discernible as the natural weathered surface is a yellowish colour, whereas the picked areas are
greenish (O’Kelly and O’Kelly 1983, 177). Such colour distinctions would have been
more apparent when the stones were first decorated. Close area picking was employed
in some instances to accentuate earlier incised designs, as seen on the lower part of
the stone (C12), near Wilde’s ‘representation of a lotus, or lily-leaf’ (1849, 208) or
Coffey’s ‘small leaf-like’ image (1912, 58), and in other places obliterates earlier
designs, such as on the top right-hand part of stone C12 where a three-ringed
concentric circle motif is effaced (O’Kelly and O’Kelly 1983, 178). Loose area
picking is found on orthostats C1, C7 and C19 of the north tomb, and the lintel recess
(R1) of the south tomb (O’Kelly and O’Kelly 1983, 169-73). The picked images of
R1 in the south tomb have been interpreted as ‘serpents’ with their ‘heads’ formed by
a picked dot (O’Kelly and O’Kelly 1983, 173). I would suggest that alternatively,
these images may more reflect rivers, with their sinuous path suggesting a resonant
fluid flow (of life or death), rather than just a serpent crawling. Interestingly in some
societies the image of the snake or serpent is regarded as a symbol of water, rain and
liquids such for the San in Branberg, Namibia (Ego 2001). Whilst studying images of
serpents, Lewis-Williams and Dowson commented that ‘...Rock paintings of snakes
are not uncommon. Often it is impossible to detect the head because the snake is
entering or leaving a crack or step in the rock face...’ (1989, 130). This observation
resonates with the ‘serpents’ on R1, of the south tomb, which are located in the centre
of the orthostat face, where there is a natural vertical trough-like depression, 55cm
high, 20cm wide and 8cm deep (O’Kelly and O’Kelly 1983, 173).

Discussion

At the three main sites of the Boyne Valley, Knowth Site 1, Newgrange Site 1 and
Dowth, one is able to detect various episodes of motif application, with there being
observable differences between inside and outside reworking. Indeed, Eogan (1986,
especially chapter seven) has commented that at Knowth Site 1, angular designs occur
predominantly in the interior, whereas curvilinear motifs are found mostly on the
exterior kerb. At Newgrange Site 1 we can see a similar application with both
curvilinear and angular picked motifs on the exterior, and these are often executed in a
single episode, as opposed to the inside superimposed motifs (M. O’Kelly 1982).
While at Dowth, the outside of the monument is predominantly decorated with curvilinear motifs, whereas the inside is mostly angular designs (O’Kelly and O’Kelly 1983).

Jones (2004) has noted these features and comments that exterior curvilinear motifs are mostly the result of a single event *in situ* engraving, whereas the inside designs are executed over a longer period of time, with patterns of angular incised motifs being developed or overlaid by bolder pecked images. The positioning of these internal motifs has been argued by Shee Twohig (2000) to relate to the structural elements of the tombs, such as inner and outer passage. Following the work of some scholars (e.g. Ouzman 2001; Watson 2001; see discussions in Chapter Two here), Jones (2004, 208) proposes that later picked imagery was applied for its acoustic impact. Certainly the creation of cupmarks and petroglyphs at Kupgal, South India (Paddayya 1976) suggests that some boulders were used for percussion purposes, creating bell tones when the ‘ringing rocks’ or ‘musical stones’ are struck (Boivin 2004, 47). Within anthropology interest is being expressed with associations between sociality, the world, the brain and music. Some scholars are exploring the effects of music on humans and their own internal rhythmic systems, such as the rhythms of the brain and the biological rhythms of the body. It is argued that some social relations are maintained by practising the world’s rhythms (Gosden 2004, 285). Furthermore, in a more modern context, that of an exhibition in Leeds, England, questions have been raised regarding the ways in which one can ‘listen’ to sculpture or any material object, and why we assume that these objects are inherently ‘silent’ (Curtis *et al.* 2004). Certainly, some writers do often mention how these objects ‘resonate’, implying that maybe one is already ‘listening’ to their ‘solid’ form (Curtis *et al.* 2004), while others comment on how engagements with material objects, especially passage tombs, can be ‘orchestrated’ (J. Thomas 1993, 93).

As discussed above, the repetitive sound waves produced by repetitive banging (such as drums) can induce altered-states of consciousness (Watson and Keating 1999), but it is unlikely that pick dressing would be loud, or rhythmic enough to stimulate this effect. This observation is interesting as the earlier incised motifs are more entoptic in
design than the later picked dressing (see Cochrane 2000 for detailed discussion), yet Dronfield (1994) argues that the later stages of the Irish Neolithic saw greater shamanic activity. The reader should be reminded that Dronfield (1994) did not distinguish sequences between individual motifs and his interpretation was therefore atemporal.

The possible significances of circle motifs and the circular nature of the passage tomb mounds themselves have been discussed in length by Bradley (1998b, 104-9). I further suggest that the circle dwellings, circular palisades, circular stone settings, circle mounds and circular motifs address different expressions of temporality which adhere in each structure (see also Ewart 2003). The circle structure and image denies temporal transformation as a forward striving force, and is the privileged site or visual expression for continuity and the kinds of replicating transformations inherent in its form. The circle form may have evoked (at some level) a cyclical perception of time, which stems from a certain type of practicality (Gell 1992, 91). Such a view of time may have been linked to a subsistence strategy that held a close relationship with the seasons. The transformation of this worldview into an important structure, such as a passage tomb and the subsequent superimposition of motifs, may have resulted from a desire to have a sense of temporal control over certain atemporal situations; creating circular permanencies in flux. Certainly, the idea of a linear historical perception of time has been tracked to metanarratives of western Enlightenment and it is noted that European Medieval worldviews mostly saw the universe as changeless and cyclical (J. Thomas 2004, 31). For the peoples of the Irish Neolithic, time may have flowed in a similar direction.

Jones (2004, 207) has proposed that circular themes give an understanding of the qualities of stone used. The types of stone used embodies a significance of place and its use in a monument is a citation of this significance. The application of motifs is seen as an ongoing reiteration or replenishment of this significance of place and identity. Jones (2004) sees the processes of superimposition as a visible citation of events of prior significance, as incised motifs are replaced or enhanced by later pick dressing. He further argues that it is the process of creating an image that is more
important than the type of motif itself. The images on the exteriors of the passage tombs in the Boyne Valley were mostly created *in situ* and as one event, whereas the interior motifs seem to have involved various stages and episodes of superimposition. Jones has forwarded that the internal images acted as ‘technologies of remembrance’ (2004, 209), and were executed to memorialise the significance of place and identity; remembrance is activated through visual engagement and repetitive image making. The differences in styles is thought to be the result of different people employing distinct mnemonic practices, which may align themselves with different ways of seeing the world. From this perspective one can argue that the motifs are part of a ‘work in motion’ and of bringing a particular worldview repeatedly into existence (see Whittle 2003, 25).

These ideas are very engaging, but they possibly only work within certain time frames. For instance, across two to three generations, memories of the carving of motifs may be attributed to particular persons or groups within society, with memories of why they were engraved persisting. Yet over longer periods of time, such as from the earlier Neolithic to the later Neolithic, personal narratives or stories of motif application may have transformed into myths or sagas. These oral ‘histories’ or myths may have been complex and open to creative and selective re-workings, producing many memories, some real and some imaged, often simultaneously. Bradley (2002a, 8) notes that oral traditions can in some instances become unstable or even corrupt within 200 years, while in other contexts this happens more rapidly. Whittle has commented on these ‘long conversations’ and suggests that they may have incorporated ‘...powerful general notions of partiality, fragmentation, contrast and overlap...’ (2003, 132). Certainly these are elements that sit comfortably within the framework of the carnivalesque. By considering carnivalesque *mentalités* we can imagine human engagements with visual imagery as being ‘anti-canonical’. The passage tomb motifs deconstruct not only the canon, but also the generating processes that make canons and universal narratives. As such, superimposed motifs may have been employed as technologies of *momentary* inversion, rather than ongoing citation. The motifs themselves may have been the result of actions as opposed to the instruments for progressive social remembrance. Rather than just drawing images and
memories out of the stone, they may have been impregnating elements of a temporal worldview or societal activities into it. To expand upon this point, I draw upon the recent work of Cummings (2002), who has commented on the similarities between some chambered tombs and natural geological features in south-west Wales and south-west Scotland. Cummings (2002) remarks that some Neolithic people over successive generations may not have distinguished between structures that were ‘natural’ and ones that were created by past generations or mythic entities. In this context, earlier motifs might not have been ‘remembered’ or considered in the same manner by successive social groups. Relationships between people and motifs may have been ambiguous, needing to be constantly worked at or renegotiated. The superimposition of motifs may have assisted in producing these renegotiated practices. As Thomas (2004, 222) notes, the material world may have revealed itself in various ways to Neolithic people; ways that would be unfamiliar to ourselves. If the superimpositions of motifs were a part of processes of remembrance or citation, it creates a paradox where the images refer to a possible past but are directed to a present or future, with the processes of interpretation being retrospective (see Bradley 2002b, 122).

The Neolithic motifs at the Boyne Valley passage tombs may have assisted in fabricating or warping an interpretation of reality, and are therefore much more than static ‘world-pictures’ of social mentalités. Instead they are fluid ‘visual-events’, ‘visual actions’ or ‘eye-cons’, engraved and then engraved again by humans as ‘tactics’ to place them within the world of everyday life. The processes of overlaying or superimposing motifs helps create a never-ending, two-way process of fluid engagement between the perceiver and his or her environment. The passage tombs stones and motifs may not have been considered to be static and were possibly thought of as being imbued with personhood, memory, a sense of volition and movement whilst playing a dynamic role in human relations. This point is demonstrated by an entertaining anecdote; whilst investigating the peculiarities of the grammatical structure of the north American Ojibwa language the anthropologist Hallowell once asked an old man ‘...Are all the stones about us here alive? He reflected a long while and then replied, “No! But some are.”’ (1960, 24). I am not
arguing that people definitely inverted their worlds at these sites, but rather that in considering alternative engagements with the motifs themselves, and in acknowledging that the motifs transformed over time, we can begin to look along the processes that may have created the motifs, rather than just being stuck looking at the form of the motifs. The following chapter will discuss the evidence from the Loughcrew complex, Co. Meath, and evaluate if these themes are played out there also.

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1 It has been noted that as many of the tomb sites are on acid soils, there may be a taphonomic bias against the preservation of inhumed remains (Cooney 1992a, 130).

2 The distortion and enhancement of images may also have been achieved via fire, with the flickering light creating a play of shadows (F. Lych 1970, 40). Such illumination would work well with emphasis augmented by liquids.

3 A human shaped carved figure made from Yew tree has also been discovered in an Iron Age deposit at Ralaghan, Co. Cavan. It is possible that the active inherent attributes of the tree, such as its evergreen qualities and poisonous leaves and berries, influenced its selection for carving (A. O'Sullivan 1990, 69-70).

4 The ordering of discrete entities into chronological sequences as a means of understanding through temporal succession, has recently been criticised as being characteristic of modern Western thought (J. Thomas 2004, 145-161). Thomas (2004) argues that sequential or stratigraphic units are first described as free-standing entities, which are later connected to each other through isolated events or acts of intentionality. I aim to by-pass this modern 'atomistic' (J. Thomas 2004, 160) perspective by incorporating fluid engagements that perform within flows of flexible and permanent conduct.


vi In a sense there are no ‘real’ spectators within carnivalesque environments as all are immersed within it; they live in it with ‘normal’ life ceasing to exist during its time-span (Bakhtin 1968, 7).

vii That some people can have differing gender roles that transgress biological male: female groupings in Native American societies, is not in itself seen as a social perversion. For instance, gender is often determined by the roles and preferences people adopt in childhood, rather than on biological attributes. The perversion, however, with the clowns is that the people involved are normally viewed as ‘male’ gendered persons.

viii Of the innumerable species of fungi native to the British Isles, about a dozen are psychoactive or hallucinogenic when taken in the correct dosage. The strongest and most frequent are Psilocybe semilanceata, the ‘Liberty Cap’ (see Fig. 4.32) and Amanita muscaria, the ‘Fly Agaric’. These hallucinogenic mushrooms occur in two groups (Lee et al. 2000). The first group, which contains Psilocybe semilanceata, consists of mushrooms containing the drugs psilocin and psilocybin. The amounts of drug present in each mushroom can vary, depending upon the growing conditions. Some members of this group also contain quantities of the drugs baecystin and norbaeocystin, which like psilocin and psilocybin are alkaloid tryptamine derivatives. The second group contains the Amanitas which have hyoscynamine, muscimol and ibotenic acid as their psychoactive ingredients (Lee et al. 2000). It was thought that the poison muscarine was the main active ingredient in Amanita muscaria and Amanita pantherina. Recent research has, however, shown that it is only present in minute quantities (0.00025 per cent of the fresh mushroom) and has no clinical effect (Kovar 1998).
muscarine poisoning does occur, the symptoms are conspicuous perspiration; salivation; lacrimation; vomiting and diarrhoea; fall of blood pressure; the slowing down of the pulse and shivering. Fatalities are rare, and death occurs only when the other two members of group two are consumed, *Amanita virosa*, the 'Destroying Angel' and *Amanita phalloids*, the 'Death Cap'. Fifty per cent of people who consume these will die (see Cooper 1994; Svrcek 1999). There is no known lethal oral dose of *Psilocybe semilanceata* (Allen 1988); it has however been suggested that consumption of 1kg of fresh mushrooms is very likely to be hazardous (Cooper 1994).

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*Psilocybe semilanceata* mushrooms are saprophytic (living on decaying organic matter) and prefer wet environments such as bogs and waterlogged meadows. There is currently no hard palaeomycological evidence for the presence of *Psilocybe semilanceata* in Ireland in the fourth millennium cal. BC, but the pervasive distribution of mushrooms of this genus throughout Eurasia and the rest of the world, implies a likely prehistoric presence (Schultes and Hofmann 1980; Furst 1988). Peintner and Pöder have recently analysed the 'Black Matter' from the girdle bag, which was found with the 5,000-year-old body known as 'Ötzi' or the 'Iceman' from the Otztaler Alps of the South Tyrol, as tinder material, derived from two different species of fungi (2000). The fungal species were identified as *Fomes fomentarius* and *Piptoporus betulinus*; neither species are psychotropic, but are renown for their pain-relieving and styptic properties (Peintner and Pöder 2000, 145). So far, this find represents the only case where fungi plays an obvious part in a prehistoric persons equipment, and it suggests an intimate knowledge of native mushrooms. Historical accounts of mushroom use within the Britain and Ireland are very scant. Wasson has attributed this to historic Europeans being 'mycophobic', regarding mushrooms as repugnant fungal growths and expressions of parasitism and decay (1965, 24). The near-total ignorance of the fungi season within modern Britain and Ireland suggests that this is an unaltered attitude (see Charteris 2001).

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Anticholinergic deleriants: these substances are not usually regarded as hallucinogens, although they have a great deal in common historically, socially and pharmacologically with stimulants taken for their consciousness-altering effects. They are called anticholinergic because they block the action of acetylcholine, a nerve transmitter substance of the muscarinic subtype that controls the contraction of
skeletal muscles. They are named delerians because their effects at high doses include incoherent speech, disorientation, delusions and hallucinations. Depression and amnesia often follow these sensations for the period of intoxication (Grinspoon and Bakalar 1997). The anticholinergic delerians derive from the Solanaceae or 'Nightshade' plant family, of which there are 2,400 species worldwide. In Europe these include, Atropa belladona – deadly nightshade, Mandragora officinarum – mandrake, Hyoscymus niger – black henbane and Datura stramonium – thorn apple. These plants contain tropane belladonna alkaloids, which include hyoscyamine (found in leaves, roots and seeds), hyoscine (found in roots), atropine (dL-hyoscyamine) and scopolamine (L-hyosine) (Arnett 1995). The term Atropine is derived from Atropos, one of the three fates in Greek mythology, as a result of it being used as a poison during the Middle Ages. Belladona refers to its ability to dilate the eyes of 'beautiful ladies' (Stafford 1992).
Chapter Five

Introduction

This chapter draws upon the Loughcrew passage tombs and settings to explore potential relationships created by the engravers and spectators of the visual images. As in the previous chapters, the passage tomb motifs will be analysed as a flux of images and technological illusions (or the illusion of created technologies, such as an engraved motif or built passage tomb), that may have influenced some Irish Neolithic societies. Although there is indication of some people continually interacting with the summits of Loughcrew from the Mesolithic through to the Neolithic, there is currently no settlement evidence available from either period. The passage tombs and engraved images were therefore probably removed from the context of daily life, possibly thought of as being placed in a liminal zone (van Gennep 1960), involving a strenuous physical exertion in order to reach the summits and the passage tombs (Fraser 1998, 212). Contact with the passage tombs may have been temporal and in some instances physically and emotionally hazardous, potentially acting as some form of social integration or separation (Turner 1982; Foucault 2002).

Previous accounts of the Loughcrew complex have addressed individual motifs and how they are related to burials and deposits, the entire complex with the locations and orientations of specific passage tombs, and movements of people through and around the monuments (e.g. Herity 1974; Cooney 1990; Thomas 1992; McMann 1994; Shee Twohig 1996). This chapter builds upon these previous ideas of landscape context and motif location with physical and visual engagements and develops a further argument that includes the possible sequences, differences and repetitions that are being performed by the passage tombs. It is suggested that both the sequential images, the topography of the Loughcrew summits and the passage tombs themselves establish visions, gazes and glances that are anchored in the present, with the present being a ‘temporally extended field’ of retentions of the past in the present, as well as being extensions of the present in the future (Gell 1998, 239-40). Following Gell (1992), I will review the Loughcrew evidence and consider how the repeated alteration of the sites in the Neolithic (their ‘now’), among a society of persons, was the result of the ways in which people continually renewed their beliefs in and of the world. By
repetitively participating with the passage tombs, some Irish Neolithic people were devoting effort, play and 'work', which may not be separate operations (see discussion in Ingold 2000, especially chapter 17), to be able to frequently ascertain the currentness of beliefs about events. Although we can never know what these beliefs were, we can detect themes, possible perceptions and repetitive actions; it this through some of these elements that I will construct possible narratives. Furthermore, by appreciating that these perceptions are always 'anchored in the present' (Gell 1992, 173) and in turn informed by a person's horizons, that is the limits of their experiences or outlook (Hirsch 2004, 37), and the residues of their material culture, one can further consider the possible worldviews of others within specific contextual horizons.

In the more recent literature, Thomas (1990; 1992; 1993; 2001) has explored the view that distances and explorations into other worlds and spheres of knowledge are expressed not only through the internal architectures of the Loughcrew passage tombs (see also Richards 1993; 1996b, for similar discussions on architecture and cosmos), but also via the locations of specific motifs. By moving further into the inner areas of the passage tomb, the spectator is challenged with increasingly channelled movement through more complex spatial divisions (J. Thomas 1990). This is argued to occur in order to facilitate the accumulation and manipulation of communal and 'ancestral authorities' (J. Thomas 1992, 146). By incorporating textual analogies (see discussions in Chapter Two here), Thomas proposes that that the visual motifs acted as symbolic media by which approved knowledges could be 'read' by and for particular members of society, possibly as part of an extended revelation (1992, 143, 146, 154). The differing motifs on individual stones are described as being for different people or people at different temporal stages of a particular performance or practice (J. Thomas 1993, 87). Thomas (1992, 146, 154) does, however, stress that the interpretations and meanings of the motifs may have been fluid, multiple, and capable of change as a result of the ambiguity inherent in abstract images (see also Bradley 1995b). This chapter aims to build upon these previous ideas of motif location with physical and visual engagements in order to develop a further argument that includes the possible sequences, differences and repetitions that were being performed by the passage tombs.
Loughcrew: background to the 'dark places of the earth' 

Loughcrew or Sliabh na Callighe is located at the western end of Co. Meath and constitutes a complex of passage tombs distributed across the four neighbouring hilltops of Carnbane West, Carrickbrac or Newtown, Carnbane East and Patrickstown for some 3 km from the east to the west and 600m from north to south (Cooney 2000a, 159; Fraser 1998, 206; see Fig. 5.1). From these hills it is possible to see the Wicklow Mountains, the Mournes, Slieve Gullion and the mountains to the north-east (Shell and Roughley 2004, 22). The name Loughcrew was suggested by John O'Donovan in the 1830s to have derived from lake loch na craoibhe (the lake of the branch) located 2m to the south of the hills. The name Carnbane is equally interesting as it means 'the white mound or heap', and may refer to the use of quartz in some cairns, such as Cairn T on Carnbane East. The Loughcrew group was first excavated and surveyed in the late nineteenth century by the amateur antiquary Eugene Conwell (1864; 1866; 1872; 1873) after he enjoyed a picnic there with his wife, and later to a
lesser extent by the local landowner Edward Crofton Rotherman (1895; 1897) and George Coffey (1912). Conwell (1864, 44) first described the passage tombs as 'cairns' and identified them with individual letters, such as Cairn A and Cairn B and in his own words '...exhausted the alphabet...' (Conwell 1864, 47); this system has been retained to this day by most scholars and I employ it rather than use Herity's (1974) inventory scheme (e.g. Cairn D as opposed to Me. 6). Cairn H on Carnbane West was excavated by Joseph Raftery in 1943 (Cooney 2000c), and since Iron Age material (metal tools and cattle bone fragments) was discovered at the foundation layer, it is suggested that this cairn was remodelled or re-used or even built during the Iron Age (Coffey 1912, 86; McMann 1993, 18; 1994, 526; see further discussion below). The cairns are located on an east-to-west axis, with an almost linear structure, with smaller tombs arranged near larger focal ones. In this respect the Loughcrew passage tombs can be compared to the Boyne Valley sites (Cooney 1990). There are currently over 30 passage tombs in the Loughcrew complex and many of these are engraved with visual motifs, particularly on the internal structural stones and occasionally on the kerbstones. Patrickstown Hill is thought to have had a further 21 cairns, but that they were totally demolished with no remaining traces before 1864 (Conwell 1864, 48; Brennan 1983, 69). Shee Twohig (1981, 94, figs. 213-41; see also Frazer 1893) recorded over 100 decorated stones (124 decorated surfaces), although the original number was probably more, and has argued for a distinctive Loughcrew style of imagery. More recently, a Japanese expedition employed a modern rubbing technique to produce a new record of the Loughcrew motifs, but this unfortunately still remains unpublished (M. O'Sullivan 1993, 30).

Geology

The topography at Loughcrew consists of a dominant elongated ridge orientated south-west/north-east on the interface between the areas of the Boyne/Blackwater and Shannon river systems. The outcrop projects out of the Lower Silurian rocks (Palaeozoic siltstone), mudstones and fine sandstones, with some of these grits being used to construct the majority of the passage tombs in the Loughcrew complex (Coffey 1912, 79; Cooney 1987, 94); to the south and west of the hill are the comparatively low, undulating, limestone plains of Co. Meath and Westmeath, and to the north slate rocks occupy the low areas around Lough Ramor (Conwell 1864, 43).
From the summit one can see the mountains at the coasts of Carlingford and Sligo, giving a view of Ireland from sea to sea, about its narrowest part (Conwell 1866, 355). The summit was estimated to command a view of at least 37 miles all round on a clear day, and specifically chosen as a ‘special’ place for this feature (Conwell 1866, 356). The passage tombs are situated along the curving spine of the ridge. The central component of the complex resides above the 214m contour line, covering an area of approximately 3.5km east-north-east/west-south-west and about 400m to 1km north/south (Cooney 1987; 2000c). The passage tombs are centred on moderately flat-topped summits and are similar to the Boyne Valley passage tombs in that the smaller sites are clustered around larger tombs. The Loughcrew complex is also similar to the Boyne Valley in that it is located between two river systems, namely the Boyne and Shannon.

The undulating, steep and flattish features of the topography have been argued to directly affect and influence a person’s visual experience through its contrast and transformation (Fraser 1998, 212). The flat features of the summits are only apparent when one reaches the tops of the hills. It is interesting to note that most cairns are located on the margins of the summits, although exceptions do occur (e.g. Cairn D and T). This creates a visual ‘island’ whereby the internal spaces are framed by the steeper banks on the periphery of the summits and by the cairns, which in turn physically and visually block-out the external spaces. Fraser has suggested that these topographical and artificial features possibly demarcated eight focal areas or as I have proposed ‘islands’ within the Loughcrew Hills (1998, 212-14; see Fig. 5.2). The summits form ‘islandscapes’ (Cooney 2004, 145), special places where striking features of the land are embellished and special material culture created and used to enhance links with the lived-in-world and ‘other’ worlds, whilst also delineating boundaries to these liminal places (Bradley 2000, 36). After Whittle (2004), we might therefore describe these aerial locales as ‘islands-that-float-to-the-sky’. Indeed, some Neolithic people may have regarded mountains and hills as part of the sky rather than just the land (Watson 2004, 60).
In following Thomas’s (1993) desire to create narratives that address more humanised interactions with the environment and associated material cultures, Fraser (1998) discussed the physical stresses involved in ascending the Loughcrew summits and the additional difficulties that would be incurred by leading animals, carrying objects or maybe people in a ‘state of crisis’ (Foucault 2002, 232), such as adolescents, the elderly, menstruating or pregnant women, the sick, or perhaps the dead. Scaling these slopes might also have impacted upon notions of time and space. The act of climbing might have incorporated different senses of time than were generally used within the daily round. Bloch (1977) has commented that more than one sense of time can often exist in the same society. It is suggested that routine activities may be influenced by the seasons, such as knowing the right times of year to conduct certain events, whereas ‘special’ activities may involve notions of time that are distinct from or distort the seasons (Bloch 1977). For instance, the summit tops at Loughcrew are generally cooler in temperature than the surrounding lowland areas and can be covered in snow when low-lying areas are not. This climatic feature might deliver the
impression that the passing of seasons is respectively progressed or delayed as one rises up the slopes, with the developmental stages and annual cycles of fauna and flora being different to the lowland ones (Watson 2004, 60). Experiencing the Loughcrew Hills with differing climatic conditions and visibility distorted by atmospherics (Watson 2004, 60), may have lead to concrete testaments to the specialness of the summits. For the Mistassini Cree Indians of Quebec province, Canada, mountains are regarded as places where spirits dwell and where particular performances are enacted that are dependent on the differing weather conditions (Tanner 1979, 98).

Such features may confirm a worldview, at some level, in which the Loughcrew Hills are regarded as part of a cosmological *axis mundi*, a ‘Sacred Mountain’, ‘Cosmic Mountain’ or ‘navel of the earth’, where heaven and earth meet (Eliade 1964, 268). Hill and mountain tops are often regarded by some Tewa people from the American South-west, as an ‘earth navel’, an inverted hole into the worlds below that allow spirits access from one realm to another (see discussions in Tilley 1994, 65-66), exposing themselves as ‘hierophanies’, that is something that reveals itself to be special (Eliade 1964, 32). Foucault (2002, 231-33) describes these sites as ‘hetertopias’, that is a counter-site which can simultaneously juxtapose in a single place several places. These zones also contest and invert a place while being outside all places, even though one can locate them in a physical reality. These summit tops or island settings may have subverted daily life, with the dramas of carnivalesque at play. For example, in discussing the possible significances of some ‘natural’ places, Bradley (2000, 27) utilises descriptions of some ancient Greek ceremonies, in which mountain locations are used for role reversals in overturning the norms of daily life. In one mythological narrative the high areas of the landscape incorporated a ‘...one day ritual transhumance. The highest turn[ed] into the lowest... where... metamorphoses and reversal [took] place...’ (R. Buxton 1994, 4). At the Loughcrew summits, at particular times, some members of society may therefore have inverted their normal networks of relations and disrupted how they thought about themselves, others and the world in general. How these themes interact with the passage tombs and associated visual imagery will be discussed in more detail below.
There are 14 passage tombs on Carnbane West, including two larger passage tombs, Cairns D and L, being respectively 55m and 40.5m in diameter (Herity 1974, 50). The occurrence of two large focal passage tombs is unusual in Ireland. Although Coffey suggested that Cairn D was ‘...undoubtedly a cenotaph...’ (1912, 90), others including the original excavator have speculated that it does cover a passage tomb (e.g. Conwell 1866, 361; 1873, 50; Herity 1974, 50). On Carnbane East six passage tombs are grouped around the larger Cairn T, which is 35m in diameter (Herity 1974, 50). On Patrickstown Hill three smaller passage tombs are located to the south-west of the larger Cairn Y. Located on the knoll named Carrickbrac, between Carnbane West and East, is Cairn M, which is unfortunately little more than a slightly elevated piece of land today. Cooney (2000c) has argued that as Cairns D and L are visible from the south and west and east and north respectively, one can speculate that the some Irish Neolithic people were concerned with the visual impacts of the larger cairns. Interestingly, the density of passage tombs decreases on the three main eminences from west to east, in spite of the fact that the land increases in the same direction (Cooney 1987, 94). Indeed, the commanding view afforded by all the Loughcrew passage tombs is taken as further evidence of an interest in spectatorship and long distance visibility and intervisibility (Cooney 1990). McMann (1993) has commented that the passage tombs within this complex are mostly orientated towards the east, with others being aligned towards Cairn T on Carnbane East and some towards Fourknocks to the south-east (see also Herity 1974). These contrasts in terrain and orientation would have facilitated unique human engagements within the landscape, and have helped form the basis of some passage tomb studies that are not reliant on two dimensional maps and plans (e.g. Fraser 1998).

Appetites for construction and disruption

There is currently a lack of direct datable evidence for the Loughcrew complex and estimated dates generally range from c. 4000–2800 BC (McMann 1994, 526). Lithic evidence from the area does, however, demonstrate a Mesolithic (some time after 7000 BC) and Neolithic activity (Cooney 1987; Dillon 1990, cited in Cooney and Grogan 1994, 13; Kimball 2000, 31). This situation has led Cooney (2000a) to propose a speculative three-phase sequential model for the Loughcrew complex,
based on Sheridan's (1985/6) developmental scheme. Cooney (2000a, 159) believes that such an approach is useful as it allows one to further appreciate how the complex evolved through the actions of some Neolithic people. Fraser (1998) has also incorporated Sheridan's (1985/6) developmental scheme due to it being supported by some of the spatial relationships of the cairns (see also J. Thomas 1990; 1992). For instance, both Cairns J and L, Carnbane West, share the same orientation to the south-east, diverging by only 5m (McMann 1994, 529; Fraser 1998, 207). As the entrance to the smaller Cairn J is mostly blocked by the larger Cairn L, it is unlikely that Cairn J was built later than Cairn L. I utilise this developmental interpretation as it also compliments the sequential approached used in Chapter Four, describing the Boyne passage tombs. I will not, however, include Sheridan’s (1985/6) date estimates as the current shortage of chronological data makes it almost impossible to break down her speculative stages for Irish passage tombs in general at Loughcrew, beyond a 3800-2800 BC (or fourth to third millennia BC) time-frame. What this chapter will elucidate is that as with the Boyne Valley passage tombs, the larger Loughcrew passage tombs seem to be built after most of the smaller ones (contra Herity 1974, 84-7), with most of the passage tombs being built in the first two phases.

In phase 1, we witness the construction of cairns less than 15m in diameter on Carnbane West. These sites are located in two focal zones that are delineated by natural knolls that for a northwest to southeast barrier. Similar tombs are also located on Carnbane East on the western slopes and near the summit of this ridge, leaving the centre area clear, while Cairn U is situated on the junction of a flatter and higher area. Cooney (2000a, 159) suggests that the three possible small passage tombs (Cairns X1, X2 and X3) at the western edge of Patrickstown ridge also belong to this phase. The passage tombs within this phase appear to emphasise and be sympathetic to the natural features of the summits (Fraser 1998, 216-217).

Within phase 2, we notice the construction of passage tombs of intermediate size, with cairns varying from 15m to 20m in diameter. On Carnbane West, the natural northwest to southeast divide is further enhanced by the construction of three passage tombs, two of which form a pair on the knoll ridge (Cairns G and F), while Cairn H is placed to the northeast on the flatter slope and takes ‘centre stage’. Cooney (2000a,
159) has recently commented on the visual impact which the conglomeration of Cairns F, G, H, I, J and K would have created for the Neolithic spectator, and how the positions of the tombs close together would have restricted views of what lay beyond (see also Fraser 1998). Cairn M is located on the top of the Newton ridge to the southeast of Carnbane West. Combined with the construction of Cairn S on Carnbane East, the tombs in this phase draw the spectator's attention to the more level areas at Loughcrew.

It is during phase 3 that we witness the construction of the larger passage tomb cairns within the Loughcrew complex. These sites include Cairn D at 54m in diameter, and Cairn L at 40m in diameter on Carnbane West; Cairn T at 35m in diameter on Carnbane East and Cairn Y at 30m in diameter on Patrickstown Hill (Herity 1974, 41-55). Whereas the earlier smaller passage tombs are positioned in sympathy to the topography, being located on raised knolls and on the periphery of flatter areas, the later larger passage tombs are sited in the centres of these previously open areas and therefore dominate in a 'constructive' manner (Fraser 1998, 217). Although it should be noted that Cairn T also dominates one's focus in that it occupies the highest summit in the complex at 276m above sea level (Herity 1974, 42). Furthermore it has been suggested that some of these focal passage tombs replaced earlier smaller sites, with the inclusion of older decorated stones in Cairn T, Carnbane East cited as an example (e.g. Shee Twohig 1996, 74; Cooney 2000a, 161). If this is indeed true, then it might obscure or invalidate Fraser's (1998) sympathetic through to constructive sequences. An interest with visual impact is not only suggested by the size of the cairns, but also by the inclusion of quartz, as is seen with a quartz standing stone at the northwest edge of Cairn D, on the very point of the escarpment of the hill, being on the western edge of the whole complex (Conwell 1873, 50; Cooney 1996). Visual focus would also have been enhanced by the increased removal of local woodlands near and on Loughcrew during the Neolithic period (Fraser 1998, 222). Furthermore, the curving inward of the kerbstones, to highlight the entrances to the interiors of some passage tombs, is regarded as conspicuous expression rather than visual concealment (Conwell 1864, 49).
This phasing of the passage tombs demonstrates that they were not all built at the same time, rather there were repetitions, episodes and punctuated performances over time. The settings of the tombs in the final stages draw the spectator’s attention to the more level areas at Loughcrew, creating ‘stage’ settings. It is noteworthy that as soon as one creates a stage, there is gaze and distance, performance and otherness, although particular interactions can subvert or abolish these dimensions (Baudrillard 2003, 27).

Of the 31 cairns now visible at Loughcrew today (Cooney 1990, 743), seven have intact ground features, while 21 have remaining interior fragments and 17 have partial or complete kerbs (McMann 1994, 526). Many of the visual motifs are deteriorating (15 cairns still have motifs today) and many more have been lost in the last hundred years as a result of weather conditions, erosion, modern afforestation and even by flourishing nettles (Conwell 1866, 365). The surviving images on these passage tombs do not present the same ‘mature’ plastic style that was observed at the Boyne Valley passage tombs in Chapter Four here, and appear more as a collection of random images that are ‘...crowded onto surfaces in a busy and seemingly unfocused manner...’ (M. O’Sullivan 1993, 30). Following O’Sullivan’s (1996, 87) typological sequence, discussed in Chapter Four (see Fig. 4.13), none of the motifs progress beyond the Step 1 standard Irish image designs, with the plastic aspects of the stones rarely explored. Due to restrictions of space here and these preservation issues, I will focus on select cairns and their visual motifs from each of the hills within the complex to further understand some of the past actions and dramas that may have been played out at these sites. A detailed discussion will then follow the data presented.
Carnbane East

Cairn T

Fig. 5.3 Cairn T as seen when approached from the south-east (photo: author).

This cairn is the focal tomb on Carnbane East and is a 'classic' cruciform passage tomb 10m long. It is also a 'stalled' structure similar to Site J at Dowth, Boyne Valley (Herity 1974, 41; see Chapter Four). Cairn T, c. 35m in diameter, is visually noticeable from the lower plains surrounding Loughcrew and from most of the uneven topography below the hills themselves (Herity 1974, 42; Fraser 1998, 214; see Fig. 5.3). Interestingly, as one reaches near the summit of Carnbane East, from any direction, Cairn T and the other cairns disappear from view. It is not until one is three-quarters of the way up that the cairns appear again. This feature has been argued to represent the visual capitalisation of the natural aspects of the hill architecturally creating an additional visual and physical boundary for a particular sense of being or experience (Fraser 1998, 215). The cairn is delineated by a series of ice-boulders, most of which have been split in half, to form a kerb. The entrance constitutes a V-shaped in-turning in the kerb, with the façade emphasised by setting increasingly larger stones towards the entrance (Herity 1974, 42). Both Conwell (1866, 372) and Rotherham (1895, 311) reported loose quartz lumps outside the entrance and base of K29, or the 'Hag's chair' (Conwell 1866, 371). The quartz outside the entrance was located in three oval settings, each c. 4.6m in diameter (Rotherham 1985, 311). These settings may have performed in similar ways to the ones at Knowth Site 1 and Newgrange Site 1 (see Chapter Four). Conwell also described a wall of quartz three feet high and approximately two feet in thickness around the entire base of the cairn (1872, 91). Regrettably, due to undocumented restoration work in the 1940s, there is
no surviving evidence for it (Shee Twohig 1981, 214; 1996, 73; McMann 1994, 537). Here the passage tomb is described in its current state. Two stones stand upright flanking the opening to the passage, on top of which there is a large lintel block, completing the façade and orientated south-east towards the Boyne (McMann 1994, 535; see Fig. 5.4). The central octagonal chamber (2–2.5m in diameter) is constructed from four large orthostats and it has three adjoining recesses. The overall width of the chamber is 5m and each recess is built from three stone slabs consisting of an upright end-slab and two side-slabs resting on their edges. This structure is roofed by corbeling (to a height of c. 3m) covered by a flat stone slab. All the recesses and main passage have a high sill (c. 0.5m high); above each of these there is a limestone lintel that interlocks with the uprights of the central chamber.

Fig. 5.4 The façade at Cairn T, Carnbane East (photo: author).

In total there are 19 decorated orthostats, two decorated sillstones, eight decorated roofstones and one decorated kerbstone at Cairn T (Shee Twohig 1981, 214; see Fig. 5.6). The entrance to the passage is demarcated with a sillstone marked with irregular motifs (including three parallel arcs), and with the passage facing edges of C1 and C15, which both have some short lines, cupmarks and circles. In the main passage, all the orthostats contain motifs, except R1 and R3. Located near the entrance on the left hand side are two heavily decorated stones, with L1 having motifs covering the entire front face of the stone, producing a striking arrangement of dots and concentric circles.
Similar designs are presented on the nearby jambstones L2, L3, L4 and the opposing R4, while R5 and L5 are similar yet with more concentric circles and cupmarks (Shee Twohig 1981, figs. 232-34; 1996, 73). Interestingly, R5 and L5 mark the last part of the passageway into the main chamber, and it has been suggested that the cupmarks were deepened artificially by chalk and stone balls, such as those found in Cairn L (Conwell 1866, 368-9), being repeatable inserted into them (McMann 1993, 28). These repeated interactive performances are thought to possibly be part of processes that dissolve boundaries between flesh and stone or even worlds during ‘normal’ or altered-states of consciousness (McMann 1994, 541). Indeed, the actually cup-hole may have been understood as a circular tunnel extending into the surface of the stone (Bradley 1995a, 113). Such acts that incorporate the inversion of surfaces fit well with the discussions of the carnivalesque in Chapter Four here. Certainly the experience of being inside Cairn T is of ‘visual overload’, with the mind literally saturated by the plethora of motifs present (see Fig. 5.5). Such intensity of imagery may have helped create emotionally charged interactions for the Neolithic viewer, whilst challenging or perpetuating accepted belief systems.

Fig. 5.5 Various motifs in Cairn T creating visual interruptions (photo: author).
All the chamber orthostats contain motifs (C1, C5, C10 and C15) and predominantly demonstrate circles and arcs, with a poorly picked radial also on C5 and serpentine forms on C15 (Shee Twohig 1981, 214-5). Sills 1, 2 and 3 also have similar motifs, being located at the entrances to the cells. In reviewing these ‘serpentine forms’, Coffey remarked that they were ‘sun-snakes’, possibly derived from Scandinavian figures of birds, horses, solar discs or the S-curve of a ship’s prow (1912, 88). Whatever the stimulus for such images, it is interesting to note that Coffey (1912) was the first scholar to make the link between Loughcrew and the equinoxes (see further discussions below). Speculating on the possible stimuli for these ‘snake’ images, we can consider schizophrenia as a pathological condition, which induces not only entoptic phenomena (see discussions in Chapter Two here) but also auditory hallucinations (Al-Issa 1978). A recent study conducted by Horowitz (1964) investigated the differences and associations between what schizophrenic patients described and drew after hallucinations in an attempt to determine their etiology. For example, initial descriptions of ‘vicious snakes’ were drawn as wavy lines, whilst ‘two armies struggling over my soul’ arose from the subjective experience of seeing moving sets of dots (Horowitz 1964, 513). Horowitz’s (1964; 1975) studies are interesting as they suggest that once entoptic or geometric images are experienced, subjective interpretation and social rhetoric automatically consume them and that the designs can readily be converted into descriptive frameworks. It is possible that if some modern people assign these patterns to conversations and thoughts with narratives, then the inhabitants of Neolithic Ireland may have done so as well.
Cell 1 (the southern most cell, located to the left on entry) is roughly rectangular in shape, with motifs located on all the orthostats (C2, C3 and C4) and most of the side corbels. Circular motifs are the most dominant, with C3 being the most prolifically decorated stone in this cell having images all over the front face, with C2 also having radial designs and C4 being overall a much less decorated stone (three sets of double concentric circles each surrounding a central dot) and appears to be visually simpler (Shee Twohig 1981, 215). The two corbels over C2 also have motifs on the front edges and underside, and these images include a deeply picked serpentiform, arcs, dots, circles, vertical lines and an oval shaped design which surrounds a ‘stirrup-shaped’ frame which is divided into three (Shee Twohig 1981, 216). Interestingly, Breuil (1934, 293, fig. 4) cited this motif as evidence of some stones being carved prior to the construction of Cairn T, due to its inaccessible location (see also M. O'Sullivan 1993, 30).

Cell 2 (the western most cell, located at the extreme end of the passage tomb) conforms to a polygonal plan, with visual images on all the fronts of its stones (C6,
C8 and C9; see Fig. 5.6). Cells 2 and 3 both show some repeated concerns that can help us appreciate the ways that the tomb was experienced, the histories of its creation and its relationships with the cosmos. Stone C6 is the most visually deficit of the stones in this cell, and incorporates a double circle with 2 possible rays. The central stone, C8 is possible one of the most popular stones in the Loughcrew complex as particular motifs are illuminated by direct sunlight at the equinoxes (Brennan 1983; O'Brien 1992; see Fig. 5.7). Similar distinctions between images and sunlight were first noted by Coffey who reported that the ‘...solar cult is abundant at Loughcrew; rayed suns and wheel-like figures are plentiful...’ (1912, 89). It has, however, been suggested that there are inherent dangers in focusing on the particular images that are highlighted by the sun, as a result of the extensive ‘Office of Public Works’ restorations that altered the original shape of the entrance (McMann 1994, 537). The front face of C8 is completely covered in motifs, including four examples of circles with internal radiating ‘petals’ (Shee Twohig 1981, 215) or ‘flower-like elements’ (M. O'Sullivan 1993, 34) around a central dot and circle. The panel also incorporates zigzags and an oval frame or stirrup image. Shee Twohig (1996, 74) has noted that fine, coarse and medium point methods were employed in decorating this stone. The particular images made with medium point continue under the supporting corbels, and suggest that the other fine and coarse images were made whilst C8 was in situ.
Fig. 5. 7 (a) photograph taken at 6:51am showing the shaped beam of equinox sunlight illuminating C8. (b) photograph taken at 7:15am with sunlight illuminating the bottom right corner C8. (c) photograph taken at 7:18am demonstrates the last of the sunbeam on C8. Orthostat C9 and Sill 3 are also now illuminated. Interestingly there is a sun symbol highlighted on the top right hand corner of Sill 3 (photo: Michael Fox; see also images in Brennan 1983, 100).

Another of the most impressively decorated stones (the roofstone of Cell 2) in this passage tomb is often missed by some visitors. This roofstone contains imagery all over the underside face. As the motifs continue beyond the supporting corbels, it is likely that the stone was decorated before being placed into the passage tomb (Conwell 1873, 39), and in this respect it is similar to the right-hand recess roofstone in Newgrange Site 1, Co. Meath. Shee Twohig (1981, 216) has commented that it
would have been very difficult to decorate a stone so intensively, whilst lying on one's back, or even in the dark being illuminated with artificial light (Coffey 1912, 41). Indeed, today the images are best seen when lying on one's back with feet facing towards the passage entrance. This feature has led Thomas (1992, 149) to comment that only those people who had access to the deeper areas of the passage tomb would be able to engage with these images. The motifs on the roofstone include, parallel lines, 'flower' patterns, dots, circles, radials, serpents, arcs and spirals. Interestingly the spirals appear to be more angular than circular, and the motifs in general are 'haphazardly' placed, especially near the centre of the roofstone (Shee Twohig 1981, 217, fig. 238). It has been suggested that when the sunlight hit C8, it is reflected to illuminate this roofstone (Brennan 1983, 169). The location of the stone has allowed good preservation, and Shee Twohig (1981, 217) has commented that three grades of picking tool were used to create the panel. As the images are basic abstract geometric, and as they do not conform to the modulations of the stone's surface, we can place this roofstone within step one of O'Sullivan's (1997) sequence.

Similar themes are played out in Cell 3. In this cell (the northern cell and located on the right of the central chamber) there are two decorated stones (C11 and C14), which are placed in juxtaposition to each other. The underside of the cell lintel has a picked dot with six radiating lines, while the underside of the roof slab has an incised image consisting of parallel zigzags (Shee Twohig 1981, 217). As several of these angles that produce the zigzag do not meet, they can be considered as an entoptic 'fortification' illusion or teichopsia image (see W. Richards 1971; Niedermeyer 1990; Dronfield 1994; see also Endnote xiii here and Fig. 5.8). Its location on the underside of the roof slab, in an inaccessible position, might suggest that the image was produced before stone was set in place. Certainly the notion that entoptic images were created onto/into stone before most other designs, has previously been explored in detail on some of the Boyne Valley passage tombs (e.g. Cochrane 2000). That entoptic images were used might suggest a desire to incorporate otherworldly/alternative influences or interactions, and possibly performances influenced by psychoactive substances or persons with pathological conditions. The main portion of C11 is heavily covered in images. The lower part of the stone may be described as 'chaotic' in that it constitutes a number of randomly placed oblique lines
crossed in places by short horizontal lines, with one 2-bend snake embedded (Shee Twohig 1981, 216). C11 also includes dot and circles and a radial motif. C14 is also completely covered in imagery, albeit slightly less than C11. The images on C14 are, however, more individualistic and one can notice an oval shaped motif, a serpent with six bends, arcs, circles and radials. Cell 3 is slightly larger than the other cells, but is not enhanced through a greater number of visual images, as is seen at the other cairns at Loughcrew (Shee Twohig 1996, 74). In the entire Cairn T passage tomb, radial images dominate, with them being present on 37% of all the carved surfaces. Shee Twohig (1996) has commented that Cairn T demonstrates a desire for coherence, with almost identical styled images appearing in juxtaposition to each other in the passage way (see above descriptions), with the four main orthostats in the central chamber (C1, C5, C10 and C15) also having similar imagery. Such symmetry fits well with Foucault’s (2002, 235) definitions of the roles that heterotopias may play. The juxtaposition of similar images creates a space of illusions that exposes and enhances the partitioning and ordering of movement within the passage tomb, whilst simultaneously reflecting and inverting the random, messy and jumbled aspects of life.

![Fig. 5.8 Underside of Roofstone Cell 3, Cairn T, Loughcrew, Co. Meath (Shee Twohig 1981, 238).]

To the north of Cairn T and on the exterior is located K29 or the ‘Hag’s Chair’ (see Fig. 5.9). This kerbstone has visual imagery on its front and back face. The top of the
central part of this kerbstone is believed to be artificially cut into creating the chair appearance (Shee Twohig 1981, 217; contra. Conwell 1866, 371), and the inlaid cross on the ‘seat’ surface was cut by surveyors engaged in the ‘Trigonometrical Irish Survey’ (Frazer 1893, 321). More recently, however, others have stated that the cross was associated with a secret eighteenth century outlawed religious Mass ceremony (McMann 1993, 27). Conwell commented that many of the images on K29 were ‘...much defaced by the action of time and weather...’ (1866, 372). The images that we see today, over a hundred years later, are unfortunately even more weathered and this resulted in Shee Twohig (1981, fig. 238) having to reproduce Du Noyer’s watercolour sketch from Frazer’s paper (1893, fig. 45) in her corpus. The limited images that still exist include on the front face six inverted boxed ‘U’ shapes and several double ‘U’ shapes and circles, one with a central dot all. On the back face of K29 there are two roughly executed concentric circles (Shee Twohig 1981, 217).

Considering that K29 is the third largest kerbstone, decorated and such a prominent feature, it is surprising that it was not placed diametrically opposed to the entrance, as is seen at some of the Boyne Valley passage tombs (e.g. K52, Newgrange Site 1). That images are presented on the outside of the passage tomb does suggest that they were intended to be seen by spectators in ‘public’. Such display may have allowed the passage tomb to operate within networks of opening and closing that both isolated and rendered it penetrable. Performances with these external images may have incorporated differing or mirroring gestures and permissions than the internal motifs.
Fig. 5. 9 K29 also known as the ‘Hag’s Chair’, Loughcrew, Co. Meath (photo: author).

Cairn U

Fig. 5. 10 Plan of Cairn U, and illustration of C3, Loughcrew, Co. Meath. Scale represents internal plan only (after Shee Twohig 1981, figs. 239, 240; McMann 1993, 26).
Cairn U is located 14m north-east of Cairn T, is c.13m in diameter, and contains the second largest concentration of decorated stones on Carnbane East (Herity 1974, 44). The central chamber has four cells attached to it, with two cells on the south side, one on the north and one on the west (see Fig. 5.10). It has been suggested that the north cell possibly consisted originally of two individual cells, but work conducted in 1995 restored it to one (Shee Twohig 1996, 75). The main passage is blocked by two sillstones, and the original settings for the outer part of the tomb are unknown. The passage entrance is orientated to the east-south-east in the direction of the Fourknocks tombs (Conwell 1866, 374; McMann 1994, 535), and the passage orthostats do not continue to the kerbstones (Shee Twohig 1981, 74; see Fig. 5.11). Although no roofstones exist today, the passage tomb is fairly well preserved and 15 kerbstones survive today (see Fig. 5.?). Only three of the passage orthostats are decorated (R2, R3 and L2), with the imagery on R2 mainly located on the lower right face. Both R2 and R3 are carved with ‘U’ shapes, arcs and some circles, whereas L2 predominantly consists of meandering lines and a possible dot and radial (Shee Twohig 1981, 217). It is at Cairn U that Herity suggested that a Loughcrew atelier learnt a new sense of patterning and design (1974, 42).
In Cell 1 (the western cell and located first on the left off the passage) only has visual imagery on the lower right-hand edge of C2 (facing east) and these mostly consist of ‘U’ shapes and some small meandering lines (Shee Twohig 1981, 217). Continuing into Cell 2 (the other western cell located adjacent to Cell 1), C2 also has imagery on its western face, mainly on the left side of the stone. These motifs are more extensive than the other face and include a roughly executed serpentiform image, horizontal lines, circles, arcs and boxed ‘U’ shapes (Shee Twohig 1981, 218). The other decorated orthostats in Cell 2 (C3 and C4 east side) both have badly weathered serpentiform images. C3 is heavily decorated with images covering most of its front face. The largest image on C3 consisted of a composition of sets of ‘U’ shapes ‘impinging’ on a central oval motif (Shee Twohig 1981, 218). Herity described this motif as the engraver’s ‘masterpiece’, being a representation of ‘...an owlish face, eyes in the centre of grouped arcs on either side of a vulval nose and mouth...’ and
'...frankly feminine...' (1974, 45, 106). This observation is justifiable, if not fanciful, only if one reviews Du Noyer’s water colours in Frazer’s paper (1893, fig. 59), which fails to record most of the images on the stone. Comparisons with Shee Twohig’s more recent recordings (e.g. 1981, fig. 240), make such assertions less tenable. Furthermore, it also demonstrates the influences that scholars such as Breuil (1934) and Crawford (1957) had on Herity (1974) with respect to anthropomorphic theories. Other than a serpent with six bends, C4 (east face) also has small circles and meandering lines.

In Cell 3 (the end or deepest cell) there are three decorated stones (C5, C6 and C7). C5 is heavily carved all over the front face and on the top bevelled edge. The well preserved images on C5 are complex and include a panel of serpentiforms, larger individual serpents, arcs, vertical lines, a radial line motif and a lattice with lozenges (Shee Twohig 1981, 218). Although just as extensively carved as C5, C6 (the backstone) is considered to be of a poorer quality stone with many natural holes, which has made the visual imagery difficult to trace in the past (see Shee Twohig 1981, 218, fig. 240). The images on C6 largely consist of boxed ‘U’ shapes, tall narrow boxed arcs and several short radial lines. Interestingly Herity saw in this panel a ‘ship motif’, which I can unfortunately not see (1974, 44). C7 has a lightly picked panel of serpentiforms consisting of six horizontal zigzags that all join at their angular apex’s and end in wavy lines (Shee Twohig 1981, 218).
In Cell 4 (the northern most cell and located to the right of the passage) there are four carved stones (C8, C9, C10 and C11). The imagery on C8 is located mostly on the upper parts of this stone and it includes horizontal zigzags, bent zigzags, concentric circles and possibly a spiral. C9 (the backstone of Cell 4) is the most extensively decorated stone in Cairn U (see Fig. 5.12) and the imagery includes serpentiforms (one serpent has 14 bends), lozenges, arcs, circles, radials, boxed chevrons and ‘U’ shapes. The imagery covers almost all of the front face of C9, but stops at the top edge which slops from left to right at a 30° angle (Shee Twohig 1981, 218). As the decoration also stops at ground level and at the right hand corner, it has been suggest that the stone was carved in situ (Shee Twohig 1981, 218). Shee Twohig (1996, 75) has also commented that C9 mirrors some of the images on the opposing C3, but in a more complex fashion. Herity believed that the basic purpose of this was to depict ‘...a number of standard magical motifs in a pleasant arrangement...’ (1974, 43). These observations reinforce the idea that the right hand side of passage tomb cells or chambers where emphasised through enhanced/enchanted architecture or visual imagery. Stones C10 and C11 (only just within the Cell 4) have very limited designs
in comparison to C9. On C10 the motifs (two arcs, five circles and a ‘U’ shape) are located low down on the western face and the images drawn by Du Noyer’s in Frazer’s paper (1893, fig. 69) are now mostly buried by earth. C11 has possibly been removed from its original setting and has images on its east (two inverted boxed ‘U’ shapes), south (well preserved, medium point zigzags, serpents and meandering lines) and west (2 vertical lines) faces (Shee Twohig 1981, 219).

As one enters Cairn U, it becomes apparent that the motifs become more elaborate and ‘complex’ the deeper one moves (Shee Twohig 1996). Cell 4, on the right hand side, has the most intensive visual imagery, with C9 being the most extensively decorated. Interestingly the backstones in the passage tombs at Loughcrew appear to have the ‘best’ or most elaborate images carved into them, demonstrating the ‘...surer hand of a master...’ (Herity 1974, 42, 46). Such observations do reflect Thomas’s (1990) description of the developing complexities involved in moving deeper into a passage tomb; an inner world. Thomas (1992) further suggests that the increased ‘complexity’ of the visual media indicates restricted knowledge available only to certain members of a society as part of an extended revelation. Thomas states that it was ‘...space, not the subject...’ (1993, 93), that was being controlled at some passage tomb sites. These notions will be discussed in more detail below.
Carnbane West

Cairn F

This cairn incorporates a cruciform passage tomb and is located on Carnbane West, in between cairns D and L, and adjoins the now ruined cairn G. The passage is orientated in an east-north-east direction, towards Patrickstown Hill, and does not extend to the extreme edge of the cairn that is c. 15m in diameter (Herity 1974, 53; Shee Twohig 1981, 207; McMann 1993, 39). The placement of Cairn F, on a natural rocky ridge that runs north-west south-east separating the summit into two halves, enhances a visual barrier to panoramic views and particular cairns ( Cairns A1, A2, A3, B, C, D, H, J, K, L and I respectively) (Fraser 1998, 215). The cairn is in good condition and is demarcated by 15 surviving kerbstones. The kerb on the north-west side of the cairn is indented and respects the kerbstones of Cairn G. Only one roof stone survives and this
is located above the outer section of the passage way; the sill stones at the entrances to cells 1 and 2 remain (see Fig. 5.13). Five of the passage orthostats have visual imagery (L1, L3, L4, R2 and R4), with R2 being the most intensively engraved all over the front face, displaying serpentiforms, lozenges, inverted ‘U’ shapes and zigzags. The natural fissure in the centre renders the central images difficult to describe (Shee Twohig 1981, 208). L1 has six deeply picked parallel lines through its middle that are very reminiscent of O’Sullivan’s (1996) Step 4 amorphous picking stage, although in this instance there appears to be little awareness of the contours and profiles of the stone. One can therefore speculate that these images were applied in a later stage, but not with the same skill or appreciation that is demonstrated in the Boyne Valley passage tombs in the last episodes of motif superimposition.

Cell 1, on the eastern and left side of the central chamber, has motifs on the front face of C1, only being visible when one looks out of the passage tomb. The stone is almost completely covered with ‘U’ shapes set out in vertical rows. It has been observed that a medium point was used for a majority of the ‘U’ shapes, whereas the two larger ‘U’ shapes and circle at the bottom of the stone are described as being carved via a broader point (Shee Twohig 1981, 208). This could suggest two episodes of motif execution.

Cell 2, the deepest cell, has visual imagery on the backstone C5 and this comprises four ‘U’ shapes that are similar to the ones on C1 and a circular design with eight radiating lines. Shee Twohig (1996, 77) has linked this ‘sundial’ motif with the image on the only surviving orthostat at Cairn X1 on Patrickstown Hill (see below). This suggested ‘link’ is possibly only made by the images looking similar; Shee Twohig (1996) unfortunately does not elaborate on the comment. Cairn F is certainly orientated in the direction of Cairn X1, and it is speculated that Cairn X1 was constructed first in phase 1 (see above).
Cairn H

Cairn H is reminiscent in design of Cairn T on Carnbane East, in that it is also cruciform in plan and of a similar size (40.5m circumference), although this cairn is orientated east-south-east (McMann 1993, 36; see Fig. 5.14). Cairn H is located south-west of Cairn L. The passage is currently blocked by two stone slabs, and it is thought that this is a result of Raftery’s restorations conducted after the 1943 excavations. Raftery stated that he preserved the interior as he found it; there is a circular chamber with three partly corbelled cells and one surviving roofstone in the passage. The kerb consisting of 25 stones was, however, ‘retouched’ and drystone walling was added to the outer end of the passage (Shee Twohig 1981, 208; 1997, 77; McMann 1993, 36). Cairn H was first excavated by Conwell in 1865 (Conwell 1866,
352-4) and again in 1868 (Conwell 1873, 57), later it was excavated by Rotherham (1885, 315) and finally by Raftery in the 1940s. The nineteenth century investigations discovered material that included a stone ball, small pieces of quartz, burnt pottery, flint, sea shells and small shiny stones. Raftery’s excavations also found Neolithic materials (including Carrowkeel pottery, a pendant, three stone balls, water rolled pebbles, a chert scraper and flint), but also (as mentioned above) many fragments of cattle bone that had been shaped into ‘plaques’, ‘combs’ and ‘blades’, decorated with Iron Age styled designs incised with metal tools. Raftery concluded that these bone flakes suggested that Cairn H was built in the Iron Age rather than the Neolithic (Shee Twohig 1981, 208; McMann 1993, 18, 37; 1994, 526). Raftery never published a complete excavation report and some scholars now question his interpretation (e.g. Herity 1974, 55), and propose that the extensive excavations in the nineteenth century probably allowed the bone fragments to slip from their original context, down into a lower one beside the orthostats (e.g. Shee Twohig 1981, 208). In total there are seven decorated stones in this passage tomb; six orthostats, one sillstone and one kerbstone (see Fig. 5.14).

Fig. 5.15 Cairn H, Carnbane West, Loughcrew, as seen from south-east (photo: author).

The main passage is constructed by three orthostats being opposed to each other with the outer ones acting as jambstones. The only decorated stones in the passage are L2 and R2. The imagery on L2 is of poor quality and condition, with the dominant motifs
being two incomplete oval shapes. One is positioned around three natural hollows that appear to have been deepened by picking or by the insertion of stone balls, and the other is set in the centre of the orthostat (Shee Twohig 1981, 208; McMann 1994).

Stone R2, opposite, is more intensely decorated with imagery all over the front of the stone. This stone includes oval shapes, stirrup-shaped frames, spirals, zigzags, U shapes, a serpent, oblique lines running through the centre and several cupmarks, some deeply picked. It is possible that the oblique lines are a later addition as they cut through and across the central spiral coil.

Cell 1, on the southern-western left side, only contains imagery on the front face of C5 and this is best seen when one looks in to the passage tomb (contra J. Thomas 1992). The imagery, however, is of poor quality and not what Thomas (1992) might term as ‘complex’. The dominant motif is the dot-and-circle. The deep sloping line that cuts across this stone is regarded as natural (Shee Twohig 1981, 208), and as the motifs ‘respect’ this fissure, we might place then in stage two of O’Sullivan’s (1997) sequence. Cell 2, the deepest cell, has no motifs on the backstone as is seen elsewhere and only contains motifs on the front of C11. The imagery on this orthostat is limited to two horizontal lines that both form the base for three solidly picked triangles. Above these motifs is an area of picking that does not intrude upon the ‘pendant’ shaped images. Cell 3, on the northern and right side of the central chamber, is polygonal in plan and contains a basin-like slab of stone. The left edge of the cell is framed by C14, which is marked with a vertical serpent image near the top of the stone that descends into a circle that rests above a ‘U’ shaped motif. The other decorated orthostat in Cell 3 is C18 with poorly surviving motifs. Du Noyer’s watercolour sketches (Frazer 1893, fig. 9) demonstrate a complete circle with chevrons placed on the inside. Today these images are not apparent and all one can witness is a rough circle, that does not acknowledge a natural fissure, with some internal lines at the top of the arc and some more above it (Shee Twohig 1981, 209). The ignorance of the natural fissure by the engraver(s) might suggest that these images occur in stage one of O’Sullivan’s (1997) sequence. The most striking visual feature of Cell 3 and indeed the whole passage tomb is located on the sill stone above the cell. On this stone are placed three clearly picked images that spiral in a clockwise direction, springing from a central dot and circle (see Fig. 5.14). Interestingly, the
outermost coil appears to have been placed after the central was carved, as it flattens slightly in deference to it. This occurrence and that the images are placed near the edge of the stone (for more enhanced impact?) suggest that the sill was executed within stage two of O'Sullivan's (1997) sequence. Indeed, some scholars have commented that this sill stone seems more typical of the Boyne Valley images (McMann 1993, 37). That the northern most cell on the right side of the central chamber is different in shape and with more ornamentation, is possibly further indication for a preference or desire to emphasis one side of the passage to over the other (see Shee Twohig 1997, 78). One of the kerbstones (K8) contains imagery (the only other at Loughcrew is K29 on Cairn T, see above), consisting of a panel of parallel lines, a rough oval, a deeply picked circle and serpents that appear to meet at one end. It is very likely that other kerbstones at Loughcrew were decorated, but that climate conditions have not permitted survival.

That there are at least two recognisable episodes of motif application may suggest the temporality of interactive encounter. These sequential engagements with images may present world perceptions or simulations of worldviews that were developed in a 'timely manner' (see Gell 1992, 173). Time does not carry us with it, so in order for people to realise their aims or beliefs, they must plan or apply pressure to keep abreast of time; that is to act in a timely manner. The sequential motifs would have been executed in a timely manner as most events require specific circumstances on order to succeed.
Cairn I

Cairn I is located on higher ground (a large knoll) and approximately 40m to the south of Cairn L, creating ‘...an architectural mirror image...’ (Fraser 1998, 215), although smaller in size. None of the roofstones have survived intact in this passage tomb (Conwell 1866; see Fig. 5.16), although the cairn remains (c.19m in diameter) and is delineated by ten kerbstones, which contain no imagery (Herity 1974, 55; Shee Twohig 1981, 209). The passage is orientated east-north east, and towards Cairn T on Carnbane East (McMann 1994; see Fig. 5.1), but it does not extend to the outer edges of the cairn. The internal passage terminates in a large central chamber, which is compartmentalised into seven cells; three on each side face each other and the remaining one faces the passage. In total there are seven decorated orthostats in Cairn I.

Fig. 5.16 Plan of Cairn I with illustrations of C13 and R2, Carnbane West, Loughcrew, Co. Meath. Scale represents internal plan only
(after Shee Twohig 1981, fig. 217, 218; McMann 1993, 38).
The only passage orthostat that has been engraved is R2, which has images covering the front face. The dominant motifs are five circles with radial lines. As with Cairn L, the images are mainly located in the central cells off the main chamber, rather than in the deepest cells (contra J. Thomas 1990). In cell 1 on the left side of the chamber, only C1 is decorated, with arcs and inverted U' shapes on the front face and edges. In cell 2 the backstone (C4) is very badly worn dominated by circular designs and C5 front face has multiple ‘serpents’, circles, boxed ‘U’ shapes and arcs. In cell 3 there is a large loose stone lying on the floor. The original position of this stone is not known, although Coffey’s plan placed it in the central chamber. The stone has images on both faces and along one edge, with the side that is currently the upper face being superior (Shee Twohig 1981, 210) and similar to C5, but also with double parallel zigzags. The rear cells, deepest in the passage tomb, are not decorated at all.

Cell 6 is the largest cell and is located on the right side of the chamber with images on both its side orthostats (C13 and C15). On the east side of C13 contains circles, meandering lines, radial lines and rays. The images on the lower half of the stone are
obscured by a large basin like slab that resides on the floor of the cell (Shee Twohig 1981, 210). This possibly suggests that the slab was placed after the orthostat was carved. C15 has very lightly picked simple images on the right hand edge on the western face, with the dominate motif being a possible serpentiform with seven bends. Cell 7 contains the last remaining imagery in Cairn I and it is located on C17. This orthostat projects into the passage chamber (see Fig. 5.17) and is decorated on the right edge, halfway down the stone. There is a panel of five complete zigzags. Thomas (1992, 149) has commented that this orthostat and others (C1 and C15) are the most ‘complex’ motifs and noticeable only when one enters deeper into the passage tomb and turns to look out of the chamber. Although this is true, Shee Twohig (1997, 77) has questioned whether we can term the motifs more ‘complex’ than the others in the passage tomb, and suggests rather that it is the radial designs (41% in total) that are ‘emphasised’ and that this is as a result of the location of Cairn T (see again Fig. 5.17), which also has dominant radial images.
Cairn L

Cairn L is the focal passage tomb on Carnbane West and is located on the north-eastern edge of the plateau. The passage tomb is orientated east-south-east, in the direction of Cairn M, with the entrance indicated by a curve inwards on the kerb circumference (Conwell 1866, 367). It is regarded by some as being among the two most important passage tombs in Loughcrew, with the other being Cairn T, on the grounds of their size (c. 40.5m in diameter) and orientations (Herity 1974, 53; Brennan 1983, 69; see Fig. 5.18). As Conwell (1866) first observed, Cairn L is the only passage tomb at Loughcrew with the original corbelled roofing intact, although the central part has been replaced with modern concrete (Shee Twohig 1996, 75). The first 6m of the passage were also restored and protected by dry-stone walling, in an attempt to preserve the imagery from the elements (Deane 1889-91, 164). The passage proceeds from the entrance into a large central chamber, which has eight adjoining cells. The overall plan of the chamber is asymmetrical and similar in design to Dowth Site J (Herity 1974, 55; see Fig. 5.19). Cells 2 and 6 both contain stone basins. Located under these stone basins were many fragments of charred bones (more than 900 pieces), several human teeth (approximately 48), three stone balls, eight white balls and a polished oval object (Conwell 1866, 368; Herity 1974, 238). The fragmentation and disruption of human remains may have been a deliberate attempt to rupture notions of a given reality, creating new illusions and beliefs that ricochet between secure and destabilised knowledges (Bailey 2005, 183-7; see discussion in Chapter Seven). Conwell (1873, 61) reported that the inner most part of the passage was covered in blackened cremation ashes, demarcating the occurrence of a funeral
pyre. The central chamber is marked by a large isolated limestone orthostat or monolith (Cooney 1996b, 30), and this is suggested to be placed in order that it is illuminated by the sun at certain times of the year (Brennan 1983, 110; although see above discussions on reconstructions). The pillar may also have been associated with the one north-west of Cairn D, Carnbane West (see Conwell 1873, 50), and may also have organised movements in and around the hilltop and the passage tomb itself (Shee Twohig 1996; McMann 1994). These movements may have been prescribed for certain festivals at different times of the year. Forty-three of the kerbstones currently survive and none contain imagery (see Fig. 5.19). The lack of imagery on the kerbstones may be the result of preservation, or it may have been deliberate.

Fig. 5.19 Plan of Cairn L with illustrations of C4 and C16, Carnbane West, Loughcrew, Co. Meath. Scale represents internal plan only (after Shee Twohig 1981, figs. 222, 225, 226; McMann 1993, 33).
Six of the passage orthostats contain visual imagery (R1, R3, R4, L1, L3 and L4). Stones R1, R3 and L4 all contain large oval images, although these are faint in some instances and obscured by modern cementing of the floor in other situations (Shee Twohig 1981, 211). R4 is covered in deep cupmarks and although Frazer (1895, 64-71, cited in Shee Twohig 1981, 211) stated that they were caused by burrowing sea urchins (*echinus lividus* and *strongylo-controtus lividus*), McMann (1993, 34) has again suggested that these were created for or by the periodical insertion of stone or chalk balls. L1 has ‘haphazard’ picking all over the front face with some circles and arcs (Shee Twohig 1981, 211). L3 has images on the lower part of the front face, which includes arcs, boxed U shapes and lobes with radials. Coffey described these ‘U’ shapes as being ‘...clearly intended for a distinctive device...’ and possibly representing ‘...the sinking or rising sun...’ (1912, 88). Although this notion is plausible, he does unfortunately present an image of L3 upside down and in isolation to the other motifs on the orthostat (see Coffey 1912, fig. 74). In contrast, R3 opposite has images on the top and bottom of the front face, which include boxed ovals, zigzags and boxed ‘U’ shapes.

In Cell 1, on the eastern and left side, the most visual impressive stone is C3 (east face), which contains three spirals that decrease in size from the top right face of the orthostat. The other side of C3 (west face), again has mainly spiral forms, although smaller. The other decorated stone in this cell, C1, has a circle with radials in its centre and some cupmarks that are considered to be natural in origin (Shee Twohig 1981, 211). Cell 2, again on the eastern and left side, contains a stone basin, and the decorated orthostats surrounding it (C3 west face, C4 and C5 east face) are mainly decorated with circular motifs. This occurrence has led Shee Twohig (1996, 76) to draw comparisons between this left hand cell with a basin, and that of the left hand cell in Newgrange Site 1, Boyne Valley.

The predominant cells in Cairn L are the larger Cells 2, 4 and 6, with Cells 3 and 5 regarded as little more that intermediate space that contain no visual imagery, except a lozenge enclosed in an oval on C11 and the circles mentioned on C5 east face above (Shee Twohig 1981, 212; 1996, 76). The backstone (C9) of Cell 4 is naturally divided into two halves. The right hand side contains a damaged circles and some pickmarks,
whereas the left hand side has serpentiforms and some ‘U’ shapes (Shee Twohig 1981, 212). Cell 6, located on the north and right hand side, is the largest cell in the structure and indeed Loughcrew. It contains a stone basin almost 2m long (Conwell 1866, 368) and the ‘finest’ decorated orthostat (C16) in the tomb (Herity 1978, 54), with it also being the most ‘extensively’ decorated stone in Loughcrew (Shee Twohig 1996, 76). The motifs on this stone are closely grouped together and in some instances actually overlap, which is rare at Loughcrew (M. O’Sullivan 1993, 32). The imagery on C16 includes dominating dot and circle motifs, vertical lozenges, triangles, lattices, boxed ‘U’ shapes, parallel lines and a large serpent (Shee Twohig 1981, 212). As the images on the lower portion of C16 are obscured by the stone basin, it is suggested that they were executed before the basin was set in place (Shee Twohig 1996, 76). Facing into Cell 6 is orthostat C17 (west face) which has motifs that are isolated from each other and they include boxed U shapes, spirals, circles, a lozenge and a large semi-circle with radiating lines. The extent of these lines cannot be determined as the stone basin impedes access (Shee Twohig 1981, 212), which suggests that this stone was also carved before the placement of the basin.

Cell 7 and Cell 8, north and right side of passage tomb, are constructed via the erection of orthostat (C19), in the centre of what would otherwise have been a single cell. C19 is the only stone on this arrangement that contains visual imagery, and this is mostly includes deeply cut lattices and lozenges, on its western face.

Shee Twohig (1996) has reviewed the construction of Cairn L and its imagery to contest Thomas’s (1992) assertion that the innermost and deepest parts of a passage tomb are the most ‘significant’ or important and that this is represented via the complexity of the motifs. The above evidence suggests that the individual cells, particularly Cell 6 on the northern right hand side and not the deepest (Cell 4), are more visually ‘complex’. Cairn L repeats many of the themes outlined for Cairn T, such as size and motif repetition, but also adds further dimensions and inversions of use by the incorporation of basins. These similarities and differences will be discussed further below.
Patrickstown Hill

As is demonstrated in Fig. 5.1 (see above), there are the remains of four cairns on Patrickstown Hill, the second highest and easternmost summit of the Loughcrew range. Some of these still have surviving stones, while the others are little more than spreads of debris. Cairn Y, c. 31m in diameter, is only detectable today in a subtle rise in the tops of the pine tree plantation that occupies the hill (Herity 1974, 50; McMann 1993, 41). Apparently the majority of the stones that formed Cairn Y were removed by some for the construction of fences (Conwell 1866, 736). Of the other remaining cairns on Patrickstown Hill (Cairns X1, X2 and X3) only X1 and X2 are significantly noticeable in the form of rubble and stones. It is possible, however, that originally the summit contained more cairns and passage tombs. Indeed, one can even speculate that the southern side of Patrickstown Hill was possibly more desirable than the northern within the Neolithic period. By incorporating Finch and McEntee's (1980) study of the distribution of the soils on Patrickstown Hill, and how the southern slopes would always have received greater concentrations of solar radiation, temperature and transpiration, Cooney (1987, 95) suggested that the initial attraction to the summit would have been its warmer slopes, possibly even for settlement. Certainly, Conwell reported that until 1864 a group of 21 tumuli (possible passage tombs) occupied the south side of Patrickstown Hill, but that they were destroyed mostly by a local landowner for his fences, and partly by others who utilised the site as an open-air quarry (1864, 47-8; 1866, 377). Certainly, decorated stones have been discovered in boundaries, such as the ‘Loughcrew fence stone’ (Coffey 1897, 37), while other stones have been found in isolation near Loughcrew, such as the ‘King’s Mountain’ stone (Conwell 1864, 48), and the two Ballinvally, Co. Meath stones (Shee Twohig 1972). Of the surviving Cairns (X1 and X2) only X1 contains significant visual motifs, and as such I will only discuss this cairn in detail.
Cairn XI

Cairn XI, c. 12m across, is located to the west of the summit of Patrickstown Hill (see Fig. 5.20). The cairn is currently formed by nine surviving low set ice boulder orthostats arranged in a rough circle, with a decorated stone near the centre. It is suspected that the cairn originally contained a cruciform shaped passage tomb (orientated in a north-west direction, towards Cairn T and Carnbane East) and that the decorated stone is the remains of one of the backstone from the right-hand recess cell (Herity 1974, 50; Shee Twohig 1981, 220). The only stone in Cairn XI that contains visual imagery is a split sandstone boulder, located on the south side of the cairn, with the motifs placed on its north-west face on the lower part. The motifs are badly weathered but the main image is described as ‘...one of the most accomplished designs in the cemetery...’ (Herity 1974, 50). The main motif consists of a small cupmark surrounded by 13 radial lines, forming a ‘sundial’ or ‘sun-splash’ image, similar to one on K15, Knowth Site 1 (McMann 1993, 41; M. O’Sullivan 1993, 21). It is interesting to note that this ‘sun image’ was reported by Du Noyer as best seen...
during the setting rays of the sun (Frazer 1893, 338; see also Conwell 1866, 375). Other images include a double penannular circle, another cupmark with nine radiating lines, deeply picked circles, a dot with 11 radiating lines, some curved lines and a long serpent form (Shee Twohig 1981, 220).

Difference and repetition

With the exception of Cairn T, a recurring theme within a majority of the passage tombs at Loughcrew is the prominence of the right sides of the passage tomb as you enter deeper into it. In some instances this is emphasised by the right cell being larger than the others (e.g. at Cairns H and U), and in other examples the central cell on the right side is larger (e.g. Cairns I and L) (Herity 1974, 42; Shee Twohig 1996, 78; McMann 1994, 532). Indeed, the right sides of the passage tombs often contain other distinguishing features such as the stone pillar and basin stone in Cairn L, and the basin/slabs in Cairns H and I. The right cells are often more elaborately decorated (Herity 1974, 42, 123), with the sill stones or backstones being the most visually striking, such as is seen in Cairns H, L, I, and U. In multi-celled passage tombs, the cell in juxtaposition to the elaborately decorated right cell, is sometimes also stressed with prominence, such as in Cairns I and L. As discussed earlier in Chapter Three here, we might be witnessing the priority of dexter over sinister. Shee Twohig (1997) has highlighted these occurrences and suggests that they constitute a choreography of the practices or performances that may have occurred within the passage tombs. Shee Twohig (1997) also noted that that the left cells appeared to be dominated by circular images, with the right cells demonstrating a greater array of images. Whether this is tantamount to more ‘complex’ panels is open to debate. Thomas (1992, 146-7) creates a ‘basic division’ and considers spirals, meanders and dots as ‘simple’ with concentric circles and lozenges as more ‘complex’ arrangements. Thomas proposes that ‘simple’ arrangements are rarely found on the same stone as the more ‘complex’ ones (1992, 149). In attempting to challenge the dichotomy of ‘simple:complex’, Shee Twohig (1997, 79) has argued that although ‘simple’ spirals and ‘complex’ lozenges do not occur on the same stones, spirals and concentric circles do (on 14 stones). She also notes that concentric circles and lozenges only occur on six stones in total, and
therefore make the distinctions less impressive and removes some of the assertions of Thomas's spatial depth analysis (1992, fig. 11.3).

Thomas's (1990; 1992; 1993) proposals create situations in which 'space' as well as 'spectator' are controlled. For Thomas the Loughcrew passage tombs act as the '...gradual multiplication of bounded spaces... [creating a] greater subdivision of the audience, depending upon how far they were allowed to penetrate into the monument...' (1990, 176). The shapes of the passage tombs enforce a linear pattern of movement within the passage way and physical 'penetration' into the chamber is dictated by the orthostats and by crossing a 'symbolically-laden' forecourt entrance (J. Thomas 1990, 174; 176; 1993, 85). In some instances a person has to actually crouch down to enter and even lie down to see particular images (Lynch 1973, 155; and see discussions above). Within this depicted scheme 'lower ranked individuals' or more 'subservient' persons were only allowed to the outer-parts of the passage tombs (J. Thomas 1990). Thomas's (1990; 1992; 1993) studies are therefore centred around an 'inside:outside' dichotomy, being concerned primarily with the passage tomb interiors. Thomas (1992, 145) does not consider external or 'public' engagements other than commenting that there may have been prescribed patterns of spatial movement between the cairns, possibly a linear based one (see Cooney 1990), with the limited intervisibility between some individual passage tomb exteriors indicating possible sequential encounters. For instance, as one could not visible see the entrance to Cairn H from the entrance of Cairn L, Carnbane West, one would have to physically move nearer to it (see Fig. 5.21).
As a response to studies that privilege the interiors of passage tombs, Fraser (1998) suggested that greater importance lay in the larger-scale and possibly more frequent social encounters that could have occurred in the spaces between and outside the passage tombs at Loughcrew. For Fraser (1998, 209), the public spaces were not only able to add legitimation to specific practices, authorities and beliefs, but also they were able to challenge or subvert them, as a direct result of the public nature of the places and events. The spaces in between the cairns (see Fig 5.2 and Fig. 5.21) become ‘theatres in the round’ (Bradley 1998b, 116) acting as social foci (see also Sharples 1984, 116), and as with all good theatrical performances, incorporated elements of apprehension, risk and danger. The notion of risk and danger is amplified if one imagines the Loughcrew summits to be liminal zones where the dead or spirits dwelt or to which they had access. As with all theatre spaces, they are designed to produce systems of simulation and illusion of place and persons; the aim of theatre is unauthenticity (Pearson and Shanks 2001, 117). Indeed, it is within liminal spaces that all performances operate (Pearson and Shanks 2001, 53). By incorporating notions of performative simulation and the carnivalesque, we can begin to create more emotional narratives. Carnivalesque performances may have been at play within the open spaces, involving larger numbers of people; more people than the passage tombs could hold.
As such, we can imagine some people acting with less physical restrictions on movement, deploying festive laughter to momentarily enjoy a symbolic victory over the spirits and death, over all the worldviews that restrict and maybe even oppress within the daily round (see Stam 1989, 86). By deploying carnival ideas people may have overcome the confines between passage tomb, cairn, hilltopography, bodies that are alive or dead, whole or cremated, and the world in general. Bakhtin describes these events as ‘interchange’ and ‘interorientation’ and proposes that ‘...eating, drinking, defecation and other elimination (sweating, blowing of the nose, sneezing), as well as copulation, pregnancy, dismemberment, swallowing up by another body – all these acts are performed on the confines of the body and the outer world, or on the confines of the old and new body. In all these events the beginnings and end of life are closely linked and interwoven...’ (1968, 317).

Discussion

We do not have to settle for interpretations that depict either some people operating within the passage tombs, or conversely only performing outside the cairns. By developing the models presented by Thomas (1990; 1992; 1993; 2001), Shee Twohig (1996) and Fraser (1998), we can begin to speculate that different peoples were doing different things and sometimes even the same things, but in alternative settings (i.e. inside and outside the passage tombs). The Loughcrew settings may represent permanence in flux with punctuated shifts in social orientations. Within the passage tombs the activities may have been more formalised, with spatial distinctions, barriers and the visual motifs creating fluid and interactive types of communication. These events may have been the ‘internal’ simulacrum of carnivalesque performances as hyper-real worldview palliatives for the participants (see Chapter Seven for discussion). Outside the passage tombs these activities may have been temporally suspended, with the carnival in the focus ‘island’ areas erasing the boundaries between spectator and spectacle. We can maybe imagine the laughter of the masses creating an alternative form of free consciousness, and unique perspectives on experience, that were no less important than seriousness or even tears (e.g. as seen at some modern Western funeral practices). Carnivals can certainly be transgressive,
creating an ‘irrational’ yet real state of happiness, from miserable situations or locations (Stam 1989, 101, 119). Indeed, the apertures to the passage tombs themselves conform to carnivalesque modes in that they can instantly invert from an entrance threshold into an exit one, with entry leading to exclusion and openings becoming closings (or vice versa).

The conceptual models that were used to create the images on the insides of the passage tombs were made in particular interpretations of the world to present the ‘...world as being capable of being otherwise than we believe it to be...’ (Gell 1992, 217 original emphasis). The images on the Loughcrew passage tombs are simulations of a given reality, a hyper-reality (i.e. greater than reality) and as Gell suggests, ‘...the world is as it is, but we think it could be otherwise, and it may be otherwise than we think...’ (1992, 217). The Loughcrew passage tombs act as nodes to continuity and rupture, and present Neolithic simulations and simulacra in that they reference a reality that does or did not exist. Simulation in a Neolithic context is not about referential beings or substances, it is the generation of an interpretation of the real without origin or reality (see Chapter Seven). The motifs, passage tombs, covering cairns and focus ‘island’ areas simultaneously embody, contest and invert spaces and place, visually and physically. These features were not static, sanitised and sterile. The Neolithic people had no ‘physical’ access to alternative believed worlds, for if they had physically accessed them, they are no longer alternative believed worlds, but rather the actual world itself. Experimentation with simulations of a worldview via motifs on passage tombs, ‘real’ or ‘imagined’ possibly allowed some Neolithic people mental access to the other beyond (see Cochrane 2001; Chapter Seven here). The visual motifs are therefore sources for invention and belonging, or processes with dimensions of creativity and ‘reason’, although they could have also been ‘inept’ and ‘unreasonable’, creating gaps and absences within the appearances of the solidity of the world in which they lived in (Shanks 1992, 118, 137). These processes can lead to an escalation of what is thought to be true, of the lived daily experience, through modes of display, engagement and disengagement. This can create feelings of anxiety, and can also create an increase in the material production of images that are interpretations of the world. These anxieties can produce subversive and inversive technologies or strategies. The individual motif and the passage tomb within a specific
location might therefore be an intensified expression of a chain of images, discourses and material realities that helped support and distort people’s perceptions of their worlds in direct and indirect ways. How these themes play out in other locations relatively near-by (e.g. the Mound of the Hostages, Co. Meath) and farther away (e.g. Sess Kilgreen, Co. Tyrone) will be considered in Chapter Six.

1 Taken from an essay that won the Gold Medal and Prize of the Royal Irish Academy on the Hills of Loughcrew by Louisa Beaufort, an early nineteenth century antiquary (McMann 1991, 53; 1993, 9). The ‘dark places of the earth’ quote is also from Psalms 74:20.

2 The stones used to construct the passage tombs at Loughcrew are often described as ‘limestone’, but they do also include calcareous or carboniferous sandstone, coarse greywacke (the gritstone), occasional microgranite and conglomerate (McMann 1991, 24; 1993, 23). The stone use can broadly be described as sandstone for ornamentation and limestone for roofs and kerbs (Herity 1974, 55).

3 Previous interpretations have been based on data that is mostly map and plan dependent, presented in black and white two dimensional formats (e.g. Cooney 1990). More recent studies of the Loughcrew Hills are now incorporating aerial LiDAR (Light Detecting and Ranging) survey techniques that allow digital three dimensional models to be created on computers. Such developments are now producing colour and black and white DMS (Digital Surface Model) maps and plans that enhance the surface modulations (e.g. Shell and Roughley 2004).

4 There is, however, some speculation as to whether the two Ballinvally, Co. Meath stones were ever incorporated within passage tombs (Shee Twohig 1972, 229).

5 It is noted, however, that Cairn X2 does contain a kerbstone with 30 badly weathered cupmarks arranged in lines (Shee Twohig 1981, 220).
Chapter Six

Introduction

In this chapter I evaluate the evidence from smaller passage tombs within Ireland, as a means of contrasting possible differences and detailing similarities between the larger complexes (e.g. the Boyne Valley and Loughcrew) and smaller examples. In doing so, I work through some of the larger questions that were raised in Chapters One and Two, regarding notions of scale, intensity, agency and worldviews that are stimulated and perpetuated by engagements with visual stimuli. As a means of comparison I will draw upon passage tombs that are located far from the Boyne complex and ones that are relatively near. Two examples will be used from the north of Ireland (Knockmany and Sess Kilgreen, Co. Tyrone), one from the south-east (Knockroe, Co. Kilkenny) and two smaller sites from the east again and not that far away (Fourknocks and Tara, Co. Meath). Arguments from the previous chapters will be reconsidered and discussed, such as the animated aspects of images, the agency of motifs and stones, temporalities and superimposition, the dynamic aspects of liquids and relations with hill tops, rivers and waterways. These positions will, however, be reviewed within alternative settings, to assess the applicability of particular themes to passage tombs in general. In doing so, I will discuss whether the major passage tomb complexes in the east of Ireland are indeed an anomaly, or if there are beliefs systems (such as an axis mundi worldview) that possibly punctuate and rupture at differing locales, resonating through the visual imagery, settings and material culture. I will commence this interpretative journey with a short trip down the archaeological road to Fourknocks, Co. Meath.
From the Irish *fornocht* or *fiuar cnuic* meaning ‘exposed place’ or ‘cold hills’ (Hartnett 1957, 272), the Fourknocks I passage tomb, Fourknocks II tomb and Fourknocks III mound/barrow are located near the modern village of Naul, Co. Meath (Hartnett 1957, 197). These sites are located on the summit of a broad-backed ridge orientated north-east to south-west and situated at 152m above sea level; the views from the summit are spectacular, the Dublin/Wicklow Mountains to the south, the Cooley and Mourne Mountains to the north, the distant Loughcrew Hills to the north-west, and the sea to the east, are all visible on a clear day (Hartnett 1957, 198; Herity 1974, 39). Although closer in distance, the Hill of Tara, Co. Meath is harder to see, while the Bellewstown Ridge conceals the more immediate Boyne Valley complex that is c. 15km away. The hills also overlook the Delvin River to the south (Shee Twohig 1981, 220); such proximity to water is reminiscent of the Boyne Valley complex. The siting of the passage tombs suggests a desire for visual dominance, and this effect is particularly
enhanced if one approaches the summit from the lower grounds to the north, and to a slightly lesser extent from the south (Cooney 1997b, 17, 19; see Figure 6.2). Here, my primary focus will be upon Fourknocks I, as it is the only passage tomb on the hill that is currently known to contain motifs. There will, however, also be a brief consideration of the nearby Fourknocks II, to enhance some of the complex histories that these mounds may have experienced (see also discussions in Cooney 1997b, 19; 2000a, 106). In doing so, I will review some of the alternative impacts that the visual imagery produces and stimulates, and consider the differences that it makes.

Fig. 6.2 Plan of Fourknocks I
(adapted from Shee Twohig 1991, figs. 246, 247, 248; Cooney 2000a, fig. 4.5)
Fourknocks I is dated to c. 3000 cal BC. The passage tomb itself was re-brought to the public attention by Mrs. Liam O’Sullivan and excavated by Hartnett (1957), and later (re)constructed by the Office of Public Works, with a concrete covering dome, designed to protect the interior and simulate an earthen mound. Upon entering the passage tomb from the north-east, one soon traverses the passage and is led into a central ‘pear-shaped’ beehive-fashioned roofed chamber (c. 5.5m to 6.4m in diameter), that has three smaller chambers in a cruciform plan with lintelled roofs (Hartnett 1957, 201; Herity 1974, 39; Shee Twohig 1981, 221). There are corbel stones above the orthostats of the central area, that were kept in place by retentive clay, reaching a height of 2.75m; it has been proposed that the main roof space was not completely corbelled (Hartnett 1957, 201; Herity 1974, 39). Instead, it is suggested that the structure contained a framework of radial wooden rafters forming a roof, being supported by a timber post (Hartnett 1957, 201). Evidence for this proposal rests with the discovery of a post-hole 0.65m wide and 0.40m deep during excavation, located in the centre of the main chamber, to the east of the passage and near the inner side of the stone that forms the east wall of the southern chamber. Impressions on the floor were also interpreted as marks left by fallen timbers that decayed in situ (Hartnett 1957, 212; Herity 1974, 40). Hartnett (1957, 212) proposed that if there were indeed a wooden structure, it was likely that it was conceived to be temporary, and impermanent. It has also been suggested that the post alternatively pre-dates the passage tomb, providing a focus in the landscape (Cooney 2000a, 104). Either way, its spatial relationship to the structure of the passage and southern chamber, suggests a degree of importance (Cooney 2005).
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The hill itself incorporates outcrops of blue carboniferous limestone containing nodular concretions of chert, from which the structure of this passage tomb was built (for uprights and roof corbels), with grey/green gritty shale being used for the decorated stones (with Stone G, the non-orthostatic stone found outside the passage on the eastern edge of the mound, being the possible exception); thus creating distinctive colour differences (Hartnett 1957, 198, 228; Herity 1974, 41; Shee Twohig 1973, 164; 1981, 222; Cooney 2005). The mound (20m in diameter and c. 4m high) was composed of earth and grass turves, and was demarcated by a low sandstone dry-built stone kerb (Hartnett 1957, 200, 203; Herity 1974, 39; Shee Twohig 1981, 221; see Fig. 6.3).
The closure of Fourknocks I passage tomb was marked by its sealing off from the outside world by the deposition of artefacts within the passage way, including inhumed bones of children and cremated bones, held in situ by covering stones. There are deposits of human bone in all three chambers and the entrance passage, with evidence for human bone being placed above the pre-excavated and restored roof over the central area of the mound (see Fig. 6.4). Within the chambers there were cremation layers, c. 10-25cm deep, covering the stone flagged floors and sealed by thin stone slabs. The cremations are argued to have been washed or cleaned, resulting in the pyre debris being mostly absent. The deposits did, however, contain stone and bone artefacts, including hammer-pendants, chalk balls and bone pins that were heat damaged. Interestingly, and uncommon for Irish passage tombs, there are also unburnt or inhumed human bones present, in the form of skulls and long bone fragments. The minimum number of persons represented is 65, with 31 of these being cremated and 34 unburnt (Hartnett 1957, 269-70; Eogan 1986, 138; Cooney and Grogan 1994, 68; Cooney 2000a, 108-9). The cremated bones occurred mostly on the lower layers, while the unburnt children bones appeared mostly on the top deposits. These upper child/infant deposits included seven neonates, six infants in their first year, three in their second, a child of approximately five years and one of indeterminate age (Hartnett 1957, 270; Finlay 2000, 414). That the passages were deliberately blocked
with human remains, and a high proportion of these being children, may mark a change in the ways in which some people may have thought about the site in its later stages of use, and may have created new narratives and conversations about it (Cooney 1997b, 19; Finlay 2000, 416, 419). In considering these possible situations one should not, however, automatically assume that they incorporated the perpetuation and presentation of ‘individual’ persons within particular burial activities (see discussions in Gell 1999e; Whittle 2003; Fowler 2004; Hofmann 2005; A. Jones 2005). Nor should we regard the cremated remains as passive objects merely operating within representational systems of citation and memory (be it the remembrance or forgetting of past people or ‘ancestors’). Instead, it may be more profitable to consider the cremated elements as being imbued with their own agency, even after fragmentation and dispersion. These (re)active objects could possibly stimulate new tensions and experiences that dislocated and supported daily frames of reference (Bailey 2005, 33). Such a perspective may support the proposal that the accumulation of disintegrated cremated human remains was at some level created to maintain partible aspects of various composite entities after death, set within a particular cosmological framework. It also side-steps the need for essentially modernist questioning of whether children in cremated states were fully socialised, thought of as representing difference, change, continuity or ambiguity (see further discussions in Chapter Seven).

The flat-surfaced stones within this passage tomb are mostly decorated with distinctive angular motifs, which are often referred to as the ‘Fourknocks style’ (Hartnett 1957, 227), whereas curvilinear motifs are found when the surface is convex (M. O’Sullivan 1993a, 27). The finest examples of imagery are arguably found on the lintel stones (M. O’Sullivan 1993a, 27). With the exception of Stone G, all the decorated stones are sandstone. There are only five orthostat stones decorated with motifs in Fourknocks I (L4, R2, R5, C1 and C5). Other decorated stones in the passage tomb include stones A, B, C, D, E, F and G (Hartnett 1957, 224-8; Shee Twohig 1981, 221). Rather than detail the motifs on each individual stone, I will briefly illustrate specific imagery and its location in the passage tomb (see Fig. 6.2).
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The upper left-hand side of the front face of orthostat L4 is divided by six vertical incised lines, which almost run from the top of the stone to the bottom. These lines are further divided and crossed by vertical and horizontal zigzag incisions. Some of these lines appear to have been lightly picked, while deeper ones were smoothed through rubbing (Crawford 1955, 158; Hartnett 1957, 221; Shee Twohig 1981, 221), which was achieved by the stone being a soft, close textured sandstone (Hartnett 1957, 221).

Orthostat R5 may be considered as a portal or jamb-stone and is positioned on the western terminal edge of the passage, facing east and adjacent to stone B (Hartnett 1957, 223). On the chamber face, in the central upper part there are two vertical lines, which incorporate four lozenge triangles. To the right of this panel, on the passage face, there are cupmarks and areas of rough picking. Across the middle of this face, there is an incised horizontal line that forms the base for 11 triangular shapes (Hartnett 1957, 223; Shee Twohig 1981, 221).

Orthostat C1 is one of the most famous stones in Fourknocks I and possibly Ireland in general. The front face of the stone is crossed by two long lines near the top of the stone (see Fig. 6.5). The top of one line turns downward at its terminal and connects...
with the top of a double lozenge shape. Below the apex of where the two main lines cross is positioned a wide V incision, forming another loose lozenge. Directly beneath this is a wide crescent that turns upwards at the ends. Under this are positioned several short lines and curve shapes (Shee Twohig 1981, 221). Some have suggested that this imagery may demonstrate anthropomorphic qualities, representing a face, with eyebrows, hair, mouth, torso, possibly limbs and a belt (Hartnett 1957, 222; Herity 1974, 94; M. O’Sullivan 1993a, 28). This resemblance might or might not have been intentional (Shee Twohig 1981, 221). Interestingly, the excavators of Fourknocks I, often referred to this stone as ‘The Clown’ (Hartnett 1957, 222), possibly evoking subversive notions and carnivalesque principles, albeit modern, within a passage tomb.

Stone A was rediscovered by Hartnett (1957, 224) lying decorated face-down, situated north-west on the outside of the mound; apparently twenty years before Hartnett’s excavations, it was located further north of the mound. The stone is roughly rhomboidal shaped, with parallel flat smooth sides, both of which are decorated. On the side that is currently the front face, there are three joining motifs, comprising of circles, spirals, cupmarks, bent zigzags, short lines and angular lines; all designs are poorly executed (Hartnett 1957, 224; Shee Twohig 1981, 221). Interestingly, Hartnett described this ambiguous image as ‘...an “impressionist” representation of a... rather animated female figure...’ (1957, 224). Although I agree that the image suggests fluid movements and actions, I fail to see this as representing a female form, or that such a suggestion simplifies ‘...the descriptions of the component parts of the pattern...’ (Hartnett 1957, 224). The long-axis edge of this stone is covered in imagery, comprising eight heavily picked lozenge designs that are flanked by double lines of zigzags. Based on the assumed importance of the ‘female image’, Hartnett (1957, 225) suggested that both sides of this stone were intended to be seen, with Stone A being originally set vertically as an orthostat near the entrance. Based on subsequent excavations at Newgrange Site 1, it is more likely that this stone was part of the missing passage lintels, with the more ornate edge being designed to be seen and the more abstract ‘doodles’ remaining hidden in the architecture of the passage tomb (see discussions in Shee Twohig 1981, 222).
Stone B rests upon the dry-stone corbelling above Orthostat L6. The exposed overhanging part of this stone is decorated. The imagery consists of four groupings of concentric circles sequentially positioned across the stone, with smaller circled being embedded in the angles of the connecting points. Located on the left portion of the stone are three parallel lines. All the main circles are linked via a continuous line that doubles itself at the left terminal. The overall design is very precise with definition enhanced by raised bands between the picked areas (Shee Twohig 1981, 222). Due to the effects achieved by the meticulous execution of this piece, Hartnett (1957, 226) suspected that production was via a metal punching tool. Recent experiments have, however, demonstrated that similar results can be achieved with sharp pointed flint or quartzite implements, when struck with a stone or wooden mallet or hammer (Shee Twohig 2004, 45).

Stone C is currently positioned as a lintel that rests on R5 and L6 and spans the passage (see Fig. 6.6). It was discovered in a similar location, with one edge dipping downwards into the debris that filled the passage (Hartnett 1957, 226). The imagery comprises four tightly nested horizontal bands of parallel angular zigzags. All these angles meet at their apexes and are therefore not entoptic motifs. The motifs are incomplete near the right-hand flank due to possible flaking, and were poorly restored at a later date (Hartnett 1957, 226; Shee Twohig 1981, 222). A medium point was possibly used to execute the majority of this stone.

Stone E is the lintel over the southern recess (Cell 2), the innermost chamber that faces the passage, found containing the largest amounts of material culture, including...
a red deer antler pin. Although damaged on one end, the stone is still impressively decorated in the angular ‘Fourknocks style’ (Hartnett 1957, 227). The imagery is formed by four large picked double lozenges, which are flanked above by five rows of parallel zigzags, and two below. Inserted into these zigzags are some solidly picked triangular shapes. The central lozenge designs are solid, with the surrounding ones being formed by false relief bands (Hartnett 1957, 227; Shee Twohig 1981, 222).

Fig. 6.7 The lintel capstone, Stone F (photo: author).

Similar in detail is Stone F, the lintel capstone of the western recess (Cell 3), on the right-hand side as you enter the chamber; it is the largest of the three cells. The imagery comprises ten independent solidly picked lozenges that form a central band. Above and below the lozenges are positioned three parallel rows of angular zigzags, which have solid triangular shapes inserted into the external edges of the composition (Hartnett 1957, 227; Shee Twohig 1981, 222; see Fig. 6.7). Interestingly, the easternmost chamber (Cell 1) to the left as one enters has no decorated lintel and contains the lowest comparable quantities of cremated bone and artefacts (Cooney 2005).
Located c. 100m to the east of Fourknocks I, built on slightly higher ground, is the ruinous and un-restored mound of Fourknocks II; it is ovoid shaped and measured 28m by 24m (Hartnett 1971, 35-6; see Fig. 6.8). The mound that was surrounded by a ditch covers several features; a bell-shaped cairn, a cairn ditch, a megalithic passage, and a trench (Hartnett 1971, 35-42). The elongated trench (10.6m by 1.6m) was constructed before the mound, possibly being contemporary with the cairn, and was an open-air location where bodies were cremated (Hartnett 1971, 44, 63); the fill also included worked antler, burnt clay and charcoal produced from ash (*Fraxinus*), hazel (*Corylus*), oak (*Quercus*) and willow/polar (*Salix/Populus*) (Hartnett 1971, 42). The minimum number of people identifiable in the human remains is c. 21, with about 11 children and 10 adults (Cooney 2000a, 106-8). Sometime after the last cremation was deposited, a limestone and blue flag roofed megalithic passage (4.3m long and 1.1m wide) was erected that was orientated to face north-east, dipping down to terminate at the cremation trench, creating a T-shaped plan. The passage was constructed from seven undecorated orthostats on the south-eastern side and six undecorated on the north-western and was filled with stone, shingle, earth with deposits of fragmented and cremated human bone; the fill included adult and large amounts of children deposits (Hartnett 1971, 40-1). Inhumation and children seem to dominate this passage area. Burnt antler and bone pins was also discovered that may have been
associated with a possible sheep's metacarpal acting as the head. The final addition was an earthen mound placed to cover the entire feature (Hartnett 1971, 44).

Both Fourknocks I and II are positioned to face northwards and both are placed on the northern extreme of the hill's ridge; this renders them more visible when approached from the north (Cooney 2000a, 111; see Fig. 6.9). The earthen covers over the mounds would have made the mounds appear similar in stature and size (e.g. Fourknocks I is c. 20m and Fourknocks II is c. 28m in circumference). In both mounds access was eventually impeded through the passage by the packing of human bone. Connections between the mounds are also threaded through the proposition that the sites were contemporary. It is suggested that during the earlier phases the deposits of human bone discovered in Fourknocks I were originally burnt within the open-air cremation trench (Hartnett 1971, 63; Herity 1974, 163; Cooney 2000a, 111). At some point it would appear that it was no longer desired that Fourknocks II remain exposed to the elements and it was transformed into a structure that resembles a passage tomb. Both sites were demarcated by specific yet different features; Fourknocks I by a low
kerb and Fourknocks II by a cut-ditch. It has been suggested that ditches may at some
level play a cosmological delineating role similar to megalithic kerbs (M. O'Sullivan
2005, 236). Interestingly, in both these sites, closure was signalled by the placement
of human remains. The usage of the passage at Fourknocks II parallels that at
Fourknocks I; at Fourknocks I child remains were predominantly placed in the
passage, whereas at Fourknocks II they were confined to the passage (Hartnett 1971,
63). At both sites children under five years old were mostly inhumed. One of the
most striking differences between the mounds is the presence and absence of visual
imagery on the passage orthostats. Fourknocks II is undecorated with motifs and this
may be as a result of the orthostats being placed to indicate the closure of the feature,
rather than its perpetuation, whereas it would appear that repeated engagements
occurred within Fourknocks I, which necessitated the need for visual stimulation and
regeneration.

Although not contemporary with Fourknocks I and II, it is interesting to note that the
later Bronze Age monument Fourknocks III (Hartnett 1971, 81) mimicked the mound
shape of its predecessors, and may have been attempting to reference them at some
level, thereby enhancing the significance of the ridge-way. These desires may also
resonate through the Bronze Age usage of Fourknocks I and II as cemeteries (Hartnett
1957; 1971; Cooney 2000a).
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The Mound of the Hostages, Tara, Co. Meath

Fig. 6.10 Map demonstrating the location of the Mound of the Hostages, Tara in relation to other passage tomb sites within Co. Meath (adapted from M. O’Sullivan 2005, 5).

Approximately 16km south-west of Newgrange Site 1, c. 5km east of the River Boyne, and c. 28km south-west of Loughcrew is located the passage tomb named ‘The Mound of the Hostages’ or Duma na nGiall (sometimes Dumha-na-Ngiall) positioned on the north-south ridge of the Hill of Tara or Temair, at c. 155m above sea level and 2km in length and 0.75m wide (Wilde 1849, 124; Macalister 1919, 231, 250; Newman 1997, 21; see Fig. 6.10). The name Tara is thought to derive etymologically from the ninth century Irish, meaning either a height from which there is a great view or a liminal place betwixt twilight/darkness and light, a gateway to other worlds (Newman 1997, 1; M. O’Sullivan 2005, 6). Such evocative descriptions fit well with possible worldviews that saw the hill as an axis mundi and with parallel discussions of the
Loughcrew Hills in Chapter Five. From the summit, one can see the Hill of Skreen to the east (c. 3km away) with the Cooley and Mourne Mountains framing the background; to the north Slieve Gullion; to the north-east the Hill of Slane; to the north-west the Loughcrew Hills, and to the west and north-west the Skane River, a watercourse that feeds into the River Boyne at a similar point to the River Blackwater (Wilde 1849, 120, 125; Newman 1997, 1). These river connections are argued to create and support a geographical communications linkage between Tara, the Boyne Valley and the Loughcrew passage tomb complexes (Eogan 1999, 433; M. O’Sullivan 2005, 5). Indeed, the Hill of Tara is literally surrounded by rivulets, streams and rivers that are relatively close by, possibly creating an impression of an island setting that does rise to the sky (see Fig. 6.11). Based on their size, Newman (1997, 28) proposes that of these surrounding waterways, the Boyne and Skane may have been among the easiest to navigate through during prehistory. As discussed in Chapter Four, these river-ways may have been seen and thought of as being alive, diverse, dangerous, eternal, contoured and imbued with cosmological significance and ambiguity, helping to create senses of identity, place and histories between these different places. Interestingly, Macalister (1919, 235) alluded to further associations with water, when he detailed a natural spring on the south end of the ridge, with a streamlet flowing eastward from it. The spring is now only recognisable as a marshy zone (Newman 1997, 28). The local geology of this hill comprises mainly Lower Carboniferous limestone, with concentrations of sandstone and mudstones also being present.
Despite Macalister’s hope that ‘...we may never know what, if anything, lies buried beneath the surface at Temair...’ (1919, 278), investigations have been conducted
and the following provides a brief account. Interactions with the Hill of Tara may have commenced in the later part Mesolithic period, as supported by the discovery of a large decontextualised flake of grey chert (M. O’Sullivan 2005, 246; Warren 2005, 300; see Fig 6.12). The pre-cairn Neolithic features on the site include a ditch that runs under the mound and four large ‘fire-pits’ and spreads of burning with no associated pottery that date from the mid-fourth millennium cal BC (de Paor 1957, 220; M. O’Sullivan 2005, 27). These areas of burning may represent collective activities that involved groups of people engaging in public performances, perhaps at night, lighting up the hill-that-floats-to-the-sky (see previous discussions in Chapter Five). The lack of pottery might preclude a scenario that depicts daily activities such as cooking and heating. Instead, we may be witnessing feasting activities, as supported by the discovery of a mass of organic material, such as a cattle mandible and other animal bones within a charcoal spread (M. O’Sullivan 2005, 27-8). These fires may have been thought of as alive, being both gentle and comforting, but also unruly and dangerous, especially when roaring in the wind at night (Tringham 2005, 107). The fires would have enhanced sensational performances, with the colours of the flames and embers (see Chapter Four) continually changing and providing an ephemeral focus. Such effects may have dramatised the telling of tales and myths (see Chapter One). The smoke may have brought tears to the eyes, with the smell impregnating the hair and clothes. The heat itself from the fire may have warmed the skin and fuelled passions via the ‘sexual excitement’ that fire can bring (Tringham 2005, 107). These dramas would sit well within a carnivalesque perspective. What is interesting is the possibility that the site drew some people towards it, before the passage tomb was conceived. The visible residues of these earlier fires, the scorched and ashen earth, would have acted as reminders of these actions for people, or created new relations, at later times.

Later activities include the construction of a small passage tomb structure, which faces to the south-east through two portal stones at the entrance. It resides under a cairn of stone and earth, and is segmented into three parts by two sills (each c. 1m² in area). Surprisingly, the cairn is not demarcated by a kerb around its base, with the cairn not thought to have slipped (de Paor 1957, 220; Eogan 1986, 110); this may be
as a result of the stiff clay used to construct the mound (Collins 1960, 6). There is no
differentiation between passage and chamber (c. 3m in length) with the innermost area
(away from the entrance/exit) widening to c. 1.25m across (Shee Twohig 1981, 220;
Newman 1997, 71). The entrance/exit is marked by two flanking portal stones that
face east (de Paor 1957, 221; Newman 1997, 71). Behind the back of some of the
passage tombs orthostats (R1, R2 and L1) were discovered three cists, filled with
cremated human bone. Cist I contains a minimum of nine people, with at least one of
these being a child. Artefacts found included one bead, one possible bone pin and a
miniature Carrowkeel bowl. Cist II was placed against the external face of the
decorated orthostat R2 and incorporated the cremated residue of approximately 34
people, mostly adult, although child and infant bones were also present (the infant
may have spilt over from the fill of the passage tomb). Objects discovered included
about five stone balls, bone and antler pins, one bead and a flint flake. Finds from Cist
III included objects of ornamentation, such as decorated pendants, beads, pins and a
‘stab-and-drag’ decorated Carrowkeel bowl full to the brim with cremated human
remains, placed on a layer of clean cremated bone; at least nine adults, one child and
one infant are present (M. O’Sullivan 2005, 77). The walls of the passage tomb are
constructed from seven orthostats, which support a drystone wall and two large
capstones. The passage tomb was first excavated by Seán Ó Ríordáin in 1955/6 and
later by Ruaidhri de Valera in 1959 (Shee Twohig 1981, 220; Newman 1997, 5; M.

Although Herity described this as a ‘...degenerated tomb...’ (1974, 41), he did add
that the quantity of burial and finds evidence here were unsurpassed in Ireland. The
material evidence includes large amounts of cremated and unburnt human bone
(representing hundreds of persons), 28 beads, 24 pendants, Carrowkeel Ware pottery,
and 33 chalk and stone balls (de Paor 1957, 221; Shee Twohig 1981, 220; Newman
1997, 73). Outside the passage tomb and cairn, 17 human cremation deposits were
discovered mostly in shale stone saucer-shaped receptacle settings, being associated
with the primary burial phase within the structure, from the period 3350-3100 cal. BC
(M. O’Sullivan 2005, vi, 9). These oval cremation settings may have performed in a
similar manner to a kerb (M. O’Sullivan 2005, 236). A large fire near the entrance of
the passage tomb is thought to be contemporary with the cairn (Newman 1997, 74), and may also represent performances occurring outside the site, as is suggested at Newgrange Site 1 and Knowth Site 1 in Chapter Four, and Knockroe, Co. Kilkenny (see below). The earliest recorded activities at the site date from the first half of the fourth millennium cal. BC, with the passage tomb being built during the second half of the fourth millennium cal. BC (M. O’Sullivan 2005, 222; contra. Newman 1997, 74).

This site has recently been compared most with Fourknocks I (see above and Fig. 6.13), as a result of its location on the periphery of the ‘Boyne Valley nucleus’ in Co. Meath (M. O’Sullivan 2005, 236). In addition, neither mound is delineated or held in place by a large stone kerb; indeed The Mound of the Hostages has none present, as is also found at Sess Kilgreen, Co. Tyrone (Hartnett 1957, 203; M. O’Sullivan 2005, 236; see below). Knockmany, Co. Tyrone, is also comparable in size, and has a very small low kerb (Eogan 1986, 101). Furthermore, the burials/placements in the Mound of the Hostages passage tomb constitute more people (greater than c.300 people, including adult, child and infant) than any other passage tomb in Ireland, with Fourknocks I being the nearest contender (M. O’Sullivan 2005, 237). The non-human
bone from the passage tomb includes fox, sheep/goat, cattle, pig, horse and hare; this is argued to be, however, the remains of animals brought in by scavenging foxes that occupied the tomb as a den at a later period (M. O'Sullivan 2005, 125).

![Fig. 6.14 Lia Fáil standing stone penetrating the heavens and suggesting its anthropomorphic or phallic qualities on the Hill of Tara, Co. Meath (photo: author).](image)

Formally located on its side till 1798 near the Mound of the Hostages, and moved to the northern side of the central mound of the Forrad in 1824, is the Standing stone commonly named *Lia Fáil*, *Fáil* or the ‘Stone of Destiny’ (Wilde 1849, 120, 124; Macalister 1919, 250-51; Newman 1997, 86; see Fig. 6.14). Uncovered by Robert Cochrane\(^v\), the standing stone measures 1.57m high, 1.58m in diameter at ground level, and 1.23m near the top (Macalister 1919, 251; Newman 1997, 86). The stone is not local, being white granite comprised of euhedral quartz and euhedral feldspar phenocrysts, with its origins maybe lying in the granite parts in the north of Ireland such as the Newry granodiorite (Newman 1997, 86). This feature is reminiscent of: the quartz standing stone at the northwest edge of Cairn D, the standing stone inside Cairn L, and the pillar stone which had a rounded white sea pebble at its base, outside the entrance of Cairn V at the Loughcrew complex (Conwell 1873, 67; Cooney 1996;
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see also Chapter Five); the standing stones outside the entrances to both the eastern and western passage tombs at Knowth Site 1 (Eogan 1986, 48, 65; see also Chapter 4); and possibly the wooden post at Fourknocks I (see discussions above). The shape (possibly phallic) and size (almost human in height) of Lia Fáil may have given this stone anthropomorphic and metaphorical qualities. It may have stood for fertility or continuity, creating links with non-human entities or elders, maybe acting as a guardian or 'gatekeeper' (Cooney 2000a, 134-5). Indeed, the stone itself may have been considered as a person or imbued with agency, being periodically activated or stimulated with particular liquids or activities at certain times of the year (see discussions in Chapter One). Whatever its possible significances were, this stone literally stood out in the landscape and may have constructed through its visual impact new movements, relationships and narratives around it (see Shee Twohig 1996, 77; Cooney 2000a, 131).

![Fig. 6.15 Plan of the Mound of the Hostages (after M. O'Sullivan 2005, fig. 59).](image)

Although similar in structure and composition to the other Co. Meath passage tombs, the Mound of the Hostages uniquely contains very little visual imagery on its stones, with Orthostat L2 being the most decorated". In the centre of the wedge-shaped L2 is
positioned a cupmark surrounded by six concentric circles (Shee Twohig 1981, 220; see Fig. 6.15), below this to the right are a further four concentric circles. Above these are two dot and circle motifs and a double U shape. The upper parts of the stone possess a six bended 'serpent' form, a cup and circle, and two deep picked arches. On the left of the stone there are three boxed U shapes and a large cup and circle with an additional concentric arc (Shee Twohig 1981, 220). That the images on this stone do not extend to the ground level suggests that the stone may have been carved before placement in the passage tomb. The motifs are deeply cut into the stone in a similar manner to the ones seen at Loughcrew, Co. Meath and Knockmany, Co. Tyrone (M. O'Sullivan 2006, 67). As none of these motifs explore the plastic qualities of this stone, we can place them within stage 1 of O’Sullivan’s (1996a) sequence. Located near this stone were at least two chalky limestone yellowish coloured balls, that may have been associated with the cupmarks (see discussions in Chapter Five). It is difficult to contextualise the burial remains with this orthostat as a significant amount of the fill has been contaminated with secondary disturbance as a result of some people, rodents and foxes (see above). From the secure evidence available, it is possible to include the deposition of mushroom and poppy headed bone pins and the cremated and unburnt human bone by orthostat L2. The occurrence of decorated portable objects also mirrors those found within Fourknocks I. The human remains comprise an unburnt infant, an unburnt child and three to six adults, some of which were cremated, while others were not (M. O’Sullivan 2005, 98). It is possible, however, that these remains are a later inclusion as they were found associated with a decorated Bronze Age Food Vessel. Opposite L2 in the middle compartment were masses of cremated and unburnt fragmented human remains. Positioned between L1 and L2 was an unburnt adult human skull, with the pelvis, ribs and vertebrae. The gap between L2 and L3 was filled with a large deposit of cremated human bone, with a hammer pendant, a mushroom headed pin (or miniature phallus?) and sherds from a Carrowkeel pot. Most of the dated bone near this orthostat falls around 3335-3049 cal. BC; there seem to be micro-differences between the accumulation rates in the cists and central tomb compartments, but this may be due to later disturbance and other circumstances (see extended discussions in M. O’Sullivan 2005, 88-9). The deposition
of unburnt human remains into primary cremation deposits seems to have continued until the end of the Neolithic.

Previously, only one decorated stone (L2) has been documented at the Mound of the Hostages (see Herity 1974, 253; Shee Twohig 1981, 220, fig. 245; Newman 1997, 73; see Fig. 6.16). O’Sullivan (2005, 67) has recently, however, highlighted a scatter of pick marks and a distinctive circle on the back of Orthostat R2. As with L2, this orthostat is slightly wedge shaped with a badly eroded and rotted surface; the motifs were applied after this damage. On the left of the stone face a possibly natural ridge has been enhanced by a band of picking that also runs along a shallow inclusion (M. O’Sullivan 2005, 67). Other images include cupmarks and a possible circle. Unfortunately, it is currently difficult to discriminate with confidence which of these images are indeed natural from those made by some Neolithic people (M. O’Sullivan 2005, 67). The stone may have been chosen for these ‘natural’ characteristics and anomalies (M. O’Sullivan 1997). Interestingly and similar to L2, at least two adult human skulls were also discovered by Orthostat R2, that were dated to c.3100-2500 cal. BC (M. O’Sullivan 2005, 100, 116). The occurrence of human skulls near a decorated orthostat may signal intentional deposition to perpetuate or reinforce certain beliefs or may be the result of later Bronze Age disturbances; skulls were also located
near non-engraved stones. The placement of skulls was also encountered in the passage at Fourknocks I. The placed skulls may suggest a desire to communicate cosmological metaphors, performing cleansing rites, as is seen among the Kenyah Kayans of Sarawak (as discussed in Chapter One; see also Chapter Seven). Skulls may also have been thought of as acting as vessels, containing the brain and eyes. From such as perspective, skulls and pots may have at times been thought of as interchangeable (Harris 2005, 44), acting as tangible analogies (see Chapter One). The location of approximately five mostly chalk/limestone white or dark coloured balls near a cupmarked R2 is also interesting and might suggest the positioning of these balls into the sockets at one time in the past (see again discussions in Chapter Five). The only other possible decorated stone currently known is an oval boulder measuring 1.5m x 0.96m x 0.44m, discovered 10m south of the passage tomb entrance beside the mound. Although this stone does not bear formal motifs, it has been reported as being artificially enhanced by flaking, picking, pocking and polishing (M. O’Sullivan 2005, 68). It may have been the process of ‘un-peeling’ the layers or skin of this stone that were important, rather than a finished composition.

One question that could be asked is why some people would construct a passage tomb that is so similar to others in the immediate area, and then choose to produce it with a paucity of carved visual imagery. One possible answer might be that other passage tombs often occur in groups or complexes (e.g. Knowth, Loughcrew and Knockroe), but the Mound of the Hostages currently occurs in isolation as does Knockmany, Co. Tyrone (see discussions below). The isolation of singular mound and limited decorative orthostats may indicate a different desire to magnify specific processes. In Chapter Two I discussed how Zafimaniry engravers continue the growth and impermanence of life and the permanence of the structure through decoration (Bloch 1995). It may have been felt by some of the people who built the passage tomb or who operated with it that the engraving of one or two stones sufficed for the engagements that were designed or wished. The abundance of human remains and the generation of large cremation deposits may have been sufficient to perpetuate or displace these magnifying entanglements, and may also suggest something of the collectiveness or general social networks that existed here at particular times. Such a situation may also
explain why L2, the most obviously decorated stone, is so impressively carved and why does it not progress past the stage 1 sequence. In the context of the Mound of the Hostages, ‘imagery’ may no longer be a noun, but more a verb (Gormley 2004, 131), a process that is rendered unfinished (see discussion in Chapter Two). The unfinished nature of the application of motifs may also partly explain the limitation of imagery on R2. If we regard the orthostats which have motifs as unfinished and unsettled processes, then we need not become entangled with representational (mis)understandings, thus allowing appreciations of the more fluid aspects of the stone and motifs. These points will be covered in more depth in Chapter Seven.

Knockmany, Co. Tyrone

![Map of Knockmany, Co. Tyrone](image)

Fig. 6.17 Schematic map of Knockmany, Co. Tyrone. The Ardunshin Lough feeds into the Blackwater River further south (adapted from OSNI Discoverer Sheet 18).

Knockmany, Cnoc mBaine, or ‘Hill of Baine’, is a small passage tomb structure consisting of an oval or wedge-shaped chamber and vestigial opening facing to the
south set in a cairn c. 25m in diameter (Coffey 1898, 94). Situated at the summit of the conically shaped Knockmany Hill (236m high), near the village of Augher, it commands views over the Clogher Valley to the south and the Blackwater River and Clossach plain, giving an almost uninterrupted horizon (Smith 1841, 190; Coffey 1912, 98; Collins and Waterman 1952; Herity 1974, 82; Shee Twohig 1981, 204; see Fig. 6.17). The ascent to Knockmany passage tomb requires strenuous physical effort when approached from any direction, with the last 100m being particularly difficult. As discussed in Chapter Five, the journey to the summit of the hill may have impacted upon notions of time and space, creating a sense of specialness for the place. The height of the location away from the lower lands and river systems would also have provided different sounds and smells from those normally experienced in daily life. People who continually engage with a particular location often become knowledgeable and accustomed to the ‘background’ hum and auditory scenes of their environment (Gell 1999c, 241; S. Mills 2005, 86). The differing sounds, sensations and visions provided by the summit of Knockmany Hill, experienced at day or night, might therefore have been unsettling, in that they actively disrupted or subverted quotidian rhythms.

Fig. 6.18 Knockmany, Co. Tyrone (photo: author).

Occupying a solitary position in a prominent place (Meeks 1960, 7; see Fig. 6.18), Knockmany passage tomb appears in this landscape to be locally isolated. Further
afield and located 8.4km to the north is the portal tomb at Grania’s Bed or Cave with cupmarks on its capstone; 6.9km to the south is the complex portal tomb at Carnfadrig; 9.2km in the direction of south-south east is the court tomb at Carnagat, while 8km to the south east is a large stone with deep hemispherical cupmarks (often termed ‘bullauns’) at St. Patrick’s Chair and Well. This feature has persistent historical associations with water and the myth that the wells here will never ‘run dry’. Located c.6.4km to the north-east is the Sess Kilgreen passage tomb that is similar in shape and structure (Collins and Waterman 1952, 30).

Fig. 6.19 The chamber within Knockmany, Co. Tyrone (photo: author).

The entrance to the chamber at Knockmany is located off-centre in the mound, being positioned on the southern edge, overlooking the Clossach plain below (Coffey 1898, 102; see Fig. 6.19). The site was originally thought by its excavators not to contain a passage (Coffey 1912, 102; Collins and Waterman 1952, 28; Collins 1960; see also Smith 1841), with the tomb representing a degeneration of the passage tomb tradition, being a later development of the type (Meek 1960, 4). Since then it has been
suggested that the tomb did indeed have a passage, albeit temporary, and that it was
closed just after the last remains were deposited and before the cairn was built to its
full height (Herity 1974, 22; Shee Twohig 1981, 204; Dronfield 1994, 75). Certainly,
stone C1 may be the remnants of an entrance, with C2 and C12 being portal features
(Meeks 1960, 4). Temporary access may also have been possible through an aperture
in the cairn (Meeks 1960, 4), as is suggested at the Knockroe eastern tomb, Co.
Kilkenny (see below). Such access may have been through the original roof, although
it is impossible to prove as the roof was removed in the past with none of the stones
remaining (Coffey 1898, 102; Meeks 1960, 4). The cairn was demarcated by a kerb of
small undecorated irregular placed revetment stones. Collins suggests that the
accumulation of a grass turf line indicates that there was a significant gap in time
before the small retaining kerb stones were set in place (1960, 4).
Fig. 6.20 Plan of Knockmany, Co. Tyrone, scale for tomb plan only (adapted from Shee Twohig 1981, Figs. 210, 211, 212).

The stones used within this structure are local rocks and consist of Old Red Sandstone (of which the hill is composed) and millstone grit (Coffey 1912, 102; Collins and Waterman 1952, 26; Collins 1960, 2; Shee Twohig 1981, 203). In total, nine of the structural stones were decorated (C3, C4, C5, C6, C7, C9, C10, C11 and C12) (Shee Twohig 1981). Excavations revealed that the mound was structured in three parts: the cairn nucleus, which was covered in an earthen skin and then revetted by a small stone kerb (Collins 1960, 6). It is proposed that the earthen layer may not have permanently covered the cairn (as is suspected at the Mound of the Hostages), but rather washed down to the kerb-fringes as a result of erosion by weather and the
nature of the light sandy soil used (Collins 1960, 6). Such possible movements of the mound via the dynamic actions of rainfall may also have enhanced beliefs in the transformative elements of life-sustaining liquids. Interestingly, the pre-cairn turf-line contained flaked fragments of quartz and heavily burnt worked flint (Collins 1960, 2), again suggesting possible performances at this location before cairn construction. Finds within and below the cairn material included 29 flints, one potsherd and disturbed amounts of cremated human bone (Collins 1960, 3-4).

Orthostat C3 is badly weathered resulting in faint picking being present. Distinguishable motifs include, cup and circle motifs, three boxed U shapes and many disconnected arcs and dots, mostly located on the right and lower part of the front face. Orthostat C4 is set radially, and as such only presents a small surface of decoration (Shee Twohig 1981, 204). It has been suggested that C4 (also C6 and C12) was set edge-inwards to bond the chamber walls more securely into the body of the cairn structure (Meeks 1960, 4). The images here include lightly picked parallel zigzag shapes and a small dot on the surface facing the chamber. Orthostat C5 has imagery on both the front and back surface. On the front face (to the chamber) there is a long
vertical line accompanied by two shorter parallel ones on the top left of the stone. On the lower parts, and mostly to the left hand side, there are meandering lines, circles, and concentric circles (Shee Twohig 1981, 204). There are fewer images on the back face, and these consist of two short parallel lines and three concentric ovals.

Similar to Orthostat C4, C6 is also set radially, with the chamber facing edge being layered with imagery. The top section is engraved with two sets of opposing asymmetrical concentric half-circles (four on the left and two on the right) that are separated by a central vertical line. Above this and to the left there is a rough double circle and a broad vertical line that terminates in two shallow dots. Below and to the right there are two short arcs. The centre of the stone is dominated by seven horizontal lines that run from left to right, and are intersected seemingly randomly by short vertical lines. Above and below this panel is some amorphous picking. This picking may form a faint circle on the lower right section below the horizontal lines. On the back face of C6 there is an incomplete lozenge (Shee Twohig 1981, 204). That the decoration ceases at the old ground level suggests that C6 was decorated in situ (Shee Twohig 1973, 169). Coffey (1898, 100) reported that the stone was badly weathered when he first inspected it.

The backstone of the chamber is Orthostat C7, which is strikingly divided in two by a natural diagonal fissure. The majority of the imagery on this badly weathered stone occurs on the right of this diagonal marking and includes two irregular concentric circles and amorphous picking. Near the centre of the stone there is a rough circle with short concentric arcs and a small roughly engraved square shape. There is a cupmark that is probably natural at the top of the stone which is encircled by an arc. To the left and just below this, there are two parallel arcs. This orthostat also has limited imagery on its back face, comprising a dot and circle in the top left (Shee Twohig 1981, 204).
Orthostat C9 is one of the most heavily decorated stones in Knockmany passage tomb, with images covering most of the front face. The stone is split (Coffey 1898, 100) and therefore appears as two stones on Fig. 6.22. Located at the top there are six concentric circles and one arc surrounding a central dot. The second circle connects to the fifth via a shallow natural crack or radial groove. On the left of the stone there are three parallel zigzags positioned above a group of three conjoined circles. Below this is the motif most commonly known as the ‘Maltese Cross’, due to a similar resemblance (Coffey 1898, 102; Breuil 1934, 297; Shee Twohig 1981, 204). To the right of this there are two cup-marks each separately encircled by an irregular oval shape. The lower section of the stone is dominated by a spiral, formed by a central circle and a clockwise spiral which terminates at a cupmark. Framing this spiral are two concentric circles and half-circles. Meeks (1960, 6), after Crawford (1957), has proposed that these elements taken together may form a pair of eyes, eyebrows and a nose. Coffey (1898, 103), however, argued that it was unlikely that the motif was a face and alternatively suggested that it was instead a modification of the motifs present to the right of the image. These motifs are rays punctuated with dots, some of
which have arcs curving over them, while below are located vertical lines that are crossed by three horizontal lines. Lower to the right of the stone there are three concentric circles positioned above random picking and a weathered serpent. Adjacent and to the left of the main spiral is a tightly compressed serpent shape of 15 bends. That the serpent form curves around the spiral suggests that it was placed after it (contra Shee Twohig 1981, 204). Interestingly, this serpent shape device has been argued by Dronfield to represent the 'meander' entoptic form or endogenous diagnostic (1994, 83). The decoration ends at the original ground level and indicates in situ engraving (Shee Twohig 1973, 169). Another way to think of this motif is to imagine how the bending and repeating curves may have constantly confirmed or displaced previous thoughts or beliefs. The 'serpent' may have created such a response for both the engraver and spectator alike. Motifs may be pleasing; they may also be repelling (see Chapter One).

In positioning oneself adjacent to stone C10, one immediately notices that the left front face of the stone has flaked off half way across the Orthostat and downwards to c.60 cm above ground level (Shee Twohig 1981, 204). The damage has possibly resulted in motifs being lost, and is suspected to be a result of the stone's re-erection, or the original fall (see Smith 1841; Coffey 1898; Shee Twohig 1981, 204). The surviving imagery is faint and badly weathered. The predominant motif consists of two sets of large concentric arcs; the upper set has up to three concentric arcs with the lower set having four. In addition, the upper circles are framed by two parallel arcs. The remainder of the decoration comprises primarily irregular zigzags and meanderings. Meandering lines are located on the south edge of the stone. At the very top of the south side of the stone there is a circle at the top left hand side. At the bottom of the southern stone there are four parallel vertical lines that are framed by a horizontal line above and below, with a cupmark central above the upper horizontal.

C11 is one of the most intensely decorated stones in the passage tomb with there being diversity between the depth and width of the picked lines (Coffey 1898, 103; Shee Twohig 1981, 205). The motifs on the front face are mainly made up of concentric circles, with the largest being on the upper left hand side, having eight
circles around a central cupmark. Located at the top and in the centre is a small serpent image with 8 tight bends. Directly below this are two concentric circles, which contain quarter segments that are in-filled with parallel lines (Coffey 1898, 103). To the right of this there are cupmarks with surrounding circles and concentric half-circles and arcs; one of these arcs in-turns at its ends, and might be termed a ‘horned arc’ or ‘pelta design’. A similar motif was also discovered on the decorated ovoid macehead from the eastern tomb, Knowth Site 1, Co. Meath (Eogan 1986, 142; fig. 57; see Chapter Seven), and much further away on the lintel Stone 665 from the Pierowall chambered cairn, Westray, Orkney (Sharples 1984, 102, Illus. 27). There is an irregular serpentine form comprising 14 bends that runs from right to left across the stone, with the extreme left end terminating in a larger design (Coffey 1898, 103). This distinguishing image resembles the number ‘2’ on Shee Twohig’s black and white ink drawing (1981, fig. 212; see Fig. 6.20), and encircles a deep cupmark. This ‘2’ device was also highlighted by Dronfield as depicting the ‘arc-spiral’ entoptic form or endogenous diagnostic (1994, 84; 1995a, 547). Below this image there is a broad arc that encloses a cupmark with lightly picked sections of up to three concentric circles inside. To the left and above this there are seven parallel arcs. Located at the very bottom of the stone are several arcs and concentric circles that terminate at ground level.

Orthostats C10 and C11 were probably decorated prior to positioning as the imagery appears to cease at ground level (Shee Twohig 1973, 169), although there seems to be some discrepancy in the original orientation of C11, as Coffey found the stone lying down on its face and raised and placed it in ‘a suitable position’ (1898, 100). In his illustration of C11 (termed Stone D), Coffey (1898, fig. 4) also presents the stone upside down. Although it has been argued that this was possibly just a publication error (Shee Twohig 1981, 205), the adherence of the descriptive text to this particular orientation of the stone does, however, suggest otherwise (e.g. Coffey 1898, 103). Furthermore, the error is also reproduced in a later publication (Coffey 1912, fig. 84)\(^{v}\). The excavators Collins and Waterman proposed that the stones C10 and C11 (they termed them stones 2 and 3) were originally located in the two stone sockets discovered, giving the structure a more oval or polygonal shape, as is seen at Sess
Kilgreen (1952, 28, 30; see also below, and Fig. 6.22). These stones were therefore moved and reset into the sockets, which is where they remain today.

C12 is located at the entrance to Knockmany passage tomb, and as with C4, it is positioned at right angles to the main orientation of the other stones (see Fig. 6.22). The imagery is engraved on to the edge of the stone that faces away from the chamber. The main motifs on this stone are unusual for Irish passage tombs and are mostly only seen at Knockmany (Shee Twohig 1981, 205). These decorations consist of a panel of three rows of short vertical lines, that are framed by two long horizontal lines at the top. The bottom row of short lines has seven verticals, whereas the both two upper rows have six verticals. Other imagery includes three cupmarks that are possibly natural on the southern side, and miscellaneous seemingly random pickings below the main panel (Shee Twohig 1981, 205). If this is indeed a portal orthostat, it is interesting that imagery is not mirrored on the adjacent set C2 stone. That motifs do occur on C12 does, however, support a preference for dexter over sinister (see discussions in Chapter Four).

Knockmany passage tomb can be characterised by the occurrence of horizontal and vertical lines (e.g. on C5, C6, C10, C11 and C12), and by the atypical images of quartered and in-filled circles (e.g. C11) and the ‘Maltese cross’ design (e.g. C9). The closest comparison to the vertical line motifs is seen at Dowth on the northern passage tomb on C7 (Shee Twohig 1981, 205; O'Kelly and O'Kelly 1983, 170; see also Chapter Four). Decoration is also interestingly located on the backs of stones at Knockmany (e.g. C5, C6 and C7) (Shee Twohig 1981, 117). Such repetition of similar images may have triggered thoughts or prompted actions of ‘indirect emergence’ (see Chapter One), that created a socialising passage tomb sensibility, for the people who interacted with the motifs. These actions may have in turn been partially regulated or disrupted by myths and narratives.

Sess Kilgreen, Co. Tyrone
Fig. 6. 23 Schematic map of Sess Kilgreen passage tomb, the decorated Standing Stone and location of a suspected second passage tomb - Sess Kilgreen II (adapted from OSNI Discoverer Sheet 19).
Located on the slopes of Shantavny, Co. Tyrone, north-east of Knockmany, and below the tombs of Shantavny Irish (at the 213m contour) and Shantavny Scotch (at the 152m contour), is the Sess Kilgreen passage tomb (see Fig. 6.23). Father J. Rapmund was the first person to have excavated this tomb and he reported in a personal letter that there was no evidence to suggest previous openings (Coffey 1911, 176; 1912, 107). Since this time no excavations have been conducted, resulting in the available information being less than the other sites discussed in this chapter. The visual imagery has, however, been surveyed and documented (Coffey 1911, 175-6; Shee Twohig 1981, 202-3, figs. 208, 209), allowing for further discussions (see Fig. 6.24). This structure is a polygonal chamber with a short passage on the north-east
side and is similar in plan to the nearby one at Knockmany (Coffey 1912, 107; see Fig. 6.24). The site currently consists of a low, circular stony mound, being 30m in diameter and 2m high. There is no evidence for a delineating kerb. Fairly centrally placed in the mound is a rectangular burial chamber with a north facing entrance. The chamber is 3.1m long and 2.4m wide. When opened in the late nineteenth century, material finds were scarce and included cremated bones near the base of C5 and C6 and a polished stone hammer near the middle of the chamber, all residing on a floor of round boulder stones (Coffey 1911, 176).

This passage tomb has seven decorated stones composed from conglomerates and red sandstones. The passage tomb does not currently have a roof, and there is no record of one being discovered when Father Rapmund opened it (Coffey 1911, 176; see Fig. 6.25). One of these roof-stones may, however, have survived; the proposed capstone is currently a nearby ‘standing stone’ (see Fig. 6.26). Although some have, however, commented that it possibly originally belonged to another nearby tomb (Herity 1974, 82, 224), for instance from the denuded remains of another structure located further
down the hill on a west facing slope. This possible second passage tomb at Sess Kilgreen currently only consists of two undecorated upright stones with loose stone fill between them. The largest stone is 1.3m high, 0.75m wide at its base, 0.36m wide at the top and 0.6m thick, while the second stone is smaller being 0.9m high, 0.97m wide, and 0.25m thick. Other commentators such as the Reverend John Groves have, however, asserted that its provenance derives from that of the main Sess Kilgreen passage tomb (Mason 1814-19, cited in Shee Twohig 1981, 202; see also Coffey 1911, 176; Breuil 1934, 297, 301). Until further work is conducted, I will agree with the conventional belief that its origin derives from the main decorated passage tomb. The occurrence of a second possible passage tomb does suggest that Sess Kilgreen did not appear in isolation in the landscape with no near neighbour, as is demonstrated at the Mound of the Hostages, Co. Meath and Knockmany, Co. Tyrone. Instead, its histories may have been more complex and interwoven with the second passage tomb, as is demonstrated at Fourknocks, Co. Meath. Regrettably though, until more evidence is available, this is mostly just speculation.
Fig. 6. 26 The Standing Stone, Sess Kilgreen, Co. Tyrone. The middle photograph was taken 20 years ago. Note the degeneration of the motifs on the stone as seen today in the lower photograph. (after Shee Twohig 1981, fig. 209; photos: Anthony Weir and author).
Visual imagery is present only on the front faces of six stones (C2, C3, C4, C5 and C6) within the passage tomb, as the backs have not been excavated and exposed (Shee Twohig 1981, fig. 209; photo. author).
Twohig 1981, 203). Orthostat C2 has one image located in the upper middle face, consisting of two rounded square boxes with an outer frame, which are roughly carved. The two boxes are joined by a short line at the lower left of the image. Orthostat C3 is dominated by three boxed ovals at the top left edge of the front face. On the remainder of the stone are depicted fainter picked dots, short arcs and traces of circles. On C4 the middle of the stone is decorated with a faintly picked spiral or possible concentric circle. It is difficult to determine this image and others as the even surface obscures, and because the motifs are lightly picked (Shee Twohig 1981, 203). Other images include a dot and circle in the centre; a spiral coil that is enclosed by two concentric circles at the top of the stone with haphazardly arranged ovals, circles and cupmarks. The images on Orthostat C5 are incomplete as a result of damage to the upper left corner. Surviving motifs include a large complex image formed by two closed lozenges that is surrounded by a third unclosed lozenge. Instead, the ends of this design run up and outwards on each side of the central lozenge, and then turn across and downwards again, joining above the double lozenge (Shee Twohig 1981, 203). A further outer line frames the composition with additional shorter lines set into the angles on the sides and top of the motif.

Orthostat C6 is the principal backstone and is argued to be the most visually impressive stone in this tomb, being previously referred to as a ‘human face’ or an ‘owl-like-goddess-of-death’ that echoes the anthropomorphic female seen at Loughcrew Cairn U (Breuil 1934, 302; Herity 1974, 45, 101; M. O’Sullivan 1993a, 31; see Fig. 6.27). The majority of images here are, however, simpler and less ambitious with single motifs on individual stones being the norm (M. O’Sullivan 1993a, 31). The central image is formed by a dot with five concentric circles; near the top right there is a small circle encased in 11 ‘U’ shapes, and to the upper left there are nine ‘U’ shapes that radiate from the central motif, with seven shorter parallel arcs on the lower part of the stone (Shee Twohig 1981, 203). At the bottom of the orthostat the overlapping arcs meet the outer circle and a cupmark. Based on this composition, Shee Twohig (1981, 203) has suggested that the two sets of outer arcs at the top were picked contemporaneously. As previously discussed (see Chapter Four), the images on the stones may not have been regarded as merely static, but rather imbued with
agency and volition. This sense of animacy may have been enhanced by the stimulating application of liquids such as water, fats or blood. Note how the application of milk to orthostat C6 (see Fig. 6.28) has instantly made the motifs appear more dynamic and ‘life-like’. Such solutions or ‘magical lubricants’ (van Gennep 1960, 172) may have helped support or disrupt cosmological belief systems at particular times of the year. The milk may also have been ambiguous and seen as other substances such as semen, as is the case with some Sambia in Papua New Guinea (Gell 1999e, 58). In Chapter Seven I further discuss some possible scenarios in which these acts and beliefs may have operated.

Fig. 6.28 Orthostat C6 being illuminated by the application of white milk. Compare with Fig. 6.27 above. (photo: author).

The Standing Stone (see Fig. 6.26) is covered in imagery all over its south face, and is 1.2m high, 1.5m broad and 0.25m wide. The motifs mostly consist of parallel arcs, cupmarks, cup and circles, dots with radiating lines and a weak spiral (Shee Twohig 1981, 203); here I will focus on a few of these designs. Strikingly, there is an artificial line of over 20 cupmarks that runs diagonally across the stone, which is paralleled by
a shorter one above it (Coffey 1911, 176). The left of the stone is also punctuated by many other cupmarks. As with the Loughcrew passage tombs, these motifs may have been produced by chalk and stone balls, being repeatedly inserted into them as part of performances that dissolved or inverted notional boundaries (see Chapter Five). Located at the top of the stone is a dot surrounded by an unclosed circle with a radial line that pierces through the opening. Lower to the right there are four sets of dots with radiating lines, somewhat like flowers (Coffey 1911, 176), one of which is surrounded by a circle in a similar manner to the images at Dowth, Co. Meath (see Chapter Four). Breuil (1934, 297) sees these images as representing faces, with individual noses, pupils, mouths and muzzles being present. Unfortunately, as a result of weather erosion and extensive cattle rubbings over the last 30 years, nearly all the images on this stone have been lost (see Fig. 6.26). Such erasure and metamorphosis of the images confirm that they are indeed not static and permanent.

The images at Sess Kilgreen passage tomb are of basic geometric design, and do not aspire to enhance the plastic qualities of the stones, as such we can place them within Stage 1 of O’Sullivan’s (1996a) sequence. Based on the similarity of the carved images on each orthostat, Shee Twohig (1981, 203) has also proposed that there was possibly only one carver involved in decorating this passage tomb.
Knockroe, Co. Kilkenny

Located near the village of Tullahought, the Knockroe passage tomb or 'The Caiseal' is 'inconspicuously' (Ó Nualláin and Cody 1987, 69; M. O'Sullivan 1993b, 17; see Fig. 6.29) sited just above the 91m contour on fields that fall to the west, above the bend in the Lingaun River, being 120m to the east of it (M. O'Sullivan 1993b, 17). The siting of this passage tomb differs from the others mentioned in this chapter in that it is placed on the side of the hill, rather than the highest elevated spot (M. O'Sullivan 1995, 11). The views are still impressive. Visible is the Baunfree tomb, located 4km away on the northern edge of Kilmacoliver Hill, and the Slievenamon cairn approximately 11km away (Ó Nualláin and Cody 1987, 69). There is another cairn 1.1km north-east of the Slievenamon cairn, but this is currently less prominent, due to its ruined condition. These sites may form a Slievenamon group or complex, similar in pattern to the Boyne Valley and Loughcrew complexes, albeit less compact (M. O'Sullivan 1993b, 15-16; 1995, 24). Here, the main focus is only on the motif
bearing Knockroe site. The geology of this area is Upper Silurian formations. This passage tomb was only brought to the attention of archaeologists very recently, when John Maher rediscovered the denuded remains in the very late twentieth century (Ó Nualláin and Cody 1987, 82; M. O’Sullivan 1993a, 33). This may have been as a result of it being recorded, but not shown, on the late nineteenth century and subsequent Ordnance Survey maps of Co. Kilkenny (Ó Nualláin and Cody 1987, 71). The structure consists of a semi-circular or elliptical kerbed earthen cairn (c.15 to 25m wide from east to west), with a small passage tomb on the western edge, and a second transeptal passage on the eastern side. In this respect it is remarkably similar to Knowth and Dowth, Co. Meath, which also possess decorated motifs with two passage tombs within their mounds, and both are relatively close to waterways and smaller tombs. It also highlights that the southern areas of Ireland may not have been as bereft of megalithic visual motifs as was previously thought (M. O’Sullivan 1996a, 91). The positioning of a single mound in a commanding position on a hilltop (albeit not the summit; see Fig. 6.33) is similar also to the Mound of the Hostages, Co. Meath and Knockmany, Co. Tyrone.
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About 30 decorated stones are visible in the structural stones of Knockroe, with at least ten of the kerbstones bearing motifs, ten decorated stones in the western tomb and ten in the eastern (M. O’Sullivan 1987, 92; 1996a, 91; 1996c, 11). Other than the main passage tombs in the Boyne Valley complex (e.g. Newgrange Site 1 and Knowth Site 1), this represents the largest amount of decorated kerbstones in one individual monument (M. O’Sullivan 1987, 92; 1996a, 91; see Fig. 6.30). In this section, I will highlight some of the more visually notable stones, in an attempt to demonstrate the wealth of imagery that is present at Knockroe. Only eight of the kerbstones are thought to be in situ; four of these form pairs either side of the entrance to the western passage tomb, marking an in-turn into the entrance. The other four stones form an arc on the southern edge of the kerb (Ó Nualláin and Cody 1987, 73). The stones are

Fig. 6.30 Plan of Knockroe passage tombs detailing some of the kerbstones discussed – scale for tombs only
(adapted from Ó Nualláin and Cody 1987, fig. 9; M. O’Sullivan 1993b, 6; 1996c, 12).

About 30 decorated stones are visible in the structural stones of Knockroe, with at least ten of the kerbstones bearing motifs, ten decorated stones in the western tomb and ten in the eastern (M. O’Sullivan 1987, 92; 1996a, 91; 1996c, 11). Other than the main passage tombs in the Boyne Valley complex (e.g. Newgrange Site 1 and Knowth Site 1), this represents the largest amount of decorated kerbstones in one individual monument (M. O’Sullivan 1987, 92; 1996a, 91; see Fig. 6.30). In this section, I will highlight some of the more visually notable stones, in an attempt to demonstrate the wealth of imagery that is present at Knockroe. Only eight of the kerbstones are thought to be in situ; four of these form pairs either side of the entrance to the western passage tomb, marking an in-turn into the entrance. The other four stones form an arc on the southern edge of the kerb (Ó Nualláin and Cody 1987, 73). The stones are
mostly local sandstone, with green greywacke or grit bearing the majority of the imagery. This is argued to be a deliberate placement (M. O’Sullivan 1995, 12); green grit is also the favoured choice on some of the structural stones in the Boyne Valley passage tombs, such as Newgrange Site 1 and Dowth (Eogan 1986, 112). The excavators of this tomb argue that the ‘inconspicuous’ siting of this tomb on a slope was visually countered by the initial creation of an earthen re-deposited yellow boulder clay platform, twice the diameter of the mound, which provided an artificial level surface (Ó Nualláin and Cody 1987, 81; see also Fig. 6.30). The extension of the earthen platform beyond the kerbstones could have also effectively created a ‘stage’ (M. O’Sullivan 1996c, 13) for specific performances in front of both the western and eastern tombs, that may have allowed certain people to appear raised or above other spectators. Such performances may have been highly charged with emotions, with intoxicant fuelled carnal and sexual actions used as powerful tools to enhance experiences. The yellow boulder clay may also have been employed for its visual impact (especially if illuminated by fire, moon or sunlight) and its contrast with the surrounding areas. Whether it was used for such purposes or not, it does suggest that some people were actively altering the landscape to suit different purposes (Cooney 2000a, 135). Interestingly, re-deposited amounts of yellow clay and oval settings have been found directly in front of the entrances and façades of Cairn T, Loughcrew, Knowth Site 1 and Newgrange Site 1, Co. Meath (see Chapters Four and Five). Placed on this platform was a nodule of Galway granite; it is the only granite discovered at Knockroe and is reminiscent of granite placed at the entrances of Newgrange Site 1 and Knowth Site 1 (M. O’Sullivan 1997, 29; see also Chapter Four). That Knockroe was constructed on top of the clay, rather than the clay merely being placed in front of it, may at some level indicate performances that invert or subvert worldviews. For instance, in Chapter Five I discussed possible stage settings in between the passage tomb cairns; at Knockroe the stage is now below and in front of the passage tombs, and possibly emphasises alternative underlying social engagements.
The western passage tomb consists of a widening passage (facing south-west) that leads to a terminal space that is only slightly larger at the inner end of the passage (Ó Nualláin and Cody 1987, 82; M. O'Sullivan 1993b, 5; see Fig 6.31). The passage tomb is compartmentalised into three sections, each entered over a sillstone and floored with a large stone slab (M. O'Sullivan 1996c, 12). This passage is 3.5m long, 0.2m wide at the entrance/exit and c.1m wide at the deepest end. As with Newgrange Site 1, the floor level rises in height from entrance to rear (M. O'Sullivan 1993b, 9; 1996c, 12). The passage tomb is aligned on the setting sun on midwinter day, 21st December (M. O'Sullivan 1996a, 91; see Fig. 6.32). The structure consists of 12 orthostats, five on the southern side and six on the north side with one backstone. To
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the south of the entrance, 0.5m away, is located a single stone (0.6m high) that may have represented an extension of the entrance beyond the line of the kerb (Ó Nualláin and Cody 1987, 73). The kerb appears to have been related to the western passage tomb, whereas the eastern passage tomb seems more detached and independent (M. O'Sullivan 1995, 12).

![Image](photo: Tom Fourwinds)

**Fig. 6.32 The sun-setting in line with the western passage tomb on Sunday, 30th November 2003**

This extension beyond the kerb, combined with other stones, may have formed a sandstone block façade built upon the 'stage' setting, creating a forecourt for possible activities to have taken place (Ó Nualláin and Cody 1987, 81). This extensive sandstone façade contrasts in colour and texture to the greywackes, and the stones do not contain visual imagery. This structural feature currently has no parallel (Ó Nualláin and Cody 1987, 73; M. O'Sullivan 1996c, 13). The ‘stage’ is also delineated by a broken line of flattish boulders that run adjacent to the earthen platform. That particular performances occurred here is supported by the discovery of a large pit cut into the platform ‘stage’, in-line with the passage tomb entrance (again similar to pits at the Loughcrew and Boyne Valley complexes – see Chapters Four and Five). The pit fill consisted of ash and baked soil, suggesting an intense or reoccurring fire(s) (M. Sullivan 1996c, 13). Just north of this feature another ‘fire-pit’ was discovered;
neither pit contained bone. Later activities on this platform include the placement of boulders (the largest being c.1m in length), in front of the passage tomb entrance (M. Sullivan 1996c, 13). These features may have been positioned to restrict movement in or out of the tomb, or they may have been used for some other visual purpose. Certainly, the blocking of the passage tomb sits well with Lynch’s (1973) proposal, although in this instance there is no communication aperture present.

![Fig. 6. 33 Looking west at Slievenamon (photo: Tom Fourwinds).](image)

The heights of the kerbstones vary between 0.6m to 1.3m. Most of the stones within this structure are ‘green’ greywackes or grits and most are decorated. The exception is Orthostat 9, which is unusually tall and oddly shaped undecorated pink sandstone that is not local to the region. O’Sullivan (1996a, 94; 1996c, 12) has argued that as this stone is structurally ‘illogical’, symbolic considerations or worldview belief systems must have been at play. Certainly, the visual aspects of this differently coloured and shaped stone and its ability to rupture the dynamics of the construction cannot be denied. What we may be witnessing are subversive acts within the building process, with emphasis on the right hand side of the tomb. Materials discovered included
cremated bone from several persons, some unburnt human and cattle bone, a mushroom-headed pin, a pendant and a bead (M. O’Sullivan 1996c, 12).

There are ten decorated stones within this passage tomb and they fit well within O’Sullivan’s Stage 2 sequence (M. O’Sullivan 1996a), in that they are mostly basic geometric, yet with a coherent consideration to the modulations of the stone’s surface. The carving on this tomb is bolder than that on the eastern one with the images themselves more extensively covering individual stones. In one instance, two opposing stones have mutually sympathetic/similar images. The substantive entrance to the passage here suggests that the structure remained open for longer periods of time than the eastern tomb, perhaps as a result of its particular solar alignment, and that may explain why the motifs developed past Stage 1 images (M. O’Sullivan 1996a, 92). I will now briefly describe some of these decorated stones.

Located in the western passage tomb on the left-hand side of the chamber is Stone 5, which stands opposite Stone 12. The front face of Stone 5 is divided by an interrupted natural diagonal fissure/shelf and contains extensive areas of loose picking and curvilinear motifs with cupmarks. Concentric circles occur on the upper right of the stone and are ‘delicately applied’, with spiral forms nearby (M. O’Sullivan 1987, 84). Below these motifs are six cupmarks, that are deliberately placed to produce a coherent shape, which suggests that they are not natural. Stone 8 is located at the left hand inner end of the chamber as one enters it. The decoration occurs on the front face of this orthostat and is badly weathered and damaged, possibly from tree growth. The main design has been described as being integrated and structured around a curvilinear form in the centre, with radiating straight lines. Cupmarks are also present on the lower left segment of the stone (M. O’Sullivan 1987, 88). Next to this orthostat is positioned the backstone to the chamber, Stone 9 at 0.95m above the modern ground-level (M. O’Sullivan 1987, 88). The front face of this stone is flattish and smooth in texture, with imagery adorning it. The decoration is predominantly formed by zones of loose picking with some curvilinear shapes. The designs cover most of the front face of the stone but they do not reach the extreme edges. There is a single circle at the top of the stone in the middle and above this there is a penannular circle.
surrounding a cupmark. Interestingly, below the modern ground level is located a spiral (M. O’Sullivan 1987, 88). There are also patches of loose picking located on the back face of the stone.

Positioned adjacent to Stone 8, with similar imagery, is Stone 10. The motifs on this orthostat seem to respect the natural fissures in the stone, and therefore may conform to stage two of O’Sullivan’s (1996) sequence. The middle face of the stone is dominated by a central spiral that is surrounded by radiating curvilinear arc shapes and parallel lines near the fissures. Above and below the naturally demarcated band zone on the front face are located groups of concentric circles, and loose arc shapes (M. O’Sullivan 1987, 88).

On the right of the main chamber is Stone 12. Although a large section of the front left hand face of this chamber has detached itself, it is still in situ. The dominant imagery on this stone consists of circles, loose concentric circles, cupmarks and radiating curvilinear lines that cover the front face and continue below the current ground level (M. O’Sullivan 1987, 88). This feature may suggest that the orthostat was decorated before being placed in the passage tomb. Next to this orthostat, stone 13 is located, near the entrance to the passage tomb. The documented imagery on this stone is currently very limited as most of the orthostat is still buried beneath the modern ground level. The visible motifs consist of a few curvilinear arcs, circles and a possible cupmark (M. O’Sullivan 1987, 88).

There are currently approximately six decorated kerbstones on the western passage tomb (Stones 21, 22, 23, 24, 25 and 27; see also Fig 6.30). Stone 21 is distinguished by a close group of serpentiform shapes on the lower middle face that coincide with the natural features of the stone. Stone 22 is extensively decorated, with imagery present over the entire front face. Motifs include large serpents that run from left to right across the middle of the kerbstone, spirals that are diametrically opposed at an angle, and concentric circles. There are also picking areas present on the left-hand side of the front face (M. O’Sullivan 1987, 88). Stones 23, 24, 25 and 27 are less dramatically decorated. The scope of the imagery is restricted to concentric arcs and
circles, spirals and arcs. It is interesting to note that Stone 27 is possibly a green-grit, as is found in the Boyne Valley (M. O'Sullivan 1987, 90).

Fig. 6.34 Knockroe East (M. O'Sullivan 1995, fig.3).

The eastern passage tomb is roughly aligned east-west, with a possibly transept-like feature on the north side, and is formed by a number of set stones that support large slabs (six in total), with internal spatial divisions being indicated by sill stones. These compartments include outer, middle and inner sections, opposed lateral recesses and a cist-like structure (M. O'Sullivan 1995, 19; see Fig. 6.34). The occurrence of a cist feature, filled with cremated human remains, is reminiscent of those found at the Mound of the Hostages, Tara (see discussions above). The passage tomb measures
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c.3m from entrance to rear and c.2.3m from side to side and probably had a corbelled roof (M. O'Sullivan 1995, 17; 20). There are two set stones on the southern end and four on the northern end, ranging in height between 0.13m to 0.7m. The tomb in its current state is severely damaged (Ó Nualláin and Cody 1987, 82), with there being no evidence for an outer passage. The entrance is delineated by a transverse sandstone slab that is c.0.7m high and flanked by Orthostats L1 and R1 (M. O'Sullivan 1995, 18). Located near this sandstone 'frontstone' was a similar shaped slab that may have rested above and acted as a temporary closing piece that could be swivelled sideways when admittance or exit was required (M. O'Sullivan 1995, 18). Access to this feature could have been granted via a puncture in the cairn, but only for a limited period of time (M. O'Sullivan 1996a, 91). Material evidence discovered included more than 15kg of cremated bone, mostly from within the tomb, Carrowkeel, decorated red ware and undecorated flat-based pottery, bone pins, beads and a miniature macehead (M. O'Sullivan 1995, 23). The discovery of a Carrowkeel pot in situ mirrors the almost complete pots found in the Mound of the Hostages, Tara (see above), suggesting that some pots were originally deposited intact, only fragmenting through later disturbances (M. O'Sullivan 1995, 26-7). It is interesting to also note that the Carrowkeel pot was discovered in the right hand recess (M. O'Sullivan 1997, 26). Three patches of burnt platform were also discovered in front of the eastern tomb (M. O'Sullivan 1993b, 14; 1996c, 13), and although they are not part of cut pits, they may be comparable to the 'fire-pits' of the western passage tomb. Although the eastern tomb has no formal passage, the kerb where an entrance area would have been was altered at some point in its history, with the general greywacke or grit kerbstones being replaced with one conglomerate (Kerbstone S9) and four sandstones (Kerbstones S8 and S10 and stones R and T) (M. O'Sullivan 1993b, 12).

The eastern passage tomb also demonstrates some similarities with the Boyne Valley complex in that a quartz facing occurred above and in front of the sandstone kerbstones and stones mentioned above, with there also being water-rolled nodules on the ground in front of the 'entrance' (Ó Nualláin and Cody 1987, 73; M. O'Sullivan 1996a, 91; 1996c, 11). This quartz layer has been interpreted as having slipped from the cairn sides in successive episodes, rather than being placed on the ground as is
postulated as a possibility at Knowth Site 1 (Eogan 1986, 45, 65; M. O'Sullivan 1993b, 13). Quartz pieces were also discovered overlaying the primary deposits in the outer compartment, and this has been interpreted to have fallen in from overhead on the cairn (M. O'Sullivan 1995, 19). Within the fill of the annexe (see Fig 6.?) was located a large quartz block which may have originally been a roofstone (M. O'Sullivan 1995, 21). There has been no attempt to describe a near-vertical quartz wall as is suggested for Newgrange Site 1. Although no stone basin has been found in the eastern tomb, a large bowl shaped pit was discovered in the terminal chamber that may have served similar functions (M. O'Sullivan 1995, 21). Up to ten structural stones are decorated, including Stones 29, 31, 32, 35, 41 and 43 (M. O'Sullivan 1987, 90). All of the motifs in this passage tomb are badly weathered and can be described as belonging to O'Sullivan's stage 1, in that they are restricted to spirals, circles and ovals, with the plastic qualities seldom explored (M. O'Sullivan 1995, 15; 1996a, 91). The designs are lightly picked and small in scale, and in contrast to the western passage tomb appear less orientated towards a large scale visual impact and were possibly created in an earlier phase (see also M. O'Sullivan 1995, 25). Interestingly, the eastern tomb did not contain stone balls or mushroom-head pins, both of which normally form part of the passage tomb assemblages (M. O'Sullivan 1995, 26).

Discussion

Immediately noticeable from these accounts of the various passage tombs are the similarities between the spatial contexts on topographically high locations, with the passage tomb mounds generally being positioned long-ways on an east-west axis ridge (see also Herity 1974, 156; Cooney 1990, 743). That the passage tombs are located in visually commanding sites on hilltops might reflect a desire to project an illusion or impression of centrality in the landscape (see Watson 2004, 88), allowing the sites to be witnessed from lowland perspectives and vice versa. As discussed in Chapter Five the physical effort involved in ascending these hill slopes, the politics of verticality, may have added to or influenced the experiences of the passage tombs especially if framed by a tiered cosmological belief system. The compositions of the specific passage tombs and mounds may bespeak of a metaphorical understanding of
the broader landscape (see also Bradley 1998b, 100, 122-3). As such, the mounds may have been evoking the hills upon which they are set, with the ditches denoting the nearby river-systems, especially if they were filled with water (e.g. Fourknocks II; see also Richards 1996), and the megalithic kerbs illustrating the mountains that often frame the horizons. The initial condition of an empty place or chamber may have also allowed the creation of a conception place for other ideas, places and interactions, being ‘hierophanies’ (Eliade 1964, 32) or ‘heterotopias’ (Foucault 2002, 231-33; see discussions in Chapter Five); this would have possibly included the application of motifs and the placement of the dead. The noted interest in solar alignments may also support this. As discussed in Chapter Four, the usage of circular mounds and motifs may also have embodied different expressions of temporality that deny temporal transformation as a forward striving force, instead being more about (dis)continuity and reduplicating reorganisations. The engraved motifs can possibly be seen as social manipulations, and manipulations of the social through stone, rendering it a re-presentation rather than a representation of and in the world (Gormley 2004, 139). The repeated form of similar images (as seen at Knockroe) may have served as a performance to revitalise a particular cosmological integrity (see Chapter One). It is the changes and stabilities of these places that stimulate the fluid dialogues. The occurrence of quartz, the limited range of material remains (e.g. Carrowkeel ware, pins and stone balls), cremated remains, performances near the entrances and preferences for the right-hand side of the passage tombs may also support these propositions. The absence of stone basins at these sites is also noteworthy. Set within an axis mundi worldview perspective, these locales, passage tombs and motifs move from merely occupying places of certainty in the physical worlds, and become the uncertain and provocative places of narrative and experience. They may also have resided in the blur between these polarised dichotomies. How these propositions play out with other aspects of Neolithic life and material cultures will be reviewed in the following chapter.
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Such floral remains indicates that there was considerable scrub in the area at the time of construction. Hazel was also the predominate wood found at Fourknocks I (Hartnett 1957, 271-2; 1971, 64).

At first this appears to be an odd wish for an archaeologist. Yet Macalister objected to the manner in which the ‘excavations’ at Rath of the Synods (Ráith na Senad), Tara, were conducted by the British Israelites between 1899 and 1903 in the search for the Ark of the Covenant. These diggings resulted in the south-eastern quadrant of the earthwork being totally destroyed (Newman 1997, 37). If trenches were to be dug, Macalister hoped that they not be carried out in such a reckless fashion. He stated that if future excavations occurred, that as much care and money for restoration be expended as possible (Macalister 1919, 278).

A large Mesolithic type flake of chert was discovered, although its context is unknown. This may suggest that either the site was visited before the Neolithic, or that a Mesolithic ‘heirloom’ was incorporated at a later time into the site (M. O’Sullivan 2005, 221).

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Shee Twohig (1981, 220, fig. 245) refers to this stone as C2, presumably due to its location in the middle chamber; I will, however, use M. O’Sullivan’s (2005, 66) appellation of L2, as it ties in better with the more recent fully published site report and plans.

Interestingly, although Breuil (1934, fig. 13) utilises Coffey’s (1898, fig. 4; 1912, fig. 84) drawings and correctly alters the orientation, Meek (1960, 5) still publishes the orthostat C11 upside down.

The applied milk was removed after this photograph with water to prevent damage and erosion to the motifs.
Chapter Seven

Introduction

In the preceding chapters, I have mostly focused on the visual motifs and impacts that they may have generated. Little mention has, however, been made of the varied material culture that accompanies the images and the structures. Any analysis of the engraved motifs and architecture that excludes cremated remains and other material objects decontextualises itself from a fuller and more fine-grained interpretation (Shee Twohig 1996, 73). By bringing together both the content and context of the passage tombs discussed, I will attempt in the first parts of this chapter to further understand some of the intimate ways in which the sites were seen, considered, and engaged with.

Shee Twohig (2000, 102) challenged archaeologists this millennium to concern themselves with detecting the falsities and unrealities of interpretations of passage tomb images, both past and present. To address this challenge and expose false facades and modern illusions, the last section of this chapter adopts a visual cultural perspective (see discussion in Chapter Two) and draws inspiration from the French philosopher Jean Baudrillard who has written extensively on simulation and simulacra within (post)modern environments. I am interested in the overlaying of simulations, and this has led me to examine the possible simulation of worldviews via the superimposition of motifs on some of the passage tombs discussed. By incorporating these positions I detail new dynamically poetic ways of thinking about how the passage tombs and their motifs act or acted within networks of visual events. This chapter will therefore continue the process of discussing less what the monuments and their motifs ‘are’, and more about what they ‘do’, within particular rhythms and temporalities.

Visions of life and experiencing death

Standard passage tomb finds include mushroom-headed bone or antler pins, small stone, clay or chalk balls, pendants, beads, stone axeheads and Carrowkeel pottery. Although these specific amalgamations of materials regularly occur, there appear to be no universal imperatives that govern precise combinations or placements. For instance, in the eastern passage tomb at Knowth Site 1, material objects may not have
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existed in the separate deposits, while at Fourknocks I pottery was absent from some closed contexts, at the Mound of the Hostages one pot contained cremated remains while another smaller one did not, and at Newgrange Site 1 there was no pottery evident (O’Kelly 1982, 122-3; Eogan 1986, 139-40; see also Chapters Four and Six). This might suggest that although general principles were at play, particular assemblages were mostly created, contrasted and juxtaposed in more fluid, improvised and performative ways (J. Thomas 1999, 78-9). Such expressions, interactions and interpretations with particular material objects may have facilitated further processes of movement, understanding, transformation and intention. These notions are amplified when one removes an animate:inanimate dichotomy and acknowledges that these objects may not have been regarded as ‘dead’ or static (Hallowell 1975, 146; see also discussions in Chapter One). The possible effects of these passage tomb collections or performances will be discussed further below.

The pendant and bead finds are invariably burnt, suggesting that they were possibly burnt with the bodies (Herity 1974, 124). Previously the occurrence of these smaller assemblages has been interpreted as ‘personal’ objects that were ‘…worn by the dead clothed and accoutred as in life…’ (Herity 1974, 126). Yet, instead of being just personal goods for a particular person these objects or technologies might have performed in alternative fashions. This is not, however, to suggest that some people did not adorn themselves in daily life, but rather that in the context of a passage tomb and associated with cremated remains and engraved structural stones, these objects may have operated in more complex ways. Very few of these objects were left in passage tombs by chance, arriving instead through acts of deliberate placement. What we therefore might be witnessing are episodes of deposition that may have related to the construction or disruption of identities of place and the delineation of personhood or being in the world (Pollard 2001, 316).

At one level, objects can influence the ‘taken-for-granted’ parts of an environment, helping to shape the habitus, in conscious and unconscious ways (Cooney 2000a, 174). Almost all of the objects discovered in passage tombs would fit well within an axis mundi worldview, with materials driving from the earth being utilised. The
burning of certain parts (e.g. cremated bone) may have allowed elements to rise to the sky, while the interment within a passage tomb may have returned elements to the ground and completed a life biography. Such life cycles could include birth (production), socialisation (exchange), consumption, absence and death (discarded or destroyed) (Tilley 1996, 247; Cooney 2000a, 175). The majority of human bone discovered in the passage tombs discussed occurred in the form of cremated residue, with many persons generally being represented with successive burial acts often evident (see discussions in Chapters Four, Five and Six). That non-burnt human bones, such as skulls (complete and fragmented) at Fourknocks I, Newgrange Site 1 and the Mound of the Hostages, were incorporated might suggest modes of transformative action or illumination. The cremation of human bodies may not have been merely for functional perseveration and ease of transportation (Herity 1974, 122). At some level, the mixing of substances and parts in differing states may reflect the belief that human bodies are porous with elements, sensations and emotions continually flowing in and out in a cyclical fashion, both during life and after death (Grosz 1994, 165; Fowler 2004). For instance, in Melanesia some people regard themselves as individual persons that are partible. These partible people often give ‘parts’ of themselves away as a means of maintaining or creating networks and relations with others (Gell 1999e, 33; Fowler 2004, 55). An interesting instance of how some people conceptualise themselves as partible beings is demonstrated by the Polynesians of the Marquesas, who have separate names for specific body parts in addition to their own name. Each named part would have its own life that related to other named members of the body and the community as a whole (Gell 1995, 44). In another example of how some people transmit essences between persons, Jones (2005) has commented on how some of the Classic Maya thought of themselves as permeable, consisting of blood and bone. By exchanging or giving these elements, relationships were manufactured, and strengthened (Jones 2005, 197). In the context of Irish passage tombs, we may at some level be witnessing the residue of performances that sought to express beliefs on how some people were enmeshed within social relationships during life. By blending, circulating and depositing fragmented human body parts and remains after death, these worldviews may have been magnified. For some of the Araucanians of South America, the dismemberment
and cutting up of the body (physical or otherwise) is linked to 'shamanic' initiatory practices of renewal, rebirth and regeneration (Eliade 1964, 53-4). The de-totalising of the body into fragments via cremation may have brought a new integrity to the dead as a whole, with placement in the passage tomb completing/commencing the transition. In such a scenario, cremation is cosmogony, with death being assimilated in the processes of regeneration or transformation (Parry 1982, 76), possibly through cyclical notions of time (see discussions in Chapter Four and Five), from 'womb to tomb' (Parker Pearson 1999, 25). Such fluid practices would have been intimately linked with auditory, visual, olfactory, and tactile sensations, emotions and being-in-the-world in general.

The processes involved in these deliberate depositions may have been complex and diverse, with many factors determining combinations and arrangements of remains, probably being influenced by existing knowledge and beliefs on how things should be performed. Conversely, some of these interment acts may also have been ad hoc, sometimes renewing and at other times contesting the accepted relationships, statuses and biographies of objects and people. These deposits would have resonated with their own agency and this may have been enhanced by their capability to operate as mnemonic devices, practices of remembering and the distillations of knowledge about ever-changing worlds (see discussions in Chapter Two). Indeed, mortuary acts can function as mechanisms for the creation and perpetuation of a society (Bloch and Parry 1982, 6), often instigating feasts, mourning, celebrations and new conversations. The cremations would have occurred mostly outside the passage tombs themselves, possibly on funeral pyres or in burning trenches. Such actions could create numerous performances. These may have included the preparation and purification of the body via hair removal, excoriation and washing, collecting the correct fuels to burn, the construction of a pyre or pit/trench (e.g. Fourknocks II), the placement of material goods (e.g. bone pins and pendants), burning and breaking up, washing of the cremated remains (as is evident from the chamber deposits at Fourknocks I and the Mound of the Hostages), transportation and lastly the deposition of the remains in containers, trenches, under stone slabs or in the passages, cists and chambers of megalithic tombs (also see discussions in Bloch 1982; Parry 1982; Gell 1995).
Performances could also have more directly impacted upon some members of society. Parker Pearson (1999) has discussed how in the late nineteenth century amongst the Warramunga aborigines in Australia, some practised self-laceration, battering or self-immobilisation by cutting thigh muscles, while some New Guinea societies administered these acts on others. More harmful exploits can facilitate the death of a person or many through sacrificial killings. Less harmful actions can also include letting one’s hair grow or cutting it, or participation in orgies of intoxication and sexual activity for extended periods of time (see Parker Pearson 1999, 1-3, 45-6). These performances would fit well within subversive carnivalesque environments and festivities.

Other undertakings may have included decisions on who should purify or make ‘safe’ the body and when. For instance with the Merina of Madagascar, some women often channel away the polluting elements of the body through mourning practices (Bloch 1982, 226). Choices may also have been made on who could attend, with certain people restricted. Within some rural Cantonese funerals young children, pregnant women and their husbands are very rarely permitted to attend funerals for fear of contamination (J. Watson 1982, 169). This may have been the case at times in the Irish Neolithic, or conversely the opposite might have been true. It is interesting to note the amounts of child remains that occur in passage tombs. If indeed the placement of the dead reflected regeneration practices, then children’s remains may have assisted in facilitating these processes (Cooney 2001a, 126); living children may also have been encouraged to attend funerary activities as a means of demonstrating expected ways of thinking, feeling and acting (DeBernardi 2002, 868). Indeed, it has been argued that in many societies children play a central role as social actors in determining how older people operate in not just funerary performances, but also in quotidian life (Harris forthcoming). As a child socially matures its presence takes place in fluid and changing networks of persons that are not one-directional (Poole 2002, 839). Some people for instance of the Mount Hagen region of Papua New Guinea use the word mbo for the activity of planting, which can refer to the placement of cuttings into the ground and also any point of growth. As such, children are seen as mbo, and constantly come into being in the world through processes of taking root,
growth and maturity that reverberate through the society as a whole (Ingold 2000, 83). If children were regarded in some sense as centrally operating within fields of human relations, then the occurrence and planting of unburnt and cremated children bones in the passages of the Mound of the Hostages and Fourknocks I and II, may reflect these possible beliefs. As discussed, however, in Chapter Six, we should not automatically assume that the child remains in anyway represented children or notions of ‘childhood’. The placements may have been ambiguous and non-human, forming parts of performances that sought to magnify processes of maturation, closure, presence/absence, regeneration and juxtaposition. Conversely, the mixing of ‘male’ and ‘female’ substances of differing ages, as is found at Fourknocks I and the Mound of the Hostages, may have reflected the pluralities of gender, identity and personhood that were thought to have existed through (in)dividual, partible and permeable mechanisms of social interaction (Gell 1999e, 35; Fowler 2004, 37). It is possible that both positions operated at the same time with cremation practices never being consistent and homogenous. Ultimately, the reshaping of deceased people via cremation and depositional processes may have created interconnected relationships that punctuated how living people saw and expressed themselves, the dead and the cosmos within the Irish Neolithic.

![Material objects discovered amongst the cremated remains in the Mound of the Hostages](M. O'Sullivan 2005, Plate 8).
Some of the pendants and beads discovered, such as from Fourknocks I, the Mound of the Hostages and some of the Boyne Valley and Loughcrew sites, have been interpreted as miniature facsimiles of larger stone technologies, such as pestle-hammers or axeheads (Herity 1974, 126-9; Eogan 1986, 142-4; see Fig. 7.1). If indeed they were copies or imitations, many interesting proposals can be explored. For instance, that miniature axeheads or maceheads (such as at the eastern tomb, Knockroe) and miniature pendants (such as at Fourknocks I) were used might suggest that they actively influenced particular people in novel ways, rather than merely being the passive ornaments of deceased ‘individuals’. As such, the miniaturisation of objects might be less about accuracy through representation and more about experimentation with the physical world and possibly a critique or interpretation of it (Bailey 2005, 29). Miniaturisation can act as impressive visual strategies that can charge material objects with psychological tensions, generating intense sensory and emotional experiences for the maker and handler. This can result in the handler or spectator feeling both empowered and interested, but also unsettled or alienated, creating a dramatic form of social experience (Nakamura 2005, 32). Gell (1999d) remarked on some of these effects when he recounted being entranced by a matchstick model of Salisbury Cathedral. He recalled being captivated more by the model than the cathedral itself; it was for him dexterity in objectified form, operating by bringing both the technologies of enchantment and the enchantment of technologies together. With miniaturisation only certain traits of the full size are ever present, rendering the smaller version a compressed and powerful version of the larger one. These interactions operate within an intimate sphere and offer different ways of seeing the world(s), creating alternative realities (Bailey 2005, 32). The object has to be picked up, held in the hand, turned around, felt, smelt and tasted, with the many of the textures and details absorbed. Such an encounter immediately distinguishes itself from performances with the passage tomb orthostats, in that once they were set within the structure it is unlikely that they were moved again. These engagements can result in the handler feeling empowered as they easily manipulate the object, but at the same time unsettled, as they may feel gigantic in relation to the object and dislocated from normal frames of reference (Tilley 2004, 137; Bailey 2005, 33; Nakamura 2005, 33).
The spectator or handler is invited to tacitly engage with the object through size, yet at the same time distanced by it through the absence of other features (Bailey 2005, 32).

Within such a conceptual framework, the stone balls discovered (e.g. in Cairn L, Loughcrew, the Mound of the Hostages, Fourknocks I and Newgrange Site 1) may have been more than ‘children’s marbles’ (Herity 1974, 136; see Fig. 7.2), being understood instead through habits of tactile appropriation in order to further interact with the ‘aura’ of the object (Benjamin 1977, 225, 242). Their form as durable, portable, possibly miniature, three-dimensional objects creates choreographies of relation (Nakamura 2005, 32). The decorated pins, such as the chevron patterned antler pin from Fourknocks I may have stimulated people in similar ways, and therefore have been more than functional fasteners for ‘hair-buns’ on the back of the head or for ‘ceremonial cloaks’ (Herity 1974, 134; Eogan 1986, 181). Intimate relations with objects may also have resulted from entanglements with the ‘phalluses’ from Knowth Site 1 and Newgrange Site 1 (see Chapter Four; see Fig. 7.3). That these devices were discovered outside the passage tombs, on quartz oval settings, may suggest that public performances were enacted via simulated or physically penetrating acts that were framed within a particular worldview. The double stone balls found in Newgrange Site 1 (O’Kelly 1982, 195; see Fig 7.2) and the Mound of the Hostages (M. O’Sullivan 2005, 154) might also support the notion that fertility, renewal or sexual practices occurred within and outside some passage tombs (see also Herity 1974, 134; Eogan 1986, 179). The penetration of the sun’s rays at particular times of the year through the entrances, and into the chambers beyond, of some of the passage
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tombs (e.g. Newgrange Site 1 and Cairn T, Loughcrew) may have magnified these beliefs (Sheridan 1985/6, 28).

Fig. 7.3 The phallus shaped stone object discovered at the entrance of the western tomb, Knowth Site 1 (Eogan 1986, colour plate XI).

Associated with cremated human remains and discovered on the old ground surface at the entrance to Cell 3 (the right hand recess) of the eastern passage tomb, Knowth Site 1, directly in front of the stone basin was discovered a highly decorated ovoid macehead made of flint (7.9cm long) (Eogan 1986, 42-3, 146). The macehead is decorated with spirals, lozenges and arcs. On each side of the macehead there is a single spiral; on one face there is an arc that in-turns at its ends, similar to the ‘horned arc’ or ‘pelta designs’ (discussed in Chapter Six; see Fig. 7.4), and around the hole for the handle are sets of lines, one of which trails off to form a spiral on the side. The ends of the macehead have close fitting lozenge motifs that are carved in relief. The macehead would originally have been mounted on a shaft. The combination of the ‘horned arc’ image and the hole for the handle has been interpreted as being ‘overtly anthropomorphic’ (M. O’Sullivan 1993a, 40). Anthropomorphic beings are often regarded by some ‘shamanic’ groups as occupying the upper realms of the three-tiered cosmos (see discussions in Chapter One). The decorated macehead may have therefore been placed to assist in journeys from within the passage tomb to the heavens. The intrusion of a handle into the macehead would, however, diminish the impact of a facial representation. One could alternatively describe the motif as symbolising a mushroom, such as the hallucinogenic Psilocybe semilanceata (Liberty Cap) or Amanita muscaria (Fly Agaric), with the ‘horned arc’ forming the cap and gills, and the macehead handle the stem (see Chapter Four, Endnote vi). Psychoactive mushrooms would certainly assist people in conducting journeys to other realms (see
discussions in Cochrane 2001, especially chapter 3). Without applying a representational interpretation, one can propose that cosmological emphasis possibly resided more with the colour, sensual and sculptural elements of the stone.

![Decorated flint macehead](image)

**Fig. 7.4 Decorated flint macehead found at the entrance to the right-hand recess of the eastern passage tomb, Knowth Site 1 (Stout 2002, 29).**

Although occurrence of decorated maceheads is rare in Irish passage tombs, undecorated ones have been discovered, such as in the western tomb, Knowth site 1. Stone axeheads are also not found in all passage tombs, but do occur in some, such as between the entrance stones of Sess Kilgreen and in the fill and foundation levels of the Mound of the Hostages (Coffey 1912, 108; M. O’Sullivan 2005, 158-9; see Chapter Six). As these artefacts do not feature largely in passage tombs, one might argue that the deposition or presence of stone axeheads and maceheads was deemed more appropriate in bogs, shallow waters such as lakes or ponds and rivers at fording points (Cooney 2000a, 208). These objects may have been understood as being animate with biographies and origin myths, gifts in their own right from the earth or sky (i.e. ones that originated in mountain locations), within a cyclical character of life.
and death (Whittle 1995, 255-6; Cooney 1992b, 24; 2000a, 210; A. Watson 2004b, 83). The placement in liquid deposits may therefore indicate how the objects were considered as fluid rather than static elements. The idea that stone is fluid also permeates some modern Western thought. For instance, in articulating the relationships between various components in an environment the artist Giuseppe Penone proposed that all mountains crumble and eventually transform into sand, and that it is just a matter of time (Kaye 2000, 148). Everything is always in a process of becoming (see Chapter Two). The paucity of stone macehead and axehead presence in passage tombs might therefore suggest that it was deemed by some as less appropriate to remove them from daily circulation by placing them within the structures.

It is possible that the material objects placed in passage tombs were oblations, gifts or exchanges that were set within practices of regeneration and fertility. Previous interpretations of the broken Carrowkeel pots in passage tombs have suggested that their destruction occurred as a result of intentional burial ‘rituals’ (e.g. Eogan 1986, 140). Fowler (2004, 73) has suggested that the breaking of an object, such as a pot or necklace, is performed and then given as an incomplete gift for the dead as reciprocation is not required, with parts of the fragmented offering being kept with the living to provide further stimuli for memories (Jones 2002, 169). The act of removing these objects from daily life and the subsequent placement of them in passage tombs may have incorporated acts of transformation that affected both present and the absent persons (see also Fowler 2004, 135). Beck (1999) has illustrated that any social activity continually involves a degree of essential risk; the ‘killing’ of these objects by the placement of them in passage tombs may therefore have involved risk and concerns with pollution and closure. For instance, in the nineteenth century some African Americans in the southern United States frequently placed broken pots on top of graves to prevent the dead from rising, and coming back (Parker Pearson 1999, 10, 26). Such processes may operate by the dead or non-human entities having their attention drawn by the fragmented ceramic and human pieces, being enchanted and tantalised by the multitude of parts, resulting in them being rendered impotent (see Gell 1998, 90). Effectively the separate parts produce a ‘network of stoppages’ (see Chapter Two). The fragmented elements of the passage tomb motifs could also
perform in a similar fashion. These disjointed parts may have provided a cognitive indecipherability, in that they confuse the spectator who is unable to distinguish at once parts and wholes within (dis)continuity, synchrony and succession (see Chapter Two).

Fig. 7.5 Two Carrowkeel bowls, discovered intact from the annexes in the Mound of the Hostages (M. O’Sullivan 2005, Plate 1).

The occurrence, however, of complete Carrowkeel pots in the Mound of the Hostages and Knockroe passage tombs does suggest that they may have been originally deposited intact, with breakage occurring during later visits and interference, or as a result of burrowing animals, plant growth and weathering in denuded monuments (Herity 1974, 143; O’Kelly 1982, 105; M. O’Sullivan 1995, 26; 2005, 119, 237; see Fig. 7.5). The total lack of any pottery at Newgrange Site 1 might be a result of such disturbances or even robbing, although one would expect to find at least one fragment, if deliberate deposition had occurred (Herity 1974, 142; O’Kelly 1982, 122-3). At Newgrange Site 1, it might therefore have been deemed more appropriate to remove the pots after usage. Indeed, rather than just being ‘burial goods’, the pots may have played a role within activities performed inside and outside the passage tombs, such as containing food, drink, stimulating intoxicants, or other liquids (e.g. blood and
semen), being deposited at the end of the performance (Herity 1974, 138; M. O'Sullivan 2005, 237). If these objects are to be considered as gifts, then intact Carrowkeel pots may have been viewed as appropriate offerings. Such intact deposits may have served as communication devices that helped bind relations between entities that were both present and absent.

The Carrowkeel pots are generally decorated on the whole outer surface of the vessel. The dominant decorative devices comprise either a series of looped rows of indentations, as is found on the examples from the Mound of the Hostages, or a chevron image arranged horizontally or vertically, often haphazardly, as is seen on pots from Fourknocks I and Loughcrew Cairn R2 (Herity 1974, 141). Interestingly, the chevron angular design is also found on the structural stones of Fourknocks I and on some of the pendants and on the shaft of the antler pin (Herity 1974, 141). That the pots were decorated may suggest that some people regarded them as being imbued with non-human agency. For instance, the Huichol of Mexico decorate some of their bowls and regard the world as being constructed with essences that reside behind the appearances or skins of everyday ‘reality’. Through tutoring, engagement, performance and greater understandings of the worldview, some Huichol are able to ‘see’ through the layers of simulacra and into ‘true’ cosmos beyond (see Pollard 2001, 318; see similar discussion on the Chumash of California in Chapter Four). It is very possible that Carrowkeel pots operated in similar fashions at some level in passage tomb environments. Furthermore, the sensory effects of the shape, size, colours and textures of the Carrowkeel pots may also have linked the objects to other elements of the landscape and built environment (see also Gosden 2005, 207). Within these interactions the decorated bowls do not merely act as passive representations of beliefs, but rather they actively instigate fuller entanglements with the world transgressing both physical, and in some instances non-physical boundaries.

Stone basins form an integral part of some passage tombs (e.g. Knowth Site 1, Newgrange Site 1, and Cairn L, Carnbane West), while being conspicuously absent from others (e.g. Fourknocks I, Sess Kilgreen and Knockroe). Interestingly, the greatest concentration of stone basins appears to occur in the Boyne Valley complex.
Some sites have several examples, such as Knowth Site 1 with two basins in the eastern tomb and one in the western tomb, or Newgrange Site 1 which has four in its chambers, whereas Newgrange Z and Dowth northern tomb only have one each. The basins are mostly sub-oval in shape, although the restored Dowth one is sub-rectangular (O’Kelly and O’Kelly 1983, 152-3). Some of these carved stone objects present decorated motifs (e.g. two large cupmarks on the upper of the two basins in Cell 3, Newgrange Site 1), with the basin in the chamber of the eastern passage tomb, Knowth Site 1 being possibly the most spectacular (Eogan 1986, 137, 147). The sides of this sandstone basin (1.2m in diameter) contain seven deep-cut horizontal lines which terminate at a central nest of three concentric circles, surrounded by two arcs, both enclosing a small circle, that face the entrance of the recess. The inside is decorated by a continuous line around the lip of the basin, with six nested arcs in the centre and radiating lines emanating from a central circle shape (Eogan 1986, 42, 147; see Fig.4.5).

Lewis-Williams and Pearce (2005, 222-4) have recently suggested that the stone basins acted as metaphors for an *axis mundi* worldview perspective. They propose that the horizontal lines on the exterior of the basin represent tiers of the cosmos through which entities (e.g. the dead, shamans or specialists) travelled, with the nested arcs and radiating lines representing the possible vortices involved in puncturing through the various layers of the cosmos. The physical shape of the basin is argued to symbolically represent the kerb, the mound, entrances, passages, the chambers and the motifs inside and outside the passage tomb. I agree that at some level the basins may have been seen by some as representing an *axis mundi* belief system, but I feel that the basins would have played a greater role than just passively epitomising symbolic systems. Instead the basins may have *presented* relational nodes between realities, actively facilitating exposure to the fluid cosmos and inviting travel and framing interaction. The stimulating application of liquids such as blood, water, milk or semen may have magnified the fluid aspects of the basins (see Chapter Four). As active agents the basins may have been influential in their own right, continually engaging and creating new relations, while reaffirming or disrupting old ones.
The absence of basins in other passage tombs is equally as interesting as their presence. The eastern tomb at Knockroe does not contain a basin, but does have a bowl-shaped pit in the floor of the end/terminal chamber that either could have incorporated a basin that was later removed (M. O'Sullivan 1995, 21), or alternatively was dug to simulate some of the actions of a basin. For instance, cremated remains may have been placed in the pit to facilitate a journey, or liquids may have been pored into the pit to assist in activation of the chamber itself. The lack of basins in the majority of Irish passage tombs suggests that their inclusion was particular to the location and requirements of specific sites, rather than as part of an island-wide passage tomb ‘blue-print’.

The stone objects in passage tombs may have embodied other places and other times, radiating some of their essences through presence or by appropriating their influences. The placement of these parts into a passage tomb with cremated remains may have served to further project them into the cosmos or alternative relationships (Fowler 2004, 140). Certainly, the process of cremation may have facilitated the release of some elements to the heavens. Such engagements may have been viewed by some as acts of renewal and regeneration, especially if associated with engraved imagery and connections with other realms (physical or otherwise). The placement of material objects in passage tombs upon the floors and in the chambers would have created temporal sequential layers, with early deposits being recognisable. These acts would have generated a textured and sublime bricolage (J. Thomas 1990, 175; 1999, 79), a ‘cosmoscape’ of variant parts: stone, earth, clay, bone, pottery, chalk, antler, ash, charcoal, and plant matter. The notion of fragmented and textured layering is enhanced when one also includes the sequential application of motifs upon the stones. Each of these elements would continually be (re)understood, reformed and re-aligned through use and fluid change (Shanks 1992, 190). Such performances would render the passage tombs locations as ‘technologies of disclosure’ (Brittain forthcoming) and revelation within spheres of activity that often overlap (J. Thomas 1996a, 178). As such, the repetition of resembling artefacts in Irish passage tombs is more than the marking of similarities; it is also the growth and magnification of differences via quantities and placements.
Following Latour (1993, 139), we may broaden these assemblages of objects to the concept of the assemblages of societies; thus creating a constant and sometimes interrupted transformation and mediation of appearance, participation and being. Yet, material objects are not free in the modern sense of liberation, but are rather bound together with people in relational ties. Indeed, it is the things in life that make humans and the humans in life that make things, blurring human:non-human distinctions (Latour 2000, 20). Within such a framework, objects do not engender themselves through representation, but instead through processes of metamorphosis and performance (Baudrillard 2005, 128-9). Passage tombs are therefore not just containers of objects; rather they actively merge containment with content. What we may be witnessing in passage tombs therefore is the distillation and manipulation of objects and persons (which again may not be separate categories) within a web of relationships. For example, following some transactions by the Merina of Madagascar (Bloch 1998, 79), we might suggest that relationships between the dry objects (e.g. cremations) and wet mutable substances (e.g. people or pottery) may have been at play, endlessly being altered by the moment and the images on the structural stones. For the Merina, contact is made during life with the dead in tombs, establishing never-ending cycles whereby the living increasingly become the dead and the dead become the living (Bloch 1998, 79).

Close encounters with material elements: structuring cosmologies

The sensory qualities of particular substances seem to have played a role in determining what materials were employed. For example, the colour of stone seems to have been important in choosing what went where. In the Boyne Valley complex and Knockroe, the soft green coloured greywacke was the preferred (although not exclusive) medium for imagery carved on structural stones (M. O'Sullivan 1997, 28; see also Chapter Four and Six). The placement of a pink sandstone orthostat in the western tomb, Knockroe; white quartz facades, platforms and standing stones in the Boyne valley and Loughcrew complexes; and blue carboniferous limestone for the uprights and roof corbels at Fourknocks I, all suggest deliberate combination and
juxtaposition of substances of differing form, colour, texture and composition. In Chapter Four I discussed how the use of coloured stone in passage tomb construction, may be stimulated by liquids and paint, could have enhanced the cosmological aspects of the structure. Indeed, the colours of particular stones may have operated in similar ways as the imagery (M. O’Sullivan 1997, 30). The coloured stones may have performed as agents of external manipulation (see discussions in Chapter One), forming and moulding social ideals, through a complex web of relations. Latour’s (2000) example of the Berlin Key demonstrates a similar type of engagement with material objects. This unique key is designed so that when a person unlocks the door to a property, they are forced to lock the door behind them in order to gain entry. In such an interaction, it is the key that determines the required social action of maintaining security obligations, and not the resident. The structural stones, especially those of differing colours and textures, with or without motifs, may equally have created social interconnections within active and sensuous networks.

The placement of cremated remains on the passage tomb floors would have created textured surfaces that possibly altered visual interactions and perceptions. The recurring material artefacts, such as stone axeheads, decorated pottery sherds and chalk balls of varying colours, all exhibit enhanced visual, auditory, olfactory, and tactile qualities, with form and content coalescing to augment performances that stimulated sensory responses. The combination of these objects within a decorated structure may reflect material expressions of believed ideas regarding how people should live, die, transform, and the world(s) in general.

Allusions to illusions: overlays and underlays

Discussions in Chapters Four, Five and Six detailed sequential episodes of the placement of motifs on to particular stones and suggested repeated interactions. By looking at these motifs on the tombs, which are an integral part of them, we witnessed evidence of past simulated engagements and worldviews that were in part sustained and perpetuated by images (see Debord 1998). To explore this possibility further, and explain how a non-representational image can fabricate and perpetuate an interpretation of the world, I will briefly introduce the notion of simulation. To
dissimulate is to feign not to have what one has, whereas to simulate is to feign to have what one does not have (Baudrillard 1994, 3). One expresses a presence, the other an absence. Both are not at opposite parts of a spectrum, but they are of the same substance. Yet it is not this simple, as to simulate is not simply to feign. For instance, someone who feigns an illness can simply pretend to be ill, whereas someone who simulates an illness produces some of the symptoms (Baudrillard 1994, 3; see also Shanks 2004, 176). Thus simulating or dissimulating leaves an interpretation of the world intact. The differences are clear, but they are masked (Baudrillard 1994, 3). Simulations remove the dichotomies of ‘true:false’ and ‘real:imaginary’, rendering such distinctions as irrelevant. The simulation becomes the worldview. Simulation is not about referential beings or substances, it is paradoxically the generation of a worldview perspective without origin or represented reality (Baudrillard 1994, 1). It is an interpretation of reality that is not static, but rather a continuously metamorphosing process (see Rodaway 1994, 244-45). Simulation is not a ‘thing’, ‘place’ or ‘space’, but rather an ongoing engagement with person(s) and the world.

It can be hazardous to unmask images that (re)create simulations, such as passage tomb motifs, since they dissimulate that there is nothing to conceal (Baudrillard 1994, 5). By this I mean that these images can feign to perpetuate beliefs that do not exist. This position operates from the perspective that images have replaced reality to such an extent that the world is no more than an encompassing simulacrum or simulation where images only ricochet off other images within a closed system. Within this system when interpretations of reality are no longer what they used to be, feelings of nostalgia, imagining and even irrelevance can be produced (Baudrillard 1994, 6; Rodaway 1995, 243). This can create a proliferation of narratives, myths of origin and of the images of a reality and of second-hand truth (see Chapter One). This possibly creates tensions, and instigates an increase in the material production of images that simulate particular worldviews. These tensions can produce technologies or strategies that create expressive statements.
Baudrillard’s (1994, 1-42) model on image progression is useful, as it allows one to further understand the possible natures of collective motifs and why some motifs might be superimposed on to others. Baudrillard (1994, 1-42) defines the four successive phases of an image as moving from a pseudo-representational state to a non-representational one. In the first instance, the image might be called a ‘positive’ appearance. It is the artificial representation of the ‘real’, such as a portrait painting. Such representation might be regarded as a technology of *reflection*. In the second, it is a ‘negative’ appearance in that it warps, masks and perverts the boundaries between reality and representation, being a technology of *distortion*. By the third order of simulation, the image masks the absence of reality. Simulation moves beyond the previous positions and augments the generation of models of a ‘real’ without origin or reality, producing a ‘hyper-real’. Representation no longer exists as the model precedes the ‘real’, thereby detaching reality and representation. One is left with engagements that play at being an appearance; it is a technology of *enchantment* (Gell 1999d). In the fourth phase the image is no longer in the order of appearance at all and bears ‘...no relation to any reality whatever...’ (Baudrillard 1994, 6); instead it is its own simulacrum or simulation. By the fourth stage the image becomes sophisticated and autonomous enough to abolish its own referent and replace it with itself, creating a performance where the image is a non-representational reality. Such performances dissolve the need for polarisations such as ‘true’ or ‘false’ and ‘right’ or wrong’, rendering them irrelevant. Although it is possible that the passage tombs themselves referenced other events or structures, I suggest that the motifs on the Irish passage tombs discussed mostly operate within this fourth stage of simulation. This proposition will now be examined in more depth.

By overlaying one motif on to another, some people may have been attempting to refresh or rupture their worldview systems. What we are witnessing is sociality and interpretations of the world, being mediated on the passage tomb stones, in ongoing simulations that are presented as superimposed motifs. Such is the succession of the simulacrum. The superimposed motifs may indicate a desire at some level to ‘perfect’ or maintain beliefs; yet paradoxically engraving it may have had the opposite effect. The closer one gets to the perfection of the simulacrum, the more evident it appears
how everything escapes representation, escapes its own double and its resemblance. In short, there is no ‘real’. The dispersed area picking is only the interpretation of the angular picked. The angular picked is the interpretation of the angular incised, and so on. It is escalation and superimposition in the production of simulated or hallucinated realities that are more and more ‘real’ through the addition of successive dimensions. None are ‘real’. They are all ‘hyper-real’. The application of later motifs might therefore be seen as individual attempts to maintain or refresh nodes of thought, such as myth, knowledge or worldviews, whose referential is absent. These simulations may have allowed some people to communicate with the ‘other’, such as the dead or entities, with some people participating with simulations, doing different things and sometimes even the same things but in alternative settings, such as either inside or outside the passage tombs (see Thomas 1990; 1992; 1993; 2001; Fraser 1998; Cochrane 2005; and discussions in Chapter Five). Indeed, the architectures of the passage tombs today still dictate that modern visitors move in prescribed manners, affecting how or what they think (Cochrane 2006).

The images are no longer a question of imitation, citation, nor of reproduction, nor even parody. Instead it is an instance of substituting simulated images of a perceived ‘real’ for a ‘hyper-real’. We as modern people are used to the idea of believing in our interpretations of the world, in the ‘ideatum’, distinguishing between imagination and illusion (Baudrillard 1996, 96). Furthermore, one can live with suspicions of a distorted truth, but anguish and uneasiness can ensue from the idea that the images conceal nothing at all and that maybe they are not even images themselves but rather perfect simulacra ‘...forever radiant with their own fascination...’ (Baudrillard 1994, 5). The superimposition of motifs at the Boyne Valley and Loughcrew complexes (see details in Chapters Four and Five) might therefore imply tensions in the Neolithic, anguish or disquieting foreignness; the uneasiness before any ‘technology’, which creates simulations.

From these standpoints, one can imagine the images on some Irish passage tombs as creating engagements that emotionally affect the viewer’s life with the transactions never ending in perfect reciprocation, but instead always being renewed, imbalanced
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and residual. For instance, the images on Orthostat 45, western tomb, Knowth Site 1, could ‘...slow perception down, or even halt it, so that the decorated object is never fully possessed at all, but is always in the process of being possessed...' (Gell 1998, 81), creating an unfinished exchange. Such performances integrate re-iteration, re-mediation, re-presentation and re-generation (Shanks 2004, 150). By looking at the motifs on Irish passage tombs, we can begin to see ‘multiple viewpoints’ (Mirzoeff 2001, 18); that is transient parallax visions that are no longer a fixed ‘gaze’, but rather a more fluid ‘look’ or ‘glance’ (see Chapter Two). By a mere glance at a motif, one is engaged in the creation of a temporal image that is entrenched in pure simulation. The beauty of the nature of superimposed motifs is that they imply multiple temporalities, with some being plural, contradictory, scrambled and palimpsestic. The motifs at Sess Kilgreen, Knockmany, the Mound of the Hostages and Knockroe appear to have been applied in a single phase. The lack of superimposition does not, however, preclude the motifs as acting as illusions to alternative realities. Instead, it suggests that there were less interactions over time with the particular sites. By looking in detail at the images on some Irish passage tombs, which form an integral part of the monumental architecture, one can find evidence for the complex relationships that operated between and with past simulated engagements.

Summary

One of the principal concerns in trying to reach understanding of the Irish Neolithic is determining the relationships between the networks created by the execution of the engraved designs, the deposited material culture and those related to the construction of the monuments. In some recent Irish case studies in the archaeological literature there has been a move to look at the associated deposition of artefacts within specific contexts and locations in the landscape. Yet as Cooney (2000a, 7) suggests, there is still a tendency to see the island as a whole with regional differences described as the result of variation from some notional, island-wide norm, rather than as the expression of traditions and practices of doing things in different ways. As such, the systems that created the designs on the monuments are often regarded as representing a homogenous set of beliefs, rather than varied and contested worldviews (e.g. Herity
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1974; Eogan 1986; Dronfield 1994; Lewis-Williams and Pearce 2005). In order to appraise this position, the preceding chapters examined the evidence from particular sites in an attempt to tease out sequences from the data and contexts so that a picture of regional variability, identity and similarity within Ireland during the Neolithic could be developed.

In reviewing several sites in Ireland, I have cultivated arguments that support the view that Irish passage tombs and their motifs operate by not just being a collection or repository of images, but rather as a social relationship mediated by images (Debord 1998). In building upon Debord’s proposition that ‘...all that was once directly lived has become mere representation...’ (1998, 12), I suggest that the passage tombs, their motifs and associated material culture are not just representations of past Neolithic worldviews, but rather indications of past performances and practices. These social practices and performances produce the overlapping material and visual cultures (see Barrett 1994; Thrift 1996) that create opportunities for experience. I follow the position that there are multiple interpretations of the world, and these are often informed by people’s experiences or visual interactions (Hirsch 2004, 37; see Chapter One). At some level, being human involves the ability to respond to visual stimuli, such as patterns, shapes, textures and rhythms and to construct thoughts on the world from these encounters (M. Barnard 1998, 107; see discussions in Chapters One and Two). For these processes to perpetuate, one should acknowledge that the motifs and objects are the visual construction of the social and not just the social construction of the visual (see discussions in Mirzoeff 2001). These fluid entanglements are enhanced when one appreciates that some stones were not all decorated at the same time. The beauty of the nature of superimposed motifs is that they imply multiple temporalities, with some being plural, contradictory, scrambled and palimpsestic. Realities, past or indeed present cannot be owned, only fabricated or denied; thus end the theoretical movements of representation that sought to produce interpretations of the real. With Irish passage tombs and their non-representational motifs the worlds of meaning, language and rationality disappear, and are replaced by the worlds of juxtaposition, repetition, momentum and metamorphosis (see Rodaway 1995; Cochrane 2005). The passage tomb simulacra ‘...ultimately have no finality and proceed by total
contiguity, infinitely multiplying themselves according to an epidemic which no one can control...’ (Baudrillard 1988, 29). These perceptual assertions form the basis for discussions in the concluding chapter.

1 There is currently a differing of opinions on the deposition period of this macehead. Some argue that it is a Late Neolithic addition (e.g. Sheridan 1985/6, 25; Simpson 1988, 29; Shee Twohig 2004, 43), while others that it was introduced in the Grooved Ware phase of Knowth Site 1 (e.g. M. O’Sullivan 1997, 26; 2005, 244). I have included this object into my discussion, however, as the motifs fit well into O’Sullivan’s (1996a) Stage 2 sequence, in that the images are basic geometric designs that adhere to the modulations of the stone, being similar to K1 and K52, Newgrange Site 1. Furthermore, the excavator Eogan stated that the macehead was discovered on the old ground surface, covered with shale, and was probably ‘...the first object deposited in the tomb...’ (1986, 180).

2 I acknowledge that being human also encompasses auditory, olfactory, tactile and paraesthetic sensations, but restrictions of space dictate that these are not considered in detail.

3 That some of the passage tombs have no finality is supported by their (re)creation in the present for recreational and informational purposes (e.g. the Brú na Bóinne Visitor Centre).
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There and back again

The primary aim of this thesis has been to express the possible contribution that a study of imagery can make towards enriching understandings of societies in Neolithic Ireland. The visual images placed at particular locations (such as Newgrange Site 1, Co. Meath, and Knockmany, Co. Tyrone) were reconsidered within an evolutionary style sequence, which related to aspects of context, building and experience. In reconsidering image sequences and by placing them within possible cosmological complexes, this research has sought to provide insights into the heterogeneous and often contradictory processes of social change and performance. I have tried to take study of Irish passage tomb images beyond its orthodox role as an epiphenomenon by giving it a central role in formulating a view of the creation of the social context of passage tomb construction and use. The images located on the stones at Irish passage tombs are no longer depicted as a ‘throw-away’ extra or ‘by-product’, but rather they now act and matter as a cosmography at the very heart of Irish Neolithic existence.

Archaeology should be self-reflexive, and as such it is appropriate at this point to review and discuss the research presented in this thesis. Chapter One assembled anthropological examples from around the world, defining particular theoretical models, which assisted in adding experiential ‘flesh’ to the Irish Neolithic archaeological data. By illustrating the varieties of layered differences, repetitions and cycles from the archaeological and the anthropological data, I explored the multiple series of concerns and possibilities that some of the Irish Neolithic people may have experienced about themselves and their world. I reviewed the academic concept of culture, and found that it often limited understandings of the past, rather than making them more explicit. The main cause of this is as a result of the encompassing aspects of the ‘personality of culture’ (Whittle 2005, 69), which often homogenises disparate social actions, helping to generate terms such as ‘the passage tomb culture’ (see Chapter Three). Instead, I considered cosmologies, mentalités and worldviews as better models to create a sense of a dynamic past in which engagements (both routine
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and non-routine) with the world are stressed, and often materially embedded, through embodied acts. Specific examples included 'shamanic' and 'totemic' modes of thought that further elucidated how some non-Western people think of and through their worlds via the power of images. Chapter Two explored how some people in the Irish Neolithic created what they saw. By amalgamating visual cultural perspectives and anthropological examples with contemporary neurology I investigated the power that images have on people and the politics of spectatorship. Images are not just passive and static forms that require the penetrating gaze of the spectator, waiting to be read with meanings comprehended. Instead they are fluid events that manipulate and affect the people who engage with them over time and space. By considering images as such, I was able to further describe the possible social relations, routines and interactions that may have occurred and that may have influenced how people thought.

Chapter Three introduced and detailed a chronological framework for understanding the Irish Neolithic from the earliest phases through to the later. Discussions were necessarily brief, but they highlighted the emergence of stone structures and passage tombs during the fourth millennium cal. BC. A model for the development of passage tombs was considered in which a trend for the earlier creation of smaller and structurally 'simpler' sites, that were later followed by the larger and more 'complex' passage tombs (e.g. Sheridan 1985/6; 2003b). In this chapter I also considered the diversity of Irish Neolithic material culture and the appropriateness of some terminology, such as 'ritual' and 'house'. Building upon these discussions, in Chapters Four, Five and Six, I presented case-studies of a variety of passage tomb sites (e.g. Knockroe, Co. Kilkenny and Newgrange Site 1, Co. Meath). Investigations of particular locations enabled me to demonstrate issues of timing, scale, performance and intensity, with the similarities and differences of the evidence, while entwining new ways of considering these occurrences, such as carnivalesque and animacy perspectives.

During the course of this thesis, the constraints of time and space unfortunately necessitated a concentration on specific points and archaeological sites. Themes that I have not considered in detail include the relations between what is often termed 'rock
art' and passage tomb imagery. Rock art mainly occurs in open-air environments, with many people potentially having access to the motifs. These more public engagements may have generated greater ruptures in daily life, thus helping to facilitate new thoughts and relations. How these experiences relate to passage tomb motifs, especially on stones that are thought to contain rock art (see Chapter Four), is something I will explore at a later date. I would also have liked to have challenged the modern construction of 'past', 'present' and 'future' models of time, and investigated the possibility that a circular perception of time swayed how some people moved and performed. Starting points might include the circular cairns and mounds, oval settings, round dwelling structures and enclosures and the usage of spirals, cupmarks and circles. Questions to be asked might include whether the time it takes to see a specific image affects us in different ways. What are the phenomenological effects of the repeated spectacle – of endless media streams? I would like to incorporate the similarities in design with concepts of repetition, return, rupture and simulacra. In doing so I would question whether in comparing the differences one is affected by what is similar in each, which in turn might refer us to another motif for comparison. Can we determine whether the more a person looks at the same thing, the more its possible resonances escape them? If so, how would these performances operate inside and outside passage tombs? Other sites for comparison with those in this thesis would include those with seemingly isolated engraved imagery, such as Millin Bay, Co. Down, Lyle’s Hill, Co. Antrim and Cloverhill, Co. Sligo, to areas possibly further away, such as Anglesey, Scotland and Brittany. These concerns and many others would ideally be incorporated into a poetic literary narrative as a means to address worldviews differently and fill in some of the absences of the past. This is not, however, to render these accounts as merely fictional or anecdotal (see Hofmann et al. 2005, 1), but rather to add extra dimensions and layers to the intellectual montage that is archaeology. Taking these propositions further I would like to present contemporary understandings of the past through disrupted textual expression (e.g. Benjamin 1999), and also challenge archaeological perspectives via alternative media (e.g. time-looped video installations). These endeavours will have to remain for the moment as thoughts for future enterprises; although see Figure 8.1 for the beginnings of an experiment with archaeological visual expressionism, that explores some Neolithic worldviews and essences.
## Conclusions

**Bone**
Transformation, fragmentation, cremation and inhumation.

**Hills**
Liminal zones where land and sky meet.

**Time**
Transition, seasons, weather, solar and celestial events.

**Structure**
Alternative environments and creating new worlds.

**Motifs**
Engagement, perpetuation, disruption and simulation.

**Quartz**
Solidified liquids and special substances.

**Water**
Life giver and taker, connections and separations.

**Place**
Arenas for performance and belief.

**Ceramic**
Metamorphosis of materials, containers for essence.

**Stone**
Gifts from the sky and earth, tactile understandings.

**Cosmos**
Ideas, illusions and engaging in the environment.

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**Fig. 8.1 Neolithic worldviews – considering elements and essences**
(inspired by Watson 2005b, fig. 6.6).
Neolithic simulations are not an irrefutable fact that can be readily transformed by us as modern observers into a concrete Neolithic narrative or worldview. To do so would be to misunderstand the ways in which simulations operate and transform. The motifs on passage tombs perform by blurring and disrupting perceived boundaries between interpretations of reality and social construction. By describing them thus, I move beyond the representational, structuralist and Platonic approaches that have been previously adopted (e.g. F. Lynch 1973; Dronfield 1996b; Lewis-Williams and Pearce 2005), that depict persons as either existing in the physical world or alternatively in (albeit sometimes temporally) another non-physical realm. Instead, motif simulacra via their detail, context and composition provide the punctum. This means that the motifs provoke the viewer to react, thus creating unsettling, unexpected and sometimes previously unknown experiences (see Bailey 2005b, 131). In reviewing some ‘shamanic’ and ‘totemic’ systems of belief in Chapter One, I was able to articulate that politics of verticality, that is the conception of an above and below at a location, may have operated within a three-tiered axis mundi worldview perspective. Engagements would occur in (non)physical worlds, imagined realms and all of the spaces in between.

Chapters Four, Five and Six detailed in depth the variety of motifs that can occur, whilst expressing episodes of difference and repetition. Thick description was deemed necessary in these chapters to reflect how such variety constitutes fluid change in depicted and often sequential form. In combining broader and more fine-grained analysis, I have attempted to demonstrate that social complexities operate at all scales. The images on passage tombs engender and connect themselves to spectators and each other through two-way intimate engagements. By moving beyond representational and textual analogies we begin to see how the motifs perform, play and produce illusions for the viewer – they actively present rather than passively represent. These simulations not only stimulate but also create snares or entrapments in and through which people can often formulate belief systems. The traits of illusion may therefore include the ability to enchant and enhance, whilst masking the disappearance of an interpretation of the world, when supplanted by another. The networks of images, settings and passage tomb therefore socialise through their being and cosmological chorography. Replication and fabrication involve making the world
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whilst making ourselves, with all endeavours distilling the processes of copying or facsimile at some level (Meskell 2005, 3). If passage tombs and their motifs act as simulacra for cosmologies that do not exist beyond the myths and thoughts of some people, then their creation in the Irish Neolithic might indicate a need for some people to materialize the immaterial (i.e. the worldview), to (dis)orientate its form and project visual presence (Meskell 2005, 5). Yet humans do not control all these creative and fluid processes, for the motifs, material objects, stones and structures all perform as a montage of 'agentic' beings in their own right, by framing and stimulating events; in doing so they continuously engage and enter new relations (Nakamura 2005, 22; see also Chapter One). These actions in motion can be enhanced via the application of liquid solutions, such as milk, blood and semen, especially when conducted in a timely manner at particular places and times (see Chapters Four, Five and Six). With the contexts and settings for the passage tombs acting as 'stages' and 'islandscapes', we can imagine some people enacting through carnivalesque environments, subverting, disrupting, whilst also perpetuating social beliefs. Such performances may have created dialogues, myths and narratives about the specialness of these places. These (un)familiar conversations would in turn factor and texture new simulations of the world, whilst creating fresh opportunities for experience.

Yesterday’s past is tomorrow’s reason why

Many previous accounts of the Neolithic past have described material objects and images (if indeed it is useful to distinguish the two) as signs and tokens that reside in the 'real' world, alluding to a hidden cosmological world (see discussions in Chapters One, Two and Three). Particular persons in the past (e.g. priests or ritual specialists) are assigned by the modern interpreter a social status determined by the fact that they could presumably read, decipher and transcend the surfaces of the material artefacts and uncover the worlds beyond. Such a scenario is, however, suspiciously similar to the roles that some modern archaeologists assign themselves. These scholars interpret materials by attempting to uncover and penetrate the meanings and social realities that exist beneath the surface layer (J. Thomas 2004, especially chapter 7). I am sure that there are many anthropological examples available to show that some people believe
that certain images or objects passively represent hidden or generally unavailable worlds beyond or below the surface (see discussions in Chapter One). Indeed, in Chapter Five I explore the possibility that cupmarks on passage tomb orthostats may have performed by granting access to other worlds. Moreover, I utilise representation analogies in drawing upon Western visual movements, anthropological examples and neurological theory as a means of illuminating the unfamiliar. My concern, however, is that these representational approaches, which are so akin to the modern archaeological condition and mentalité, dominate most contemporary discourse. Some modern academics for instance strive to see through illusions in the modern world (e.g. excavated pots and cremated bones) in order to understand past people’s interpretations of a reality, which of course are the greatest of illusions (see Baudrillard 1997, 18). I am not arguing that we do away with representational understandings, as to do so would be to ‘throw the baby out with the bath water’.

Instead, I suggest that we attempt to move beyond this presiding position and create a sense of conceptual or cosmological equivalence. I introduced the idea of simulacra and simulations as a means of thinking with, in and of the world in a non-representational manner.

I propose that by acknowledging that simulacra and simulations do occur, we can bypass the experiences of ‘simulation confusion’ (Sanes 2005), move beyond Shee Twohig’s (2000, 102) concerns with archaeological unrealities and falsities, and gravitate more towards what Shanks terms a ‘poetic’ (1992, 43-7), and what Thomas terms a ‘counter-modern’ (2004, especially chapter 10) approach to archaeology. Simulations can be thought of as creating more than hyper-realities and more than messages derived from mediums (McLuhan 1964), but also ongoing conversations and dialogues (see Chapter One). I have considered some of these dynamics as a means of creating resonances unmediated by the transparency or opaqueness of textual interpretation and mechanisms of information (see Chapter Two). The actual act of visiting a passage tomb involves a ‘performative practice’ (Pearson and Shanks 2001, 159; see also discussions in Harris 2005) as one encounters the motifs and engages with the architecture of the structures. Moving within these simulations adds to the sublime experience of them. Worldviews are often created via the structure and history of the replication or simulation of an image (e.g. motif) or artefact (e.g.
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passage tomb), with each generation presenting its own understandings. By further appreciating the plethora of relationships and possibilities that can occur with visual images, I have attempted to generate broader understandings of the complex negotiations that may have existed in the past. In drawing attention to the possible past simulations that occur with some Irish passage tombs and in detailing episodes of the imposition of one motif on to another, possibly in carnivalesque environments augmented by liquids and persons, I have expressed some of the transforming and dynamic engagements that may have been performed at some Irish Neolithic sites. In doing so, this thesis marks the beginnings of a visual cultural, (non)representational, approach to archaeological data and the multiple experiences of people in the past.
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